



**STRONG WORKFORCE PROGRAM  
LOS ANGELES REGIONAL PLAN**

January 2017

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## **Executive Summary**

Due to the unique characteristics of Los Angeles County and Orange County, the Los Angeles/Orange County Regional Consortium decided to develop separate plans for each county to meet the goals of the Strong Workforce Program.

The Los Angeles region is home to 10 community college districts with 19 colleges and nearly 300,000 community college students. The region has seven workforce development boards, more than 40 adult education providers and more than 60 school districts.

The planning process included several key planning events, such as a two-day partnership summit hosted by the Los Angeles Area Workforce Collaborative in August and a Strong Workforce Program Planning Forum held in December.

The Los Angeles/Orange County Region Center of Excellence, Los Angeles County Economic Development Corporation, Los Angeles Area Chamber of Commerce, County of Los Angeles Workforce Investment Board, Deputy Sector Navigators (DSNs), industry and workforce partners, and K-12 school districts and adult education providers were among the key groups who participated in the planning process.

The following report includes an overview of the region's nine sectors identified through the Doing What Matters Initiative: Advanced Manufacturing and Advanced Technology; Advanced Transportation and Renewable Energy; Energy, Construction and Utilities; Global Trade and Logistics; Health Care; Information & Communications Technology (ICT)/Digital Media; Life Sciences and Biotechnology; Retail, Hospitality and Tourism; and Small Business.

Through a collaborative vetting process, 22 regional projects were agreed upon, out of an initial 66 proposed projects. These projects are detailed more fully in the report. Examples of selected projects include a \$2.5 million project across all 19 community colleges to provide technical assistance and staffing that would continue the work of the SB 1070 Career Pathways Grant and a \$1.2 million project across all colleges for the CTE Regional Internship & Jobs Academy.

The planning process also resulted in a number of recommendations regarding emerging and priority sectors to improve regional planning and project implementation:

- Convert Energy, Construction and Utilities from an emerging sector to a priority sector.
- Add Life Sciences/Biotechnology as an emerging sector.
- Add Entertainment as a priority sector (specific to Los Angeles County) or split ICT/Digital Media and provide a DSN for ICT and a second DSN for Digital Media, which would fill the gap for Entertainment.

## Introduction

Over the past five months, formal planning has involved the administrators and faculty of the 28 colleges comprising the Los Angeles/Orange County Regional Consortia (LAOCRC). Members of the consortia have worked diligently to develop a plan in response to the needs of the region and the legislative intent of the Strong Workforce Program. More than a year ago, in anticipation of the Strong Workforce Program legislation, informal planning and extensive discussions spanning a diverse range of partners were initiated.

In recognition of the size of our economies and the unique needs of Los Angeles County and Orange County, separate plans were developed for each county to meet the goals of the Strong Workforce Program. In preparing this report, Los Angeles members of the LAOCRC consulted with the region's deputy sector navigators, the Los Angeles County Economic Development Corporation (LAEDC), the Los Angeles Area Chamber of Commerce (LAACC), the City of Los Angeles, the Los Angeles County Workforce Development Board, K-12 school districts, adult education providers, business and industry partners, and many others.

The following document was written, vetted and unanimously approved by voting members of the community colleges in Los Angeles County. All colleges have agreed that the Los Angeles Regional SWP Plan will be implemented by all 19 colleges. It comprises 22 projects, which collectively address nearly all of the 25 Strong Workforce Program recommendations and strategic priorities of the region.

Given time limitations and systemic changes in the governance structure of the LAOCRC, the Los Angeles Region did not develop, in advance of this process, a formal strategic plan that outlines the regional priorities. However, based on the content of discussions held at various meetings, and predominantly on the content of the selected projects, some common themes, recommendations and strategies emerged. These include:

1. Maximizing sustained industry engagement;
2. Strengthening career pathways and programs of study;
3. Expanding opportunities for work-based learning;
4. Attending to the need for new Career Technical Education (CTE) faculty recruitment and professional development and externships for current faculty;
5. Addressing the needs of business and industry in identified priority and emerging sectors; and

6. Supporting regional marketing, curriculum alignment, streamlined regional processes as well as regional labor market data collection and analysis for data-informed decision making.

## **Regional Overview**

With more than 10 million residents, Los Angeles County is the most populous county in the nation. The workforce development system in the Los Angeles Region includes 10 community college districts with 19 colleges, seven workforce development boards, more than 40 adult education providers and more than 60 school districts that serve residents in 85 of the county's 88 cities.

With nearly 300,000 full-time equivalent students (FTES), the region accounts for just under one-third of the state's community college students. Los Angeles Community College District, is the region's largest district with nine community colleges, serving more than 135,000 students. (See Appendix A for a complete list of districts, community colleges and enrollment in the region.)

The Los Angeles Region's largest community colleges happen to be some of the largest community colleges in the state. These include Mt. San Antonio College (30,654 FTES), East Los Angeles College (23,345 FTES) and Pasadena City College (22,984 FTES).

A majority of the community colleges in the region have enrollments between 10,000 and 20,000 students, while a number of other campuses offer smaller scale, more intimate learning environments, such as El Camino College-Compton Center (5,217 FTES) and Los Angeles Southwest College (5,428 FTES).

In Los Angeles County, students can enroll in hundreds of Career Technical Education (CTE) programs offered by the 19 community colleges in 10 community college districts. Accounting, business management, marketing and distribution, office technology and child development CTE programs are offered by all community colleges in the region. (A detailed list of CTE programs in the region is included in Appendix B.)

Additionally, Los Angeles County community colleges offer short-term training programs that align with third-party credentialing requirements, apprenticeships and incumbent worker trainings to update skill sets in a variety of industry sectors. Figure 1 compares overall enrollment to CTE enrollment for the 10 community college districts in the region.

**Figure 1. Overall and CTE Enrollment for Los Angeles County Community College Districts**

District	Overall Enrollment	CTE Enrollment
Cerritos	32,666	17,950
Citrus	19,627	8,403
El Camino	32,690	13,680
Glendale	28,578	12,503
Long Beach	33,657	17,413
Los Angeles	237,767	109,070
Mt. San Antonio	61,286	23,998
Pasadena Area	41,950	17,662
Rio Hondo	31,603	19,052
Santa Monica	47,220	19,866
<b>Total</b>	<b>567,044</b>	<b>259,597</b>

Colleges in the region face a number of challenges in preparing students. According to studies by the Milken Institute, JPMorgan Chase and the Centers of Excellence, the supply of middle-skills workers currently being produced is not enough to meet the demand of employers. California, and Los Angeles specifically, must significantly increase the number of workers with industry-relevant, middle-skill degrees, credentials and certificates.

Employers in critical industries from aerospace to advanced manufacturing in the county report it is increasingly difficult to find qualified candidates because workers with the necessary knowledge, skills and abilities (KSAs) are in short supply, creating a skills gap. Many firms have reported looking outside the county to attract the talent necessary for growth or simply to maintain production levels as skilled employees retire.

Meanwhile, an unprecedented opportunity exists for middle-skill workers in science, technology, engineering and math (STEM) fields. The 2013 report “The Hidden STEM Economy” by the Brookings Institution found that “half of all STEM jobs are available to workers without a four-year college degree, and these jobs pay \$53,000 on average—a wage 10 percent higher than jobs with similar educational requirements.” The study also found that jobs in the manufacturing, health care and construction industries comprise 50 percent of all STEM jobs. Furthermore, in Los Angeles County’s innovation-based economy, there is an unmet and growing need to fill middle-skill technology jobs that support the work of those with master’s degrees and other advanced degrees.

Expanding the region’s STEM talent pool must involve strategies that attract more

underrepresented students, in particular Latino students, because these students will represent the bulk of California's working-age population in the near future. In the 2016-2017 academic year, 74 percent of LAUSD students identified as Latino. Yet, this group is the least likely to obtain a degree and major in STEM.

In addition to job growth in STEM fields, the Information, Communications & Technology (ICT) cluster—which includes software development, gaming, virtual reality, design and marketing—is booming in Los Angeles. Regional stakeholders seek to focus on developing human capital through meaningful partnerships that unify educational, business and community organizations and institutions in support of evidence-based programs and initiatives.

According to the July 2016 Milken Institute report “Career Technical Education: Reducing Wage Inequality and Sustaining California’s Innovation-Based Economy,” whether it is at the local, state or national level, high percentages of skilled human capital and sustained investments in education systems drive economic growth. For Los Angeles County, this means that our region’s economic vitality is incomparably linked to the education level of our workforce.

While this is not a new concept for professional workforce, education and economic development leaders and policy makers, Los Angeles system leaders have fallen short of aligning the policies and practice required to maintain a well-educated workforce with the skills industries require. It is of paramount importance that we begin to reverse a trend which threatens the region’s and the state’s long-term economic prosperity and the income-earning ability of thousands of residents.

The sheer size and complexity of the regional economy of Los Angeles County and its demographics have made the concept of regional coordination unwieldy. Prior to the Workforce Innovation and Opportunity Act (WIOA) and the Strong Workforce Program, there were no mandates and very few incentives for leaders of traditionally siloed systems to work together.

As part of the Los Angeles regional planning process in recent months, efforts have been successful in engaging workforce, education and economic development leaders across the county. There is a shared understanding that we are largely dependent upon each other and that we must work collaboratively to solve these looming issues.

## Partner Engagement and Planning Processes

Multiple research strategies and methods of engagement were employed to determine the economic and regional workforce needs of Los Angeles County, including analyzing available reports, examining supply-and-demand data and hosting small and large meetings with partners including workforce organizations, industry representatives and intermediaries. Key partners are shown in Exhibit 2.

Since 2014, CTE deans have met quarterly with the region's seven workforce development boards and key workforce development system leaders throughout the Los Angeles Area Workforce Collaborative, which was jointly established to strengthen coordination, collaboration and alignment of workforce development education and training between the two major workforce development partners in the region. Working groups were established to develop shared goals consistent with the mission and priority objectives of the collaborative.

The mission of the collaborative is to foster a trusting Los Angeles County regional collaboration focused on demand-driven workforce and training initiatives by partnering with and aligning workforce development boards and community colleges through a transparent problem-solving approach.

The collaborative has identified three objectives to guide the process:

1. **Training:** Identify and remove barriers to training by and with community colleges for workforce development boards (WDBs), including challenges related to contract/cohort training and the Eligible Training Provider List (ETPL).
2. **Policy:** Develop joint funding/partnering strategies and policy recommendations for local, state and federal stakeholders that facilitate systemic partnerships.
3. **Data:** a) Align countywide regional workforce initiatives based on common economic development data; b) Identify and implement protocols to ensure tracking/sharing of programmatic data; and c) Eliminate duplication in support of shared workforce outcomes.

### Exhibit 2. Key Partners Engaged

- Los Angeles/Orange County Region Center of Excellence
- Los Angeles County Economic Development Corporation
- Los Angeles Area Chamber of Commerce
- County of Los Angeles Workforce Investment Board
- Deputy Sector Navigators
- Industry and workforce partners
- K-12 school districts & adult education providers



The collaborative has strengthened engagement on multiple levels including co-chaired meetings following LAOCRC meetings, attendance and co-presentations at CCCAOE and CWA conferences, commitments by workforce development boards to provide dedicated funding for summer youth employment and adult program funding for community colleges to develop and provide in-demand occupational training in high-growth sectors, increasing the number of America's Job Centers on community college campuses as shared assets, and coordination on the use of common labor market and economic development data for planning, priority setting and industry sector and cluster designation.

In addition, the collaborative has served as a forum to increase and improve regional coordination, collaboration and alignment. It has supported the regional planning processes for both the local workforce development boards and the community colleges, including participation by boards and colleges in the many regional convening events by each system to gather stakeholder input and use of common labor market information and economic intelligence reports. A regional forum for more than 100 stakeholders was hosted by the Los Angeles Area Chamber of Commerce to launch the collaborative. It featured renowned keynote speaker Dr. James Jacobs, president of Macomb Community College in Michigan. His presentation, "A New Era of Regional Partnerships," provided insights into creating regional industry alignment across workforce and economic development systems.

### **Regional MOUs with WDBs**

In June 2016, the 10 community college districts representing 19 community colleges in the region signed onto one or more of the seven WDB WIOA Memorandums of Understanding (MOUs) that were submitted to the California Workforce Development Board in compliance with mandates of WIOA and state law. Community colleges are among the 17 mandated system and institutional partners in the regional workforce development system. The MOUs represent a pledge to co-invest and participate in the delivery of employment and training services at one of the region's 35 America's Job Centers of California (AJCC), coordinate industry sector analysis and adopt common priority and emerging sectors. They also reflect a commitment to align regional systems of data collection and coordinate the interpretation and analysis of regional data for program design and development as well as strategic decision making, with the aim of enhancing career pathways and the workforce development training offered by community colleges. The MOU commitments reaffirm the shared vision of partners in the region to work together to build an aligned regional workforce development system.

Coordination with the WIOA planning process included recognition of 14 common themes from 19 regional forums with nearly 500 participants, including CTE deans, faculty and other representatives from community colleges. The WIOA planning process highlighted several consistencies shared by our systems' approaches, such as the region's unique complexity, size and diversity; the need to think and act as a single system; the importance of industry engagement regionally as a system; and the critical importance of internships, job shadowing, work-based learning and apprenticeships. Other themes include the importance of understanding economic forces to adequately prepare people for jobs; teaching essential workforce and job readiness skills; emphasizing English language skills; and improving

communication to broadcast how critical these themes are for workforce development. Exhibit 3 shows the education and workforce partners who participated in the regional workforce development planning process.

### Exhibit 3. Participants in the Regional Workforce Development Planning Process

#### 10 Community Colleges/Ring Colleges

- Cerritos College
- Citrus College
- El Camino College
- El Camino College-Compton Center
- Glendale Community College
- Long Beach City College
- Mt. San Antonio College
- Pasadena City College
- Rio Hondo College
- Santa Monica College

#### Los Angeles Community College District (LACCD)

- East Los Angeles College
- Los Angeles City College
- Los Angeles Harbor College
- Los Angeles Mission College
- Los Angeles Trade-Technical College
- Los Angeles Southwest College
- Los Angeles Valley College
- Pierce College
- West Los Angeles College

#### Workforce Development Boards

- City of Los Angeles Workforce Development Board
- City of Los Angeles Economic and Workforce Development Department
- Los Angeles County Workforce Development Board, El Camino College
- Southeast Los Angeles County Workforce Development Board
- South Bay Workforce Investment Board
- Verdugo Workforce Development Board

#### Adult Education Providers and Regional AB86 Consortia

- K-12 (Secondary) and Adult Education
- Los Angeles City Board of Education
- Los Angeles County Office of Education

#### Regional Industry/Government Partners

- Los Angeles County Economic Development Corporation
- Los Angeles Area Chamber of Commerce
- San Gabriel Valley Economic Partnership

#### Economic Development Department

- Los Angeles/Ventura/Central Coast Region LMID
- State of California EDD
- California Department of Rehabilitation (DOR)

### **Regional Planning Summit**

The Career Ladders Project for the California Community Colleges (CLP) was engaged to support meeting planning, facilitation, logistics, reporting and the regional planning process for the collaborative. In August 2016, the Los Angeles Area Workforce Collaborative held a two-day partnership summit with the seven workforce development boards, 19 CTE deans, adult education partners, the Economic Development Department (EDD) and key industry and economic development leaders in the LAOCRC region.

The purpose of the summit was to:

- Share information and commit to a joint approach for the regional plans for each system;
- Develop and adopt common priorities and strategies to strengthen local and regional coordination and to align strategic workforce development and training initiatives by and between workforce development boards and community colleges; and
- Commit to the utilization of consistent data to inform ongoing collaboration and coordinate industry/employer engagement.

The mission and objectives of the collaborative were refined to reflect the goals and mandates of the California Workforce Innovation and Opportunity Act (WIOA) and the Strong Workforce Program. The Los Angeles/Orange County Region Center of Excellence provided an overview of the data that colleges use for program development and planning purposes and that colleges are required to use for local share and regional planning. WDBs shared the primary data and information systems for WIOA case management, training and placement, and the unique terms used by each system to define similar categories and performance metrics. A discussion arose related to data using an occupation, sector or cluster focus analysis, what common data sources could be used by systems in the region, and strategies to develop common data and metrics that can be used by all systems.

The WDBs led a discussion concerning the “2016 People, Industry and Jobs” report by the Los Angeles County Economic Development Corporation (LAEDC). The report was produced for all regional partners and highlights the most recent labor market and economic trends in Los Angeles County, including high-growth industries, sectors, clusters and geographic areas of job growth. A conversation followed on emerging priorities and how the regional planning process for both WDBs and community colleges should reflect existing partnerships and collaboration, and commitment to regional alignment. There was agreement on the need to create an asset map of the current certifications/training programs within the region, and identify meetings, conferences, events and sector/industry collaboratives that could be leveraged as joint meetings.

In September 2016, another two-day summit was held prior to CCCAOE. It was well attended by WIOA and community college leaders. That convening served to deepen engagement and authentic inclusion into the WIOA regional plan, which also informed the writing of the Los Angeles Regional SWP Plan.

### **SWP Planning Forum**

Meetings with business and economic development, workforce development boards, adult education and community partners on proposed regional projects and planning culminated with a regional stakeholder forum on December 6, 2016 with industry and business leaders and employers from high-growth industry sectors invited by LAEDC, the Los Angeles Area Chamber of Commerce, San Gabriel Valley Economic Partnership, workforce development boards, and K-12 and adult education leaders.

The group met to discuss the drivers and initiatives that will impact the region, the trailer bill language for the Strong Workforce Program (SWP), allowable uses of the SWP funding, present proposed regional projects and regional plan priorities. In total, 66 attendees—representing 34 education constituents and 32 constituents from industry, business and economic development—provided significant stakeholder feedback, analysis, alternatives and information on outcomes.

Stakeholder input led to a balanced understanding of the challenges and opportunities facing the region. As a result, action-item priorities were selected to meet the need for:

- Fast delivery in our systems and responsiveness to business,
- An accelerated program approval process for certificates,
- Working jointly with industry to identify appropriate skill sets,
- Collaboration on an evaluation process of our activities,
- The development of common assessment tools, especially for advanced manufacturing,
- Apprenticeships with union involvement,
- Identification of potential gaps in work experience, and
- The creation of bridge programs to close supply and skills gaps in aerospace and other industry clusters.

A key discussion that resonated among stakeholders was the importance of implementing a collaborative process to identify the needed competencies for students and incumbent workers to ensure jobseekers are prepared and competitive.

We have been engaged in continuous discussions with WIOA workforce development partners, and we intend to bring K-12, linked learning, universities, California Department of Rehabilitation, City of Los Angeles Economic and Workforce Development Department, Los Angeles County Board of Supervisors and county departments including probation, office of education, children and family services, workforce development, aging and community services and public social services into meetings with the CTE deans and education affiliates to assess and coordinate efforts to serve high-priority populations facing barriers to employment. The new redesign of the governance and structure of the LAOCRC will allow for such engagement.

CTE deans are members of the Los Angeles County, the City of Los Angeles, Foothill (San Gabriel Valley) and Verdugo (Burbank, Glendale and La Canada Flintridge) workforce development boards. They have participated in and contributed to both the WIOA and SWP planning efforts and WIOA Regional Plan submission.

### **LAOCRC Engagement Process**

The Los Angeles/Orange County Region Center of Excellence, hosted by Mt. San Antonio College, provided detailed data and analysis of the region's economy including the projected growth of a number of critical occupations in the Los Angeles Region and developed detailed supply-and-demand tables, which were used to validate industries selected for both the local and regional Strong Workforce Program investments.

A number of publications informed the planning process by the Los Angeles and Orange County Regional Consortia (LAOCRC). The documents provided important insights into regional workforce projects. Three reports of particular relevance were:

- “2015-2020 Los Angeles: People, Industry and Jobs,” a study by the Los Angeles Economic Development Corporation on Los Angeles County's workforce needs, occupational forecasts and skills required by occupations.
- “The County of Los Angeles Workforce Investment Board 5-Year Strategic Local Workforce Plan 2013-2017.”
- The 2016 report “Regional Labor Market Assessment Occupations in Los Angeles County” published by the Centers of Excellence. The report provides regional labor market data tables for occupations that are relevant to community college-level education and training programs in the region.

In early November, community colleges in Los Angeles County identified initial ideas and strategies for regional initiatives and pilot projects that were responsive to industry training and workforce needs and that were aligned with the capacities of the 19 colleges. CTE deans/vice presidents, deputy sector navigators, technical assistance providers and colleges interested in leading regional projects formed multi-college collaborations with industry, workforce and education partners to develop project proposals.

Initially, 66 projects were proposed, which were then ranked according to a rubric that assessed their alignment with the Strong Workforce Program requirements and recommendations, as well as the degree to which they aligned with regional workforce needs identified by industry and labor market data. Through a thorough vetting process, 19 projects were ultimately agreed upon for recommendation to the 15 members of the LAOCRC CEO Council for approval.

In December, meetings were convened that included representatives from business and industry, sector intermediaries, economic development corporations, workforce partners, adult education, deputy sector navigators and other partners to further vet and offer input on the proposed projects.

Although initially the Los Angeles County Economic Development Corporation and the Los Angeles Area Chamber of Commerce were concerned about a perceived lack of alignment of the regional projects, several targeted meetings were held to clarify the fact that the colleges utilized data and analysis developed by these entities in their decision-making and that most of the colleges included specific plans in their regional projects for sustained industry engagement to train for in-demand occupations in high-growth industry clusters.

This was also identified as one of the strategic priorities for the Los Angeles Region's Strong Workforce Program. A structured, deeper and more authentic engagement between the economic development centers and community colleges is now underway so that such instances will not occur in the future. Further, the new Los Angeles Regional Consortium Director met with the LAEDC and the Los Angeles Area Chamber of Commerce several times in December and January to develop the content outlined in this report's following sections regarding the process of sustained industry engagement and the industry-centric vetting process that will maximize input and consultation from employers to meet industry needs for skills development, certifications and employment opportunities.

## Regional Labor Market Data and Analysis

The Los Angeles Regional Consortium’s planning process incorporated data analysis from regional labor market data reports prepared by the Los Angeles/Orange County Region Center of Excellence (COE), including the 2016 report “Regional Labor Market Assessment Occupations in Los Angeles County.” Labor market data and community college outcomes presented in these reports were critical to the planning process. The following nine sectors were identified through the Doing What Matters Initiative and are discussed in more detail in this section:

- Advanced Manufacturing and Advanced Technology
- Advanced Transportation and Renewable Energy
- Energy, Construction and Utilities
- Global Trade and Logistics
- Health Care
- Information & Communications Technology (ICT)/Digital Media
- Life Sciences and Biotechnology
- Retail, Hospitality and Tourism
- Small Business

The sector data summarized in this section is reflective of the Doing What Matters Initiative. However, additional sectors in need of attention have been identified through regional partners, such as LAEDC, Los Angeles Area Chamber of Commerce and the WIBs. LAEDC and the Los Angeles Area Chamber of Commerce summarized their analysis of the needs of the region in a report and in a joint letter to the region’s community college chancellors and presidents dated November 30, 2016.

In addition to encouraging a strategy for sustained industry engagement, they urged the colleges in the region to prioritize CTE investments, projects and programs that build talent capacity in the labor markets associated with more highly concentrated, competitive and growing demand industries. They recommend an initial focus on the following seven industries:

- Aerospace & Defense (including space commercialization, drone technologies and unmanned aerial systems)
- Advanced Transportation (including fuel, autonomous vehicles, and electric vehicles and technologies)
- Information & Communications Technology (ICT)
- Bioscience & Medical Devices
- Entertainment & Digital Media
- International Trade
- Health Services

In subsequent conversations with the Deputy Sector Navigator for Energy, Construction & Utilities, construction was added to the list, which was highlighted in the LAEDC’s “2015-2020 Los Angeles: People, Industry and Jobs,” report as the No. 1 sector targeted for economic and workforce development activity.

It should be noted that these organizations use different terminology for some of their sectors which are not an exact match with the Doing What Matters Initiative. However, these sectors do overlap with a number of the Doing What Matters Initiative sectors and share commonalities. Going forward, we plan to work toward alignment of all the identified sectors through collaborations with our workforce development partners, including the LAEDC, WIBs and Los Angeles Area Chamber of Commerce.

The information provided below includes supply-and-demand labor market information (LMI) for each of the nine Doing What Matters Initiative industry sectors. Annual community college awards are based on an average of the total number of awards conferred for the three-year period of 2012-2015.

#### **Advanced Manufacturing and Advanced Technology**

There are 28 community college programs in the region that prepare students for employment in 62 occupations related to Advanced Manufacturing and Advanced Technology. Community colleges and technical/proprietary schools awarded 1,600 degrees and certificates each year for programs in this sector. Annual job openings for occupations related to these programs will total 5,800 over the next five years.

The median hourly earnings for workers in this sector range from \$11.45 to \$49.48. Carpenters are expected to have the most job openings over the next five years (691 openings), and electricians will have the second most openings (481 openings). On the supply side, community colleges are conferring the most certificates in electronics and electronic technology, 157 awards annually. General engineering technology programs conferred the most associate degrees in this sector, 52 degrees annually.

#### ***Advanced Manufacturing/ Advanced Technology***

**62** related occupations

**28** community colleges programs

**5,800** projected job openings

**1,600** awards/year

**\$11.45-\$49.48** wages



### **Advanced Transportation and Renewable Energy**

In Los Angeles County, community colleges offer 10 education programs that train students for employment in 18 occupations within the Advanced Transportation and Renewable Energy sector. These programs conferred an average of 1,000 awards each year. Over the next five years, occupations in this field are forecasted to have 1,800 job openings.

### ***Advanced Transportation/ Renewable Energy***

**18** related occupations  
**10** community colleges programs  
**1,800** projected job openings  
**1,000** awards/year  
**\$14.66-\$56.35** wages

Workers in this sector can expect median hourly earnings ranging from \$14.66 to \$56.35. The greatest number of job openings will be for automotive service technicians and mechanics (717 openings) and bus and truck mechanics and diesel engine specialists (220 openings).

Automotive technology programs account for the most certificates and degrees awarded within this sector – 74 associate degrees and 549 certificates annually.

### **Energy, Construction and Utilities**

The Energy, Construction and Utilities sector accounts for 11 community college programs in the county. There are 17 occupations in the county related to this sector.

On average, postsecondary programs conferred 778 awards each year. In terms of the demand for workers, the 17 occupations will have 6,750 job openings over the next five years.

With the exception of a few, occupations in this field earn more than the county living wage. Employment in this field can yield hourly wages from \$11.45 to \$37.12.

### ***Energy, Construction & Utilities***

**17** related occupations  
**11** community colleges programs  
**6,750** projected job openings  
**778** awards/year  
**\$11.45-\$37.12** wages

Environmental control technology (HVAC) programs conferred the most awards from 2012-2015, a total of 212 degrees and certificates. The greatest number of associate degrees, 55 total, were completed in architecture and architectural technology programs.

### Global Trade and Logistics

Community colleges in the region offer two programs related to Global Trade and Logistics. The first is international business and trade. The second is logistics and materials transportation. There are nine related occupations offering employment in this sector in the county.

On average, these two programs conferred 119 certificates and awards each year. The nine Global Trade and Logistics occupations are anticipated to offer 3,200 job openings over the next five years. Hourly earnings range from \$21.43 to \$39.50. The occupation of wholesale and manufacturing sales representative will have the most job openings by 2020, 1,429 positions over the next five years.

### Health Care

The Health Care sector is supplied by 30 community college programs. These programs prepare students to enter 30 occupations in the county.

On average, community colleges and technical/proprietary schools conferred 4,800 awards each year. Occupations in the Health Care sector are expected to have 94,250 job openings over the next five years.

In the health care sector, home health aides earn the lowest hourly wage (\$11.38) and dental assistants earn the highest (\$50.85). Overall, median hourly earnings in this sector are relatively high compared with other sectors, with all earnings being at or greater than the living wage for the county.

By far, registered nursing programs are conferring the greatest number of associate degrees in the county, averaging 1,160 degrees each year. Respiratory care programs awarded the second highest number, an average of 103 degrees each year.

#### ***Global Trade & Logistics***

**9** related occupations

**2** community colleges programs

**3,200** projected job openings

**119** awards/year

**\$21.43-\$39.50** wages

#### ***Health Care***

**30** related occupations

**30** community colleges programs

**94,250** projected job openings

**4,800** awards/year

**\$11.38-\$50.85** wages

**ICT/Digital Media**

In Los Angeles County, 25 community colleges offer programs related to ICT/Digital Media. These programs, cumulatively, offer training and education for 35 occupations related to this sector.

On average community college and technical/proprietary colleges conferred 2,563 degrees and certificates each year for programs related to this sector. ICT/Digital Media occupations are expected to have 9,400 job openings over the next five years.

Most median hourly wages in this sector are well above the county’s living wage, with the exception of data entry keyers. The remaining 34 occupations have reported earnings from \$17.75 to \$56.28.

Among ICT/Digital Media programs, office technology programs had the most associate degree and certificate completions, 906 each year. The bulk of these awards were conferred by community colleges, with technical/proprietary colleges conferring only 119 awards each year for office technology programs.

***ICT/Digital Media***

- 35** related occupations
- 25** community colleges programs
- 9,400** projected job openings
- 2,563** awards/year
- \$17.75-\$56.28** wages

**Life Sciences and Biotechnology**

There are two programs in the county that are preparing students to enter five occupations in this sector: 1) Biotechnology and Biomedical Technology and 2) Biomedical Instrumentation.

These two programs confer an average of 113 certificates and degrees each year. Job openings for Life Sciences/Biotechnology occupations will total 4,250 over the next five years.

Hourly earnings for related occupations range from \$17.80 to \$23.19 in the county. Medical equipment repairers earn the highest wage while inspectors, testers and weighers earn the lowest wage. In the county, medical laboratory technology programs confer about 24 awards annually, and biotechnology and biomedical technology programs award around 22 certificates and degrees each year.

***Life Sciences/ Biotechnology***

- 5** related occupations
- 2** community colleges programs
- 4,250** projected job openings
- 113** awards/year
- \$17.80-\$23.19** wages

### **Retail, Hospitality and Tourism**

The Retail, Hospitality and Tourism sector encompasses fashion, culinary arts and travel. There are currently 13 programs related to this sector offered by community colleges in the region. Students who complete programs in this sector will be qualified for employment in at least 28 related occupations.

On average, these 13 programs confer 1,190 certificates and degrees each year. The related occupations are forecasted to have a significant number of job openings—82,325 job openings over the next five years.

Although this sector provides many job opportunities, wages are relatively lower compared to other sectors. Occupations earn hourly wages ranging from \$11.20 to \$50.65. Higher wages are paid to supervisors of various entry-level workers.

In the sector, community college culinary arts programs have the most certificate and degree completions among all programs, on average 295 certificates and 58 associate degrees each year. Technical colleges also conferred 157 culinary arts awards each year.

### **Small Business**

The Small Business sector includes programs in the areas of business, early childhood education and cosmetology, among others. In the county, there are 11 programs that prepare students to enter 33 occupations in this sector.

These 11 programs awarded an average of 5,300 certificates and awards each year. Occupations related to this sector are projected to have 102,000 job openings over the next five years.

Because of the wide range of training programs related to the Small Business sector, hourly earnings also have a broad range, from \$8.52 to \$50.96. The occupation of sales manager is the highest paid in this sector while the occupation of childcare worker is the lowest paid.

Among programs related to the Small Business sector, the most certificates awarded were from child development/early care and education programs, 979 certificates each year. Business administration programs conferred the most associate degrees.

#### ***Retail, Hospitality & Tourism***

**28** related occupations

**13** community colleges programs

**82,325** projected job openings

**1,190** awards/year

**\$11.20-\$50.65** wages

#### ***Small Business***

**33** related occupations

**11** community colleges programs

**102,000** projected job openings

**5,300** awards/year

**\$8.52-\$50.96** wages

## Los Angeles Region Assets and Investments

Community colleges in the Los Angeles Region have a number of initiatives underway that can be leveraged and built upon to strengthen the Los Angeles Strong Workforce Program. The size and complexity of the region and the number of assets and investments is substantial; thus, a comprehensive list of *all* regional assets is not included. This section highlights the most relevant regional assets—those presenting the most impact for the Strong Workforce Program.

Several non-competitive, categorical funding streams supported by state or federal legislation provide opportunities for leveraging funding for this purpose. Although its reauthorization is still in question, the Carl D. Perkins Vocational and Technical Education Act (Perkins Act) is a source of funding that is aligned with the Strong Workforce Program.

The Perkins funds are to be used to prepare students for high-skill, high-wage or high-demand occupations in current or emerging professions and has been the most consistent funding for CTE in recent history. In the colleges' local and regional plans, the colleges need to determine ways to leverage these funds for maximum impact. All the community colleges in the Los Angeles Region receive Perkins funds (based on their CTE FTES) as well as CTE Transition Funds, which are earmarked for strengthening K-12/college partnerships. Both can be leveraged with Strong Workforce Program funds to expand targeted activities.

Senate Bill 1070 assists economic and workforce regional development centers and consortia to improve, among other things, CTE pathways between high schools and community colleges to align existing postsecondary technical preparation programs with high school CTE curriculum to ensure seamless transitions for pupils; to increase attainment of industry-recognized certificates through community college and high school CTE programs in high-need, high-growth or emerging regional economic sectors; and promote productive partnerships.

Within the region there were two SB 1070 projects, one for the county's ring colleges and one for LACCD. These SB 1070 projects worked in partnership to develop a regional strategy for career pathway development, re-imagining and re-invention of "articulation" to maximize its impact and feasibility and to develop a plan to remove barriers to successful and sustained career pathway programs. A total investment of \$3,029,538 has been made to date and the program will sunset in 2017 as a separate funding stream; however, the deliverables and expectations for career pathway development will now be a part of the Strong Workforce Program.

Although not specific to Career Technical Education, several system-wide funding programs will also be considered as assets in the region to strengthen the programs developed with Strong Workforce Program funding. These include Adult Education (AB 104 Adult Education Block Grant), and Student Success and Support Program (Seymour-Campbell Student Success Act of 2012) and allocated Student Equity Funds. Colleges in the region were deliberate and mindful

of ways that these programs can be synergistic in their impact to meet their respective goals and maximize the impact of the Strong Workforce Program in the region.

In addition to the allocated grants and funding, the region's community colleges and unified school districts have been recipients of competitive grants that can support the work. The California Career Pathways Trust (CCPT) program provided \$250 million in Proposition 98 General Funds for the State Superintendent of Public Instruction (SSPI) to award regional and local implementation grants.

Under the CCPT, one-time competitive state grants were made available to school districts, county superintendents of schools, direct-funded charter schools and community colleges for the purpose of establishing or expanding career pathway programs in grades nine through 14 (community college). These career pathway programs are intended to prepare students for high-skill, high-wage jobs in emerging and expanding industry sectors in the local or regional economy.

Within the Los Angeles region there are nine CCPT grants in which community colleges are either the lead or partners. These projects are shown in Exhibit 4.

**Exhibit 4. Los Angeles County CCPT Projects**

Project Name	Lead Agency	Amount
LA HI-TECH	Pasadena Community College	\$15 million
LAUSD Career Pathway Project	LAUSD	\$15 million
LACCD Career Pathways Consortium	LACCD	\$15 million
Montebello Career Pathway Trust	Montebello Unified School District	\$6 million
Long Beach College CCPT	Long Beach City College	\$15 million
Glendale CCPT	Glendale Unified School District	\$6 million
Long Beach Unified CCPT	Long Beach Unified School District	\$6 million
Pasadena Unified CCPT	Pasadena Unified School District	\$3 million
Los Angeles County Office of Education (LACOE) CCPT	LACOE	\$6 million

A considerable federal grant of over \$19 million, the Trade Adjustment Assistance Community College and Career Training grant, was awarded to the Los Angeles Trade-Technical College in 2013 that has had a significant impact on the health sector; the program implementation stage of the five-year grant ends in March 2017. The Los Angeles Healthcare Competency to Career Consortium (LA H3C) is a multi-college consortium project among all nine colleges that comprise the Los Angeles Community College District.

A consortium of the community colleges, sector intermediaries, the workforce system and employers in the health care industry sector joined forces to create career pathways, core curricula and new programs of study in the sector. One of the regional projects leverages this existing project and will provide support for the dissemination of the work to all colleges in the greater Los Angeles area, including those in Orange County.

The California Community Colleges Chancellor's Office made available \$10.5 million in Proposition 98 funds for the California Apprenticeship Initiative (CAI) New Innovative Program, part of the \$15 million California Apprenticeship Initiative which seeks to create new and innovative apprenticeship opportunities in priority and emerging industry sectors or areas in which apprenticeship training does not currently exist. Three projects in the region were awarded in 2016 to the Los Angeles Unified School District, Los Angeles Trade-Technical College and West Los Angeles College.

Proposition 39, the California Clean Energy Jobs Act, has awarded a series of five one-year appropriations to fund energy-efficient projects for the California Community Colleges beginning in 2012-13 to the present. The Los Angeles/Orange County Region's Prop. 39 funds are administered by Los Angeles Trade-Technical College in partnership with the Energy, Construction and Utilities Deputy Sector Navigators. These funds are specifically identified and leveraged in the regional Strong Workforce Program project for this industry sector.

### **Strategic Priorities for the Los Angeles Region**

Through the partner engagement and planning process, the Los Angeles Region identified six strategic priorities for the Strong Workforce Program that are the focus of one or more of 22 regional projects. (Please refer to Appendix C for a complete description of each of the projects.)

The priorities also incorporate input from LAEDC and the Los Angeles Area Chamber of Commerce, which have current industry councils in the areas of advanced transportation, aerospace, bioscience, entertainment/digital media, health care and ICT. These councils consist predominantly of industry firms, as the vehicles by which to validate these demand-side findings.

These priorities are intended to address the most relevant of the Strong Workforce Program's 25 recommendations at the regional level.

The priorities include:

- Maximizing sustained industry engagement through participation in industry councils and collaborative efforts, and creating regional industry advisory boards;
- Strengthening career pathways and programs of study in partnership with K-12 school districts, adult education providers and labor/registered apprenticeships;
- Increasing opportunities for work-based learning along the continuum through industry partnerships;
- Attending to the need for new CTE faculty recruitment (teacher pipeline) and professional development and externships for current faculty to ensure alignment with dynamic industry skills and knowledge;
- Addressing the needs of business and industry in identified priority and emerging sectors; and
- Supporting regional marketing, curriculum alignment, streamlined regional processes and regional labor market data collection and analysis for data-informed decision-making.



### Priority and Emerging Industry Sectors

The California Community Colleges Chancellors' Office (CCCCO) funds the Los Angeles Orange County Regional Consortia (LAOCRC). It is supported primarily with Perkins IB funds. Leadership—including the regional chair, regional co-chair, fiscal agent and COE director—have changed multiple times since the original priority and emerging sectors were selected for the Los Angeles Region a number of years ago.

In previous years, the identified sectors had been informed by limited data and were based largely on institutional practices and current industry investments and partnerships. At the time of their selection, the comprehensive regional labor market data was a fraction of what is produced and available today. Over the years, the region has made significant investments in these sectors; yet, the need to revisit and restructure the Doing What Matters sectors is paramount for Los Angeles County as it moves forward under the Strong Workforce Program. The five emerging and priority sectors for the region are shown in Exhibit 5.

**Exhibit 5. Regional priority and emerging sectors.**

Industry	Type of Sector
Advanced Manufacturing	Priority
Advanced Transportation & Renewable Energy	Priority
Health	Priority
Energy, Construction & Utilities	Emerging
ICT/Digital Media	Emerging

In addition to these sectors, the Chancellor's Office identified several more sectors which were classified as across-county needs and additional resources were provided, including sector navigators or deputy sector navigators. These sectors included Global Trade and Logistics; Retail, Hospitality and Tourism; Small Business; Life Sciences/Biotechnology and Agriculture; and Water & Environmental Technology.

Based on data analysis, industry and intermediary engagement, and published reports, the Los Angeles Region requests the following changes:

- Convert Energy, Construction and Utilities from an emerging sector to a priority sector. Sufficient work has been done to build these pathways whereby the description of this sector as "emerging" is no longer accurate.
- Add Life Sciences/Biotechnology as an emerging sector. The Los Angeles County Board of Supervisors, the Los Angeles County CEO's office and County CDC have committed to investing in the biosciences industry cluster in a comprehensive initiative that is at its early stages. LAEDC has developed an implementation plan for this initiative and is centrally coordinating a diverse group of organizations with knowledge and expertise in

regional bioscience industry cluster capacity-building, including BioCom, BioAccel, Keck Graduate Institute, CommonWeal, Collaborative Economics and others. The research, recommendations, and action items contained in the implementation plan will be reviewed by county officials in 2016-2017, setting the stage for significant action and progress in the coming months.

- Add Entertainment as a priority sector (specific to Los Angeles County) or split ICT/Digital Media and provide a DSN for ICT and a second DSN for Digital Media, which would fill the gap for Entertainment. The “Creative Economy” facilitates the cross-pollination of local talents and technologies in digital media, arts and more. Los Angeles County is one of the most dynamic, resource-rich places to do business due to the variety of creative, entrepreneurial professionals and convergence between the technology, gaming and entertainment industries and cross pollination of their ecosystems. Los Angeles County is the “Creative Capital of America.” The county’s entertainment industry has an employment base of more than 160,000 people and a supplier base of more than 13,000 companies. It remains a top region for major-studio film production. Entertainment is the third largest industry the county, providing resources for existing and new companies.

The increased dialogue among partnering agencies that has occurred over these past several months as this regional strategy has been developed, has revealed a conflict between the Doing What Matters sector framework and expected outcomes of the Strong Workforce Program, particularly in the area of identifying “sector priorities.” The adopted Strong Workforce Program recommendations include the strengthening of “communication, coordination, and decision-making between regional CTE efforts and the colleges to meet regional labor market needs.”

In addition, the Strong Workforce Program calls for the development of “robust connections between community colleges, business and industry representatives, labor and other regional workforce development partners to align college programs with regional and industry needs and provide support for CTE programs.” In addition to the Strong Workforce Program recommendations, SB 293 requires the State Workforce Development Board to collaborate with the California Community Colleges, the California Department of Education, other appropriate state agencies, and local workforce development boards to develop a comprehensive state plan that serves as a framework for public policy, fiscal investment and operation of all state labor exchange, workforce education and training programs.

As part of this state mandate, the California WDB strategic plan includes coordinating and developing high quality, actionable labor market information (LMI) that assesses regional industry and occupational trends and needs; annually publishing sector and regional profiles that include skills gap analysis; and working with local boards to collaborate with community colleges to share regional workforce and economic analysis and to identify priority industry sectors and clusters.

Unfortunately, there is a misalignment of fundamental terminology used to describe and ascertain industry sector priorities across state agencies, hindering meaningful regional dialogue regarding the sector priorities and the workforce development necessary to bolster and meet each constituent's identified priorities. With some agencies using the standard North American Industry Classification System (NAICS), others focusing on industry clusters, and some using a hybrid approach, aligning regional priorities is somewhat challenging. As we move forward under the Strong Workforce Program, it is critical that we continue to communicate and collaborate despite these challenges, but it is recommended that policy concerning the county's priority industries must be aligned at the state level. If not, the Chancellor's Office should allow regional flexibility from the Doing What Matters framework which defines the sectors to allow better regional coordination and alignment with key economic and workforce partners.

### **Career Pathways**

Career pathways have been the focus of Career Technical Education since the renewal of the Carl D. Perkins Vocational and Technical Education Act of 2006 and even before this time as part of the Tech Prep Initiative. However, community colleges in California have watched the demise of CTE programs in secondary education programs making it difficult to align postsecondary programs.

Career pathways provide an effective framework for increasing enrollment and completion of postsecondary education, and this is primarily why pathways were developed. Community college students typically require more support services than students entering a four-year degree program directly out of high school because many are the first members of their family to attend a postsecondary institution. The pathways approach is valuable to these students because many have not been exposed to the career opportunities that are available—particularly pathways leading to high-wage, high-skill occupations.

Pathways are effective for a variety of populations, such as high school and adult learners. This is also true for marginalized populations. Well-designed pathways provide opportunities for multiple entry and exit ramps as students advance to successively higher educational attainment. Student support services, such as professional career counseling, are needed. Yet, these services are often missing in pathways programs.

More effort is needed to communicate the importance of CTE and middle-skill workforce education. Along with efforts to improve community college transfer success, community college leaders and regional partners must examine what and how they communicate with non-traditional students, adult learners and their families regarding the value of CTE-workforce programs and how students can obtain their short- and long-term career objectives.

Perhaps most importantly, career pathways offer a clear model for deeper relationships and increased goal alignment between colleges and industry. This requires collaboration with Workforce Development Boards (WDBs) to maximize apprenticeship and other engagement programs.

With the Strong Workforce Recommendations, career pathways have again been mandated, and SB 1070 funding focuses on establishing the framework for the development and delivery of career pathways. During the 2015-16 school year, the 19 community colleges in Los Angeles County jointly developed policies and procedures for the development of career pathways. This included articulation of courses with high schools/adult schools and the offering of dual enrollment courses under AB 288 agreements and other agreements, such as CCPT MOU's.

Implementation has occurred at various levels among the colleges. Within the Los Angeles County Ring Colleges (non-LACCD), 461 for-credit career pathways were identified in November 2016. However, only 124 are aligned with high school/adult education programs. The same Los Angeles County Ring Colleges reported that currently, 199 non-AB 288 dual enrollment courses were offered and 59 AB 288 dual enrollment courses were offered in more than 160 high schools within their service area. Almost nonexistent is the alignment of non-credit courses/programs with for-credit CTE programs. Specific data for the LACCD colleges are not available at this time, but similar patterns have been observed.

At the high school level, CTE lacks support and the focus has been on four-year post-secondary education. High school staff has expressed frustration with trying to identify how a CTE course offered to high school students can align with the community college career pathways. More than 300 high schools exist within Los Angeles County, creating a challenge as to whom the community colleges should work directly. Currently, no dedicated staff exists at the community colleges to provide this type of outreach service. Therefore, a more formal and structural approach needs to be developed to ensure that all of the high schools in Los Angeles County are served.

The Strong Workforce Recommendation #3 focuses on the need for the community colleges to establish clearly defined career pathways originating at either high schools or adult education providers and leading to entry-level employment. One of the regional projects focuses exclusively on providing the technical assistance and staffing for implementation of this goal. We will leverage the SB 1070 Career Pathways funds and existing partnerships to build upon the previous work. The project will focus on:

1. Implementation of alternative methods for granting credit from high schools and/or adult education providers;
2. Implementation of Career and Technology Education Management Application (CATEMA) to track credit granting from high schools/adult education providers;
3. Implementation of dual enrollment courses that focus on identified career pathways;
4. Implementation of work-based learning/work experience related to identified career pathways; and

5. Professional development focused on administrators, faculty, counselors and staff.

Student support strategies are also needed to educate both students and parents and facilitate career choices.

### **Work-based Learning**

The Los Angeles Region's community colleges have incorporated work-based learning (WBL) into their SWP regional projects that will enable students to participate in activities, expanding beyond their classroom experience, to gain practical industry experience. These WBL instructional strategies are critical to preparing students for success in their postsecondary educational and career experience and are distilled from linked learning tenets.

Understanding that our students' learning experience must expand beyond four walls, these WBL instructional strategies and projects will enable students to make progress learning workplace skills that they will master over a period of time. Critical elements in making decisions on which WBL projects to fund included:

- The extent of the interactive experiences our students would have with industry and community partners during the delivery and instructional components of the practical activities,
- The advancement of economic impact in the region in which industry employers operate, and
- Internships (paid and unpaid) and gainful employment opportunities available for students.

Los Angeles Regional WBL projects span from a Cybersecurity & Regional NetLabs Hub, where students can participate in classes hosted in a virtual lab that prepare them with technical and practical skills for industry certifications, to LA High Tech Bridge & Coding Bootcamp, which prepares students through apprenticeships in technology companies where students apply technical skills from the boot camp to assist companies with writing programs, developing software and a host of other programming tasks.

All 19 community colleges in the region have elected to participate in one or more of the work-based learning projects summarized in Appendix C.

**Faculty Professional Development and Externships**

In order to ensure that our students are mastering the competencies required for current jobs in the regional economy, curriculum and course outlines, student learning outcomes, performance standards and assessment, and the use of technology and equipment must meet industry standards.

This requires that community college faculty is provided with the opportunity for professional development, training and externships. Many of the region's CTE faculty are from industry and thus have industry expertise and experience; yet, they might be unfamiliar with the rapid changes in their field and unfamiliar with new technology and equipment.

One regional project focuses on the teacher pipeline, which includes professional development and training for current faculty as a deliverable. Furthermore, the sector-based projects that are designed to enhance and enrich programs of study include allocated funds for faculty training and/or externships and professional development.

This will be enhanced by the colleges' partnerships with business and industry partners' willingness to assess the needs of faculty, provide professional development and host externships.

**Sustained Industry Engagement**

Employers request coordination between community colleges and other workforce-education providers. Employers want to engage regionally and by sector (as opposed to individually) to anticipate labor market trends, build career pathways, determine specializations, inform faculty of changing job requirements, validate skill competencies, create work-based learning for students, promote joint investment in and sharing of resources, and conduct outreach to students.

Aligning industry skill demands in the regional labor market with CTE curriculum development provides the best opportunity for students who complete community college programs to find a job in their field of study. It is essential that CTE faculty develop program material based on sufficient input from industry representatives and community leaders. Faculty knows this; yet, they need to be supported in this endeavor. Faculty must be incentivized to develop value-based relationships with business and industry. Seamless transitions from school to work require institutional infrastructures that do not exist on most campuses.

Convening faculty and deans from across the region in a series of facilitated conversations and ideation design sessions will enable alignment of curriculum, provide professional development, disseminate best practices, engage regional scale employers and incubate new ideas for sharing resources. There are other common activities, such as organizing externship opportunities for faculty to keep their skills current and coordinating administrative support for program development and reciprocity. Moreover, incentivizing college-to-college collaboration is crucial to achieving scale, as is the role of regional industry advisory boards.

Community colleges in Los Angeles County have strong, ongoing relationships with business and industry in their respective areas, but the Strong Workforce Program (SWP) has elevated the conversation. SWP has resulted in a collective acknowledgment of the critical importance and impact of a regional approach, essentially an institutionalized process for industry to engage, inform and invest is an important outcome of our regional planning.

The Los Angeles County Economic Development Corporation (LAEDC) and Los Angeles Area Chamber of Commerce, in partnership with the community colleges in the region, are developing an innovative new paradigm and processes for strategic, systematic, institutionalized, ongoing and intentional industry engagement that informs, supports, enhances and results in a co-investment by employers, business organizations and economic development in CTE development. This explicit commitment is the result of dialogue that examined the current state of inconsistent, uncoordinated outreach and engagement of industry for ad hoc employment matching.

LAEDC and the Los Angeles Area Chamber of Commerce have agreed to lead efforts to create, convene, staff and support regional sector councils that are tailored to the high-growth industry sectors/clusters in the region and the regional SWP projects.

The goal of these sector councils is to have recognized business-led forums by workforce development partners in the region that prioritize community colleges, SWP, CTE programs and industry partnerships. Co-investment will be the central focus of the agenda, while encouraging and supporting broader systems alignment.

An important strategy continues to be the increase of membership, participation and presentations from community colleges in the myriad existing regional and sub-regional business associations, chamber and economic development organizations and their high-growth sector or priority population collaboratives. Sub-regional organizations and targeted collaboratives will complement the regional council approach and remain vital to individual college programs, faculty relationships, placements and other opportunities for students, such as internships and other work-based learning.

Support and engagement of sub-regional economic development entities and chambers of commerce—including the San Gabriel Valley Economic Partnership, Valley Economic Development Center, Valley Industry and Commerce Association, Compton Business Chamber of Commerce and others—are important to ensure diverse participation, input, engagement and collaboration with a wide range of partners in our vast region. Appendix D details the region's economic development and workforce collaboratives.

**Data-driven Coordination**

The highly successful management of the regional program approval process within the LAOCRC will continue as it has in the past year and a half; however, the focus has been on the regional process to approve local degree and certificate programs, with a few projects that are actually regional in scope (i.e. the pre-approval of the Business Information Worker programs). It is the aspiration of the region to develop authentic regional strategies and solutions. As a result, new processes and systems need to be developed.

Regional coordination, curriculum development and data sharing will be innovated by the regional project with the largest scope of work, the Los Angeles Workforce Education Research Center (LAWERC, pronounced LA Work).

The project primarily focuses on informing the development of regional curricula and regional programs. Additionally, the project will inform policy and practice in workforce education through established relationships with the LAEDC, the Southern California Leadership Council, the Los Angeles Area Chamber of Commerce and others.

LAWERC will facilitate the LAOCRC shifting from a reactive model of program approval to a proactive one. Data sharing and the production of accessible labor market information and other data is also a focus, whereby LAWERC will partner with the Center of Excellence for Labor Market Research and assist to bridge the gap between demand and supply in the county.

The project aims to decrease the time required for program development through the regionalization of program curricula.

**Regional Outcomes and Metrics**

The identified metrics of the Strong Workforce Program are most appropriately linked to the local plans and will include the following:

- “More” CTE demonstrated by increased enrollment in CTE programs of study, including non-credit programs, industry credentials, and certificate and degree programs.
- “Better CTE” demonstrated by at least one of the following:
  - Completion,
  - Transfer,
  - Employment rates,
  - Employment in field of study,
  - Earnings,
  - Median change in earnings, and/or
  - Proportion of students who attained living wage.



Since the regional plans and local plans were due at the same time for this initial application, there was insufficient time to calculate the regional impact based on these metrics, which will be a sum of the local Strong Workforce Program impacts.

In addition to the mandated and recommended Strong Workforce Program outcomes and metrics, each regional project has unique and specific outcomes that are identified in the attached summaries and in the regional templates submitted to the Chancellor's Office. Some overarching regional outcomes were highlighted in one or more regional project; these include:

- Increase the number of regional industry advisories;
- Increase the quality of industry engagement and partnership;
- Improve the availability, accessibility and utility of labor market and other data;
- Increase the number of regionally pre-approved certificates and degrees;
- Improve the overall functioning of the LAOCRC

Due to the changes mentioned above, the LAOCRC has not yet had an opportunity to fully vet these regional outcomes, nor to determine the process by which these outcomes will be evaluated, including the collection of baseline data, development of data collection tools and processes for analysis. These will be refined in the first quarter of 2017.

### **Local Share SWP Activities**

In addition to the regional projects described in Appendix C, the colleges in the Los Angeles Region have also made a significant investment in "more and better CTE" through their Local Strong Workforce Program activities. Although data are not yet available for all colleges in the region since some of the Local Plans are still being finalized, the colleges have shared information in a coordinated effort to ensure that collectively, the colleges are responding to workforce needs identified in the region, and are developing, strengthening and enriching programs that will lead to living wage jobs for their students.

The largest investment in the region is the utilization of the funds in programs and activities that impact all industry sectors, identified as "across all sectors" in the local SWP templates. These activities are both broad and targeted, and all are designed to strengthen CTE at the colleges. Almost \$7 million of the region's investments are classified as such. Activities, programs and resources include:

- CTE marketing, outreach and recruitment;
- Career pathway development;
- Dual enrollment;
- Career exploration academies and events;
- CTE counseling and student support services, including tutoring;
- Job/work readiness;
- Job development and placement assistance; and
- Work-based learning opportunities, including internships.

The CTE Enhancement funds allocated to the region's community colleges last year were helpful in terms of providing assistance for one-time costs, such as equipment upgrades, curriculum development and short-term training. However, because it is a multi-year funding stream, the Strong Workforce Program affords the colleges the opportunity to plan multi-year initiatives and take them to scale, and to employ staff to assist with the work. Outreach and recruitment targeted specifically to recruit students to the college's CTE pathways and programs of study is a large part of the local investment. Colleges will leverage their local funds to market their unique college program with the more broad-based marketing strategies that are occurring at the regional and state level.

The colleges are planning and implementing activities that are innovative and exciting, as well as those that are evidence-based and tried and true to recruit students from K-12, the

workforce and the community. Many of the colleges were enthusiastic about the opportunity to continue the work started with SB 1070 to build career pathways, capitalizing on AB 88 dual enrollment MOUs and articulation agreements.

The career pathway programs include career exploration, boot camps, industry tours, student showcase opportunities and competitions, as well as CTE demonstration fairs. Colleges are also using the funds to meet the goals to significantly increase CTE enrollment at the colleges.

In order to improve the outcomes for students, the colleges are using funds to provide targeted support, beyond the typical tutoring and basic skills education. Some colleges are strengthening contextualized math and English courses, and one college will be piloting adaptive learning and competence-based education to improve academic outcomes for CTE students.

The transition from student to the workplace is also being addressed with the SWP local funds. Several colleges are using the funds to teach job-readiness courses and programming, and to provide job development and job-placement assistance, working directly with workforce and business and industry partners.

The colleges are also making significant investments in industry sectors, both those that are priority and emerging sectors and for others that have significant skills gaps, and supply and demand gaps. With these sector projects, the focus is on curriculum development and alignment, faculty professional development and externships, and also on developing programs to assist students in earning industry recognized credentials.

Some colleges are working with specific employers to provide training for incumbent workers in need of skill upgrades, and to prepare incumbent workers for significant upcoming changes in technology and work environment. Most of the sector-based strategies include all of the following:

- Faculty professional development, training and externships;
- Enhanced industry engagement and regional alignment of curriculum;
- Curriculum enhanced to align with industry standards; and
- Upgrading equipment, materials and supplies to enhance learning.

Based on preliminary data collected from 24 of the 28 colleges in the region, the sector with the largest investment is Health Science/Health Care, which is supported by the data collected concerning employment needs in Los Angeles. Nearly \$2.7 million is invested in this sector. ICT—which includes ICT/Graphic Design, ICT/Computer Systems and Coding and other related occupations—will benefit from a little more than \$1.5 million of the region’s local share.

The colleges have also made large investments in Energy, Construction and Utilities (\$1.4 million) and Advanced Transportation (\$1.2 million).

Smaller investments of Local Strong Workforce Program funds are being made in:

- Biotechnology (\$400,000),
- Advanced Manufacturing (\$400,000),
- Culinary Arts/Hospitality (\$360,000),
- Early Childhood Education (\$350,000),
- Administration of Justice (\$350,000), and
- Small Business (\$200,000).

This is not an exhaustive list of all local share investment; however, it provides an overview of the Los Angeles Region’s local share activities. These sectors projects will leverage, where possible, regional projects, primarily as they relate to the development of regional curriculum alignment and the use of regional industry advisories. The CTE deans expressed enthusiasm for the opportunity to foster regional alignment and cooperation and are committed to participating in additional collaborative activities.

## **Continued Engagement Strategies**

Based on the significance of the investment in CTE by the Strong Workforce Program, the LAOCRC is committed to diverse strategies that foster ongoing engagement of business, industry, economic development, labor, government, workforce development and education partners in program activities and through ongoing planning.

This includes strategies for periodic, substantive reporting and review of project deliverables and outcomes, with built-in processes for identifying the value-added partnerships, technical assistance, professional development and consulting needed to ensure that the projects are thriving. This also includes institutionalizing and implementing an inclusive planning process to refine the strategies used to engage partners in the planning process.

The Strong Workforce Program will be a standing agenda item at all LAOCRC Meetings, as well as the Los Angeles sub-regional meetings of the many partner organizations, sector collaboratives and councils, chambers of commerce, and business and trade associations. The Los Angeles and Orange County Regional Directors are in the process of developing a meeting structure that will best facilitate the needs of the consortium to conduct business, as well as ensure there is meaningful partner, faculty and stakeholder engagement, project presentations, local and regional program updates, and planning.

All partners and stakeholders are encouraged to attend the LAOCRC monthly meetings, however, opportunity for interactive engagement is limited. A committee was seated in January to make recommendations for a new meeting structure to support the implementation of the Strong Workforce Program. The regional projects and many of the local projects include occasional regional events intended to foster and expand continued partner engagement.

Appendix D lists the numerous sector collaboratives, workforce development initiatives and business organizations to which the LAOCRC is affiliated; the colleges will leverage these relationships in hopes that there will be additional opportunities to engage partners, those mandated and others, in the Strong Workforce Program. Colleges will take advantage of every opportunity to present and market the Strong Workforce Program to partners, as well as utilize data, information and guidance from these partnerships to strengthen the existing Los Angeles Regional Strong Workforce Program Projects as well as inform new ones that will be planned in subsequent years.

In December, the LAOCRC's new governance structure was implemented, and its processes continue to be refined. In addition, the Strong Workforce Program being a standing agenda item at meetings, partners will be invited to present economic intelligence briefings from major regional economic development organizations and sector initiatives, such as the Advanced Manufacturing Partnership-Southern California, Metropolitan Transportation Agency, Los Angeles County Economic Development Corporation and Los Angeles County Business Federation. Regular briefings from leading business and economic development organizations

on regional sector initiatives to the various councils within the LAOCRC leadership structure, including the CEO Council and the CEO Executive Committee, will address the progress and outcomes of the Strong Workforce Program.

In completing this nascent local and regional planning process, the LAOCRC colleges referenced the process maps developed by the Chancellor’s Office and in preparation for the next plan, will utilize them as a base to customize our local and regional planning processes. Capitalizing on the best practices and learning from pitfalls, the Los Angeles and Orange County Regional Directors will complete the **Strong Workforce Four-Year Planning Guide and Timeline** for use by the July 2017 planning process.

Feedback about the current planning process will be solicited from colleges and other stakeholders. To the greatest extent possible, regional planning timelines will be aligned with college strategic planning timelines and data analysis, including Perkins Plans. The planning guide will identify the mandatory dates and processes for annual review of the current regional plan and projects (7/16 to 12/18) as well as the timeline for the development of the subsequent regional plans (7/17 to 12/19 and 7/18 to 7/20). Exhibit 6 shows key events planned in 2017.

The complexity of overlapping funding periods is often a challenge unless careful planning is done. The process will include time for meaningful engagement of all constituents and opportunities for meaningful feedback from industry stakeholders, workforce, the LAOCRC leaders and others, in time for modifications to be made to address any concerns. The approval process will be clarified and will include how feedback from the LAOCRC governance structure will be addressed.

**Exhibit 6. 2017 Planning Calendar**



## Appendix A: Los Angeles County Community Colleges

Community College District	Colleges	# FTES
Cerritos	Cerritos College	17,790
Citrus	Citrus College	11,450
El Camino	El Camino College	19,163
	El Camino College - Compton Center	5,217
Glendale	Glendale College	15,462
Long Beach	Long Beach City College	20,406
Los Angeles	East Los Angeles College	23,345
	Los Angeles City College	13,530
	Los Angeles Harbor College	7,008
	Los Angeles Mission College	6,926
	Los Angeles Pierce College	15,308
	Los Angeles Southwest College	5,428
	L.A. Trade-Technical College	12,798
	Los Angeles Valley College	13,338
West Los Angeles College	7,315	
Mt. San Antonio	Mt. San Antonio College	30,654
Pasadena Area	Pasadena City College	22,984
Rio Hondo	Rio Hondo College	12,575
Santa Monica	Santa Monica College	12,694
<b>TOTAL</b>		<b>273,391</b>

Source: California Community Colleges Student Success Scorecard, <http://scorecard.cccco.edu/scorecard.aspx>

## Appendix B: Los Angeles County CTE Programs

TOP Code	TOP Name	Number of Colleges Offering Program	Number of 6-digit TOP Codes within the 4-digit Program
0502	Accounting	19	2
0506	Business Management	19	4
0509	Marketing and Distribution	19	4
0514	Office Technology/Office Computer Applications	19	5
1305	Child Development/Early Care and Education	19	7
1230	Nursing	18	5
2105	Administration of Justice	18	6
0505	Business Administration	17	1
0602	Journalism	17	1
0702	Computer Information Systems	17	2
0201	Architecture and Architectural Technology	16	1
0701	Information Technology, General	16	1
0707	Computer Software Development	16	4
0511	Real Estate	15	2
0614	Digital Media	15	7
0934	Electronics and Electric Technology	15	7
0501	Business and Commerce, General	14	1
0504	Banking and Finance	14	1
0953	Drafting Technology	14	6
1005	Commercial Music	14	1
1006	Technical Theater	14	1
1012	Applied Photography	14	1
1030	Graphic Art and Design	14	2
1306	Nutrition, Foods, and Culinary Arts	14	4
0604	Radio and Television	13	4
0956	Manufacturing and Industrial Technology	13	5
1250	Emergency Medical Services	13	1
0508	International Business and Trade	12	1
1402	Paralegal	12	1
0708	Computer Infrastructure and Support	11	3
0946	Environmental Control Technology	11	2
0948	Automotive Technology	11	3
1270	Kinesiology	11	1
2104	Human Services	11	2
2133	Fire Technology	11	3

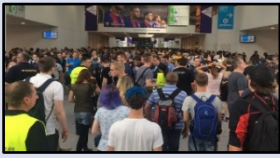


TOP Code	TOP Name	Number of Colleges Offering Program	# 6-digit TOP Codes within the 4-digit Program
0612	Film Studies (including combined film/video)	10	1
0809	Special Education	10	1
1208	Medical Assisting	10	4
0706	Computer Science (Transfer)	9	1
0835	Physical Education	9	3
0709	World Wide Web Administration	8	2
0850	Sign Language	8	1
0924	Engineering Technology, General	8	1
0952	Construction Crafts Technology	8	6
1013	Commercial Art	8	1
0606	Public Relations	7	1
1011	Photography	7	1
1201	Health Occupations, General	7	1
1303	Fashion	7	4
2206	Geography	7	1
3007	Cosmetology and Barbering	7	1
0949	Automotive Collision Repair	6	1
1099	Other Fine and Applied Arts	6	1
1210	Respiratory Care/Therapy	6	1
1228	Athletic Training and Sports Medicine	6	1
1240	Dental Occupations	6	3
1260	Health Professions, Transfer Core Curriculum	6	1
1307	Hospitality	6	2
4932	General Work Experience	6	1
0109	Horticulture	5	5
0957	Civil and Construction Management Technology	5	3
0999	Other Engineering and Related Industrial Technologies	5	1
1225	Radiologic Technology	5	1
1301	Family and Consumer Sciences, General	5	2
0430	Biotechnology and Biomedical Technology	4	1
0947	Diesel Technology	4	3
0950	Aeronautical and Aviation Technology	4	3
0958	Water and Wastewater Technology	4	1
1205	Medical Laboratory Technology	4	2
1302	Interior Design and Merchandising	4	1
2102	Public Administration	4	2
0303	Environmental Technology	3	1
0510	Logistics and Materials Transportation	3	1

TOP Code	TOP Name	Number of Colleges Offering Program	# 6-digit TOP Codes within the 4-digit Program
0512	Insurance	3	1
0599	Other Business and Management	3	1
0699	Other Media and Communications	3	1
0802	Educational Aide (Teacher Assistant)	3	2
0899	Other Education	3	1
0945	Industrial Systems Technology and Maintenance	3	1
1221	Pharmacy Technology	3	1
1223	Health Information Technology	3	2
1308	Family Studies	3	1
0101	Agriculture Technology and Sciences, General	2	1
0102	Animal Science	2	5
0103	Plant Science	2	2
0112	Agriculture Business, Sales, and Service	2	1
0115	Natural Resources	2	1
0299	Other Architectural and Environmental Design	2	1
0518	Customer Service	2	1
0799	Other Information Technology	2	1
0860	Educational Technology	2	1
0936	Printing and Lithography	2	1
0954	Chemical Technology	2	2
1008	Dance	2	1
1220	Speech/Language Pathology and Audiology	2	1
1251	Paramedic	2	1
1299	Other Health Occupations	2	1
1309	Gerontology	2	1
1602	Library Technician (Aide)	2	1
2199	Other Public and Protective Services	2	1
3009	Travel Services and Tourism	2	1
3020	Aviation and Airport Management and Services	2	5
4931	Vocational ESL	2	1
0114	Forestry	1	1
0116	Agricultural Power Equipment Technology	1	1
0516	Labor and Industrial Relations	1	1
0607	Technical Communication	1	1
0610	Mass Communications	1	1
0935	Electro-Mechanical Technology	1	1
0955	Laboratory Science Technology	1	1
1222	Physical Therapist Assistant	1	1
1239	Psychiatric Technician	1	1

## Appendix C: Regional SWP Projects

Sector, Lead College, Budget & College Partners	Project Name and Description
<p><b>1) Across All Sectors</b></p> <p><b>Lead:</b> Citrus College/LAOCRC \$600,000</p> <p><b>College Partners:</b> All 19 Colleges</p> 	<p><b><u>Los Angeles Workforce Education Research Center</u></b></p> <p>Funding this project will regionalize a Los Angeles Workforce Education Research Center (LAWERC). (Ideally this should be across both LA and Orange counties; however, the center will likely start with the 18 Los Angeles County regional colleges). The primary objective of WERC is to bridge the gap between county economic/workforce demand data and the workforce supply in order to increase alignment and inform regional workforce education, practice and policy; the required and preferred occupational competencies necessary for instructional course/program development; the county’s economic growth; and social justice issues that impact students and the workforce. Social justice issues could include educational attainment of populations in sub-regions of the county, wage parity and negative impacts of sub-regional economic development such as gentrification.</p> <p>The LAWERC (pronounced L.A. Work) will:</p> <ol style="list-style-type: none"> <li>1. Research and publish labor market supply and demand data informed by industry sector/cluster analysis, along with the industry specific staffing patterns and human capital supply chains, in relation to workforce education in the region. Industry sector/cluster analysis will be informed by and co-researched with LAEDC, the Los Angeles Area Chamber of Commerce and other county workforce stakeholders.</li> <li>2. Provide research to inform the identification of employers necessary for regional industry advisory groups to apprise colleges of necessary occupational skills, workforce education performance objectives, workforce education performance criterion, and potentially inform a regional model curriculum and program design for regional adoption, program development or program modification.</li> <li>3. Research and publish regional studies focused on the impact, relationship, correlation, etc. that local, regional and statewide workforce education and other policies have on educational access, social mobility, socio-economic status, social justice/classism, student success, workplace success/persistence, etc.</li> </ol> <p><b>Regional Priorities Addressed:</b></p> <ol style="list-style-type: none"> <li>1. Maximizing sustained industry engagement;</li> <li>2. Strengthening career pathways and programs of study;</li> <li>5. Addressing the needs of business and industry in identified priority and emerging sectors; and</li> <li>6. Supporting regional marketing, curriculum alignment, streamlined regional processes as well as regional labor market data collection and analysis for data-informed decision making.</li> </ol> <p><b>Strong Workforce Recommendations:</b> 7 8 10 11 17 20</p>
<p><b>2) Across All Sectors</b></p> <p><b>Lead:</b> LA Region Director</p> <p>\$1,200,000</p> <p><b>College Partners:</b> All 19 Colleges</p>	<p><b><u>Los Angeles Regional Marketing, Promotion and Showcasing and Innovative Projects Fund*</u></b></p> <p>This project will develop a regional strategy to market CTE to various constituencies, including students, parents, community, business and industry, workforce and the media. The project is not designed to fully fund the marketing plans for each individual college, but instead to develop a regional strategy; however, colleges can leverage this project with their local fund plans that address their unique needs. Strategies include the development of online content for websites and social media, media ads/kits, showcase events (demonstrations, competitions and regional fairs and other events) and the branding of regional CTE education in the region. It is likely that this marketing aspect of this project will be done in partnership and coordination with the Orange</p>



County Regional Marketing Plan and the Chancellor’s Office. Funds in this project will also be used to provide resources for the exploration of industry-driven innovations to address needs that might emerge during the performance period, especially those identified by the LAEDC, the LA Area Chamber of Commerce, workforce or business/industry partners.

**Regional Priorities Addressed:**

- 1. Maximizing sustained industry engagement;
- 3. Expanding opportunities for work-based learning;
- 6. Supporting regional marketing curriculum alignment streamlined regional processes as well as regional labor market data collection and analysis for data-informed decision making.

**Strong Workforce Recommendations:** 1 and 3

**3) Across All Sectors**

**CCCCO 1:1 \$3 Million Match for Regional Marketing and Outreach\***

**Lead:** LA and OC Region Directors

\$3,000,000

**College Partners:**  
All 28 Colleges



The CCCCO will invest \$3M, if the regions can match \$3M toward a CTE Rebranding effort. The region’s match would go toward customizing the outreach: 1) specific to the region’s sectors and employer partners/voices; and, 2) specific to the ground-game needed in each region to get in front of underserved students/families so they better understand their higher education options. The CCCCO has retained the services of renowned Public Relations firm Ogilvy to do an environmental scan and set a path forward on how the \$3M of state funds will be deployed. The Bay Region’s “marketing committee” has been enlisted to give regional input into the design of resulting RFA for a vendor. Once a vendor is awarded the work, CTE Regional Consortia can contract directly with the vendor for the “customization package.” It is important to keep consistency in the look and feel for how this outreach campaign is deployed or we undermine its effective and continue confuse employers/students; hence the state is making this pledge the \$3M to match the investment of the regions in order to grow enrollment.

**Regional Priorities Addressed:**

- 6. Supporting regional marketing curriculum alignment, streamlined regional processes as well as regional labor market data collection and analysis for data-informed decision making.

**Strong Workforce Recommendations:** 1 and 3

**4) Across All Sectors**

**Career Pathways Specialist**

**College Lead:** Rio Hondo

\$2,540,000

**College Partners:**  
All 19 Colleges



Implementation of Career Pathways is a major focus of the Strong Workforce Recommendations. This project would provide technical assistance and staffing that would continue the work of the SB 1070 Career Pathways Grant. The current grant sunsets June 2017, but funding is needed for the 2017-18 Academic Year. Focus will be on: 1. Implementation of Alternative Methods for Granting Credit from High School and/or Adult Education; 2. Implementation of CATEMA to track credit granting from high school/adult education; 3. Implementation of Dual Enrollment Courses that focus on identified career pathways. The Career Specialist will be the point of contact for articulation, dual enrollment and development of career pathways between the community colleges and high schools/adult schools.

Funding will provide for: 10-month employee at each of the 19 colleges, project director contract, project coordinator (part time), clerical support, web hosting for www.lacccwc.com with link to www.laacrc.org., staff development for counselors at high schools, adult schools & community colleges, and meeting expenses.

**Regional Priorities Addressed:**

- 2. Strengthening career pathways and programs of study; and
- 3. Expanding opportunities for work-based learning.

**Strong Workforce Recommendations:** 1 2 3 10

**5) Across All Sectors**

**CTE Regional Internship & Jobs Academy\***

This project would fund the hiring of Regional Work-Based Learning Coordinators (WBLC) with

**College Lead:** LA City College

\$1,192,856

**College Partners:** All 19 Colleges



industry specific/sector knowledge who could focus on CTE clusters and provide students with monthly information sessions and opportunities to participate in region-wide internships, job placements, employer-led projects, campus-to-campus employer job fairs, etc. The WBLCs would be responsible for meeting milestones that are aligned with program goals around internships, jobs, and other non-classroom activities that acclimate students to the industry and workplace; and work directly with the DSNs to gather real-time information on jobs and internships. A regional CTE Internship Academy Job Board would be developed where students can upload job portfolios and resumes in response to job openings (including project-based types of jobs in Arts, Beauty, Media and Entertainment). The Job Board would be incorporated into the LAOCRC website and maintained by a dedicated person who would receive updates from the WBLCs.

**Regional Priorities Addressed:**

1. Maximizing sustained industry engagement;
2. Strengthening career pathways and programs of study;
3. Expanding opportunities for work-based learning;
4. Attending to the need for new CTE faculty recruitment and professional development and externships for current faculty;
5. Addressing the needs of business and industry in identified priority and emerging sectors; and
6. Supporting regional marketing, curriculum alignment, streamlined regional processes as well as regional labor market data collection and analysis for data-informed decision making.

**Strong Workforce Recommendations:** 1 2 3 15 20

**6) Across All Sectors**

**College Lead:** Mt. SAC

\$265,000

**College Partners:** City, Cerritos, Citrus, Compton, El Camino, Glendale, Harbor, Long Beach, Mission, Mt. SAC, Pasadena, Pierce, Rio Hondo, LA Trade Tech and West



**CTE Readiness/Non-Credit Boot Camps**

The LAOCRC Regional Plan outcomes can be strengthened with the development of contextualized short-term non-credit boot camps to better prepare students to enter college and be successful in credit CTE coursework. Examples of contextualized non-credit boot camps are Math for Health Careers, Vocational ESL, and preparation for college placement exams. The project seeks to include participation from regional noncredit faculty for the development of contextualized noncredit curriculum. There is also the potential to increase WIOA and Adult Education Block Grant outcomes by improving post-secondary transitions, employment and certifications.

**Regional Priorities Addressed:**

2. Strengthening career pathways and programs of study.

**Strong Workforce Recommendations:** 1 and 2

**7) Across All Sectors**

**College Lead:** Southwest

\$425,000

**College Partners:** Long Beach, Mission, Santa Monica, Southwest, LA Trade Tech and West

**Entrepreneurial Mindset Across Disciplines Project**

The goal of this project is for students, faculty and community business owners to develop an Entrepreneurial Mindset Across Disciplines in CTE fields, as well as STEM, that have the potential to yield business ownership, partnerships and corporate entities. There is a gap in contextualized, small business/entrepreneurship certificates and degrees, and a lack of experiential learning by doing. Students who desire business as a career and starting their own businesses need more opportunities for work-based learning. There is opportunity for each campus, across their, disciplines to: embed and infuse small business/entrepreneurship curriculum into their, programs/courses; create certificates and degrees with emphasis on small, business/entrepreneurship; and have work-based learning opportunities through small business/entrepreneurship. Examples of the need across disciplines is in career paths that lead to



the nuts and bolts of operating a small business or becoming entrepreneur:

- HEALTHCARE: a Home Health Aide opens a registry, matching professionals to meet the needs of patients,
- AUTOMOTIVE TECHNOLOGY: a mechanic opens their own repair shop,
- CHILD DEVELOPMENT: A Child Development Specialist starts a day care center operation
- AMINISTRATION OF JUSTICE: a graduate uses his/her foundational training to become a Private Investigator with a small business operation,
- CSIT: a student with stackable certificates in Support Services Technician starts his/her own business in troubleshooting computer issues for businesses.

**Regional Priorities Addressed:**

2. Strengthening career pathways and programs of study;
3. Expanding opportunities for work-based learning; and
5. Addressing the needs of business and industry in identified priority and emerging sectors.

**Strong Workforce Recommendations:** 1 and 2

**8) Across All Sectors/Sub-regional Pilot**

**College Lead:** Pasadena City College

\$1,300,000

**College Partners:** Pasadena, Citrus, El Camino, Glendale, Mt. SAC and Rio Hondo

**San Gabriel Valley Cooperative Work Experience Education Collaborative & WIOA Partnership for Job Placement and Retention**

A regionally-based project to align and consolidate CWEE/Internship efforts, strategies and partnerships between Pasadena City College, Glendale College, Citrus College and Rio Hondo College. (Mt. San Antonio College is an interested partner, but will be unfunded.) They are single college districts and members of the LA Ring College Consortium. Together they will leverage common advisory partners, resources and policies to insure streamlined, efficient and non-redundant placements and evaluations of CWE student activities. Outcomes include more rapid and greater completion rates in programs targeted by the colleges' local SWP investment plans in phase one with a continued, phased build-out across common curricula later on. Goals will include: Agreements among the four college districts on aligned BOT and administrative policies governing work experience that are compliant with California education code; common contracts; consistent risk-management policies; common student/employer evaluation and assessment instruments and processes; CWE curriculum alignment; consolidated operational strategies; shared professional development and student advisement resources. First phases will focus on the employer/employee needs of the Greater San Gabriel Valley where many advisory members report multiple requests from the same colleges for internship agreements and partnerships. Initial focus will be on vertical regional employment sectors common to all four colleges. Subsequent phases of the project can include additional members of the LA Ring College Consortium as appropriate.

**Regional Priorities Addressed:**

1. Maximizing sustained industry engagement;
2. Strengthening career pathways and programs of study;
3. Expanding opportunities for work-based learning;
4. Attending to the need for new Career Technical Education (CTE) faculty recruitment and professional development and externships for current faculty; and
5. Addressing the needs of business and industry in identified priority and emerging sectors.

**Strong Workforce Recommendations:** 1 2 20

**9) Across All Sectors/STEM**

**College Lead:** Rio Hondo,

\$472,632

**College Partners:** Rio

**Teacher Preparation Pipeline STEM/CTE Collaborative**

The Teacher Preparation Pipeline (TPP) – STEM/CTE Collaborative started in 2014-15 when 10 TPP campuses came together and created a statewide collaborative. This collaborative provides a model of contextualized teacher preparation that successfully recruits, trains and supports existing and future educators throughout the state of California, focusing on the areas of STEM and CTE. Its focus includes career exploration, contextualized learning opportunities, teacher recruitment and retention, and the development of a quality teacher preparation model of

**9) Across All Sectors/STEM**

**College Lead:** Rio Hondo,



Harbor, Mission, Pasadena, Pierce, Santa Monica and LA Trade Tech

**Teacher Preparation Pipeline STEM/CTE Collaborative**

The Teacher Preparation Pipeline (TPP) – STEM/CTE Collaborative started in 2014-15 when 10 TPP campuses came together and created a statewide collaborative. This collaborative provides a model of contextualized teacher preparation that successfully recruits, trains and supports existing and future educators throughout the state of California, focusing on the areas of STEM and CTE. Its focus includes career exploration, contextualized learning opportunities, teacher recruitment and retention, and the development of a quality teacher preparation model of collaboration that is currently shared regionally, statewide and beyond. It will focus on two major activities: 1) enhancing professional development opportunities for CTE faculty to maintain industry and program relevance as part of the BOG Task Force Recommendations; and 2) developing partnerships with K-12 districts to develop shared initiatives for increasing dual-enrollment opportunities for high school students interested in careers with children, increasing teacher pipeline activities, and jointly promoting teaching as a career. This TPP Collaborative project covers the following key criteria and projected outcomes: Increasing Enrollment Potential (approx. 475 students enrolled in dual enrollment in Fall 2017); Developing Career Pathways (each participating college will work with 4-year university partners and K-12 districts to streamline career pathways that lead to teaching); Preparing Students (e.g. career exploration, counseling, field work); Preparing Job Seekers; Work-based Learning Opportunities; Broad Regional Focus (collaborative will convene all 19 colleges in the LA Region to work on projects with a regional focus); Job Placement Function; New Curriculum Development; Addressing Gaps in Skill Development; Faculty Professional Development; and Additional Template Metrics.

**Regional Priorities Addressed:**

- 2. Strengthening career pathways and programs of study;
- 3. Expanding opportunities for work-based learning;
- 4. Attending to the need for new CTE faculty recruitment and professional development and externships for current faculty; and
- 5. Addressing the needs of business and industry in identified priority and emerging sectors.

**Strong Workforce Recommendations:** 1 13 15 16

**10) Advanced Manufacturing/Small Business Entrepreneurship/Retail**

**College Lead:** Cerritos College

\$969,000



**LEAP Project**

Purpose of the project: The LEAP project seeks to identify, promote and encourage innovative partnerships between employers, K-12, community colleges and higher education institutions to help today's 'working learners' complete their education while working. The foundation of the consortium's project is to help the Advanced Manufacturing, Retail/Business and other selected industry sectors as determined by each campus, succeed by building educational/career pathways throughout these industries, and to prepare workers for placement and advancement in high skill and high demand occupations. Cerritos College has worked closely in partnering with Viridis Learning to build a competency-based platform and, in so doing, connects students to meaningful pathways based upon local employer demand. Scope and parameters of the project: Coordination across a college consortium to:

- 1) Increase number of student CTE courses (by: Creating/Enhancing relevant curriculum to meet workforce demands & creating stacked and latticed models from Certificate to AA/BA);
- 2) Increase percentage of student completions (as a result of building education/career pathways, increasing number of portable CTE & OER courses, and tracking student progress and retention);
- 3) Successful workforce outcomes (through increased internships & job placement percentage; improved sector-based engagement with employers within the region; and integration of the Viridis Learning platform for student tracking/placement); and
- 4) Collectively market CTE programs to K-12 and employers (by way of intervention programs in which K-12 students are engaged with college campuses for educational and academic skill building; school-college course articulation and curriculum development, school presentations and college/career days involving K-12 students, regional colleges, and industry partners; and

**11) Advanced Manufacturing****College Lead:** Glendale

\$230,000

**College Partners:** Glendale, Mission, LA Trade-Tech and West**Uniquely Abled Academy**

Glendale Community College offered the 1st Uniquely Abled Academy in summer 2016; students who function at the high end of the Autism Spectrum Disorder were trained as CNC Operators in this highly successful pilot. This regional project would assist other colleges, interested in replicating this model at their own college in one of their CTE programs; the project works best in programs of study/training where specific tasks and focused attention to detailed repetitive processes, are required for the job skill sets. GCC will advise partner colleges about how to implement the UAA program. All students ended up having college costs funded by qualifying for agency services. New UAA programs need staff to implement and to follow-up with students and employers.

**Regional Priorities Addressed:**

1. Maximizing sustained industry engagement;
2. Strengthening career pathways and programs of study; and
3. Expanding opportunities for work-based learning.

**Strong Workforce Recommendations:** 1 2 3 7 15 20**12) Advanced Manufacturing/Engineering****College Lead:** Glendale

\$600,000

**College Partners:** Cerritos, Glendale, Mt. SAC, Pasadena, Cerritos, Glendale, Mt. SAC and Pasadena**Crosstown Engineering Design Manufacturing HUB**

This regional program is structured to provide a systematic, broad-based Engineering Design Manufacturing pathways that emphasize the most prevalent design, fabrication and manufacturing technologies such as CAD, detail drawings and print reading, mechanical literacy, measurement and inspection, product and process development, cost analysis and project management, manual and CNC machining, 3D printing, sheet metal, welding rapid prototyping, casting molding and forming for metal and plastic, lighting techniques, machine technology in artistic design, developing cross town teams for competitions and/or projects, alignment of curriculum to address industry needs, etc. We will use our collective programs for work-based learning (paid internships), local and state maker fairs, design thinking all using of campus, Makerspace/FabLab/Innovation Center concepts.

**Regional Priorities Addressed:**

1. Maximizing sustained industry engagement;
2. Strengthening career pathways and programs of study;
3. Expanding opportunities for work-based learning; and
5. Addressing the needs of business and industry in identified priority and emerging sectors.

**Strong Workforce Recommendations:** 1 2 3 7 15 20**13) Advanced Transportation****College Lead:** LA Trade-Tech

\$620,000

**College Partners:** Compton, ELAC, Harbor, Long Beach, Pierce and LA Trade Tech**Advanced Transportation Regional Workforce Collaborative**

The Transportation Workforce Institute (TWI) at LATTTC aims to ensure a well-trained and diverse, transportation workforce. TWI's reach is national—constructing and disseminating model, sharable, curriculum and workforce development resources based on national industry standards and, certification. TWI's impact is regional—leading industry, education and workforce development and partners in creating programs and services that meet immediate and long-term employer needs, while connecting diverse communities and citizens through transportation projects and workforce, development efforts. Our work is shaped by three inter-connected strategies: (1) contribute to a systemic approach to workforce development in the U.S. transportation industry (2) enable agile, and interlinked responses to regional employer demands, and (3) revitalize communities and connect citizens through transportation initiatives and activities. LA Trade-Tech will coordinate the work related to the advanced transportation occupations (related to diesel, rail, automotive, etc.), and LA Harbor College will coordinate the work related to the warehousing and logistics occupations (related to jobs at the ports, trade and logistics) and will be the liaison between this project and the ProGTL project to ensure alignment and prevent duplication.



**Regional Priorities Addressed:**

1. Maximizing sustained industry engagement;
2. Strengthening career pathways and programs of study;
3. Expanding opportunities for work-based learning;
4. Attending to the need for new CTE faculty recruitment and professional development and externships for current faculty; and
5. Addressing the needs of business and industry in identified priority and emerging sectors.

**Strong Workforce Recommendations:** 1 and 2

**14) Biotechnology**

**College Lead:** Pasadena

\$750,000

**College Partners:** Citrus, ELAC, Mission, Pasadena, Rio Hondo, LA Trade Tech and West



**BioScience Collaborative**

This was a collaboration of LA County Colleges electing to use CTE-Enhanced Funding for starting or augmenting a training program for biotech laboratory skills. Ideas were proposed and decisions were made on lab space, curriculum, career pathways and dual enrollment, advisory boards, marketing, alignment with new BS programs, internships, third-party credentials, employability milestones and industry alignment. Project Objectives: 1) Increase training capacity at all collaborating colleges. 2) Create work-based learning and dual enrollment opportunities that will allow high school students and basic skills learners to choose a career in biosciences knowledgeably. 3) Facilitate the development of programs with industry-aligned curriculum using the experience of and shared curriculum from consortium faculty. 4) Market the opportunity of the bioscience consortium programs. 5) Align curriculum with Bio-manufacturing bachelor’s degrees (Solano, Mira Costa).

**Regional Priorities Addressed:**

1. Maximizing sustained industry engagement;
2. Strengthening career pathways and programs of study;
3. Expanding opportunities for work-based learning;
4. Attending to the need for new CTE faculty recruitment and professional development and externships for current faculty; and
5. Addressing the needs of business and industry in identified priority and emerging sectors.

**Strong Workforce Recommendations:** 1 2 3 7 15 20

**15) Energy Construction and Utilities**

**College Lead:** LA Trade-Tech

\$826,000

**College Partners:** Citrus, City, Compton, East, El Camino, Glendale, Long Beach, Mt SAC, Pasadena, Pierce, Rio Hondo, Santa Monica, Southwest, LA Trade-Tech, Valley and West



**Energy Construction and utilities: The Los Angeles Regional Workforce Plan**

According to the AEE-Advanced Energy Economy, nationwide an estimated additional 57,000 skilled workers are needed each year to work in the Energy Efficiency industry. California’s Advanced Energy industry needs highly skilled workers--15,000 more of them every year. The Doing What Matters Energy Construction & Utilities sector team and regional EC&U Deputy Sector Navigators and Prop 39 Directors are fostering opportunities for regional collaboration that unify initiatives to build a fully-qualified workforce to meet the region’s and California’s energy efficiency mandates, with the goal of unlocking economic growth through investment in regional energy efficiency education and skills building programs. The description of this project is Year One of a multi-year plan that will address the needs of the regional economy in this sector. The plan includes industry engagement, regional advisories, curriculum enrichment/enhancement, updated equipment, professional development, career awareness and pathway development, and new and incumbent worker training.

**Regional Priorities Addressed:**

1. Maximizing sustained industry engagement;
2. Strengthening career pathways and programs of study;
3. Expanding opportunities for work-based learning;
4. Attending to the need for new CTE faculty recruitment and professional development and externships for current faculty; and

5. Addressing the needs of business and industry in identified priority and emerging sectors.

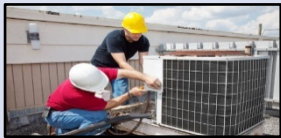
**Strong Workforce Recommendations:** 1 2 3 7 15 20

**16) Energy, Construction and Utilities**

**College Lead:** Mt. SAC

\$750,000

**College Partners:** Citrus, Compton, El Camino, Mt. SAC and LA Trade-Tech



**The HVAC/R Collaborative**

The HVAC/R collaborative has been very successful in bringing together colleges across regions in efforts to align curriculum, foster articulation, and getting colleges accredited by third-party accreditation organizations that ensure all schools involved meet high standards. It is unique in the ability to bring schools together with a common goal of serving the industry. The collaborative should be fostered to continue to grow stronger in efforts to meet the new challenges of our industry such as ZNE (Zero Net Energy), which is looming on the horizon for the State of California. It could well be the group that defines the future workforce skills and outcomes that will be needed to meet this challenge. Focus will need to be placed on skills, such as energy auditing, commissioning, alternative energy comprehension and operation, IT fundamentals, new air conditioning designs and operations, energy managing controls for residential and commercial applications, and alternative designs and concepts. While at the same time, a goal must be to continue to foster business relationships and intern opportunities for student completers.

**Regional Priorities Addressed:**

1. Maximizing sustained industry engagement;
2. Strengthening career pathways and programs of study;
3. Expanding opportunities for work-based learning;
4. Attending to the need for new CTE faculty recruitment and professional development and externships for current faculty; and
5. Addressing the needs of business and industry in identified priority and emerging sectors.

**Strong Workforce Recommendations:** 1 2 3 7 15 20

**17) Global Trade and Logistics**

**College Lead:** Southwest

\$808,842

**College Partners:** Compton, Glendale, Harbor, Long Beach, Mt. SAC, Pasadena, Santa Ana, Santa Monica, Southwest and West



**Global Trade and Logistics Regional Consortia and Digital Badging**

The consortium plans to have a greater impact this year. Planned projects include, GTL Curriculum Development & Articulation of sequenced curriculum of Industry-Themed Pathways. GTL Career EXPO to bring professionals, employers, ports, commerce, students, workforce groups, and colleges together for career and job opportunities for students. Regional Advisory of industry sector leaders, businesses and employers, education, workforce, and students who champion the cause and focus of work-based learning, internships, and jobs for our students (high school and college). Coffee House Industry Series of mini-workshops that rotate to each of our campuses every other month throughout the year as student information sessions with outreach to academies, linked learning schools and college international business, general business and entrepreneur majors. We will continue with the IBEA program & website for regional Global/International Business information, programs. The LA County WIB Transportation and Logistics Intermediary Project will continue to convene businesses and educators to access needs, training capacity and gaps, and make recommendations on training investments and program priorities. A new regional effort spearheaded by the GTL DSN on a Digital Badging project will codify student skill development and industry. Flexible Internship Training program (FIT)+ E-Portfolios will be developed for students/workers.

**Regional Priorities Addressed:**

1. Maximizing sustained industry engagement;
2. Strengthening career pathways and programs of study;
3. Expanding opportunities for work-based learning;
4. Attending to the need for new CTE faculty recruitment and professional development and externships for current faculty; and

5. Addressing the needs of business and industry in identified priority and emerging sectors.

**Strong Workforce Recommendations:** 1 2 3 7 15 20

### 18) Health Sciences/Healthcare

**College Lead:** Rio Hondo/DSN,

\$1,410,000

**College Partners:** Rio Hondo, Citrus, Compton, El Camino, Harbor, Long Beach, Mission, Rio Hondo, Pasadena, Pierce, Southwest, LA Trade-Tech and West



#### **Health Sector Career Pathways Project: A Regional Career Pathway Approach**

This project is designed to provide a regionally coordinated career pathway approach to curriculum and program development in the health sector, a sector that has been identified by LAEDC and the LA Area Chamber of Commerce as one of top priority sectors for the region as it relates to demand. The specific programs selected are vetted by industry as high demand occupations with current and projected openings and will serve both students and job seekers. Additional jobs or occupations will be added based on health sector industry and employer input and industry engagement. The project addresses a range of workforce needs along the career pathway continuum, from career pathway exploration and preparation for entry-level positions to post-degree training for RNs to meet workforce shortages. The project will include full program development, career pathway development (K- 16), curriculum development and alignment, work-based learning, employer engagement, outreach and recruitment, equipment and professional development. This includes finalizing innovations in core/foundation curriculum/certification; the alignment, enhancement and/or development of health occupations specifically in Respiratory Therapy and Radiologic Tech/Sonography (others can be added based on industry partner needs); and curriculum development for a number of Specialty RN jobs, programs that can be implemented in college, mid-level career training and post-licensure specialization courses

#### **Regional Priorities Addressed:**

1. Maximizing sustained industry engagement;
2. Strengthening career pathways and programs of study;
3. Expanding opportunities for work-based learning;
4. Attending to the need for new CTE faculty recruitment and professional development and externships for current faculty; and
5. Addressing the needs of business and industry in identified priority and emerging sectors.

**Strong Workforce Recommendations:** 1 2 3 7 15 20

### 19) Information Computer Technology

**College Lead:** Rio Hondo

\$1,450,000

**College Partners:** Rio Hondo, Cerritos, Citrus, City, East, El Camino, Glendale, Harbor, Long Beach, Mission, Pasadena Rio Hondo, Santa Monica and West



#### **Regional NetLab Hub and Cybersecurity & Regional NetLabs Project**

This is an Orange County/Los Angeles County Regional project to create a regional NetLab Hub. To date the consortium members to include: Rio Hondo College, LA Mission, Cerritos, Pasadena, El Camino, West LA, Citrus, East LA, Los Angeles City, LA Harbor and Santa Monica. This regional consortium of community colleges will give Southern California students round-the-clock access to CTE training and virtual labs. The virtual lab system will be used for courses that prepare students for jobs in IT and Cybersecurity. A regional sharing model enables participating colleges to offer courses that support training for certifications from the industry's most recognized providers, such as Cisco, CompTIA and VMware. The ability to offer a multitude of classes without each campus investing in expensive lab equipment is a major benefit. This combination of software and hardware will enable faculty and students, from any internet accessible location, to utilize a virtual lab environment designed to provide employer demanded "hands-on" experience with a variety of computer operating systems, networking equipment, and application software. The group will work with Coastline to duplicate/expand programs to include cybersecurity within the LA region.

#### **Regional Priorities Addressed:**

1. Maximizing sustained industry engagement;
2. Strengthening career pathways and programs of study;
3. Expanding opportunities for work-based learning;
4. Attending to the need for new CTE faculty recruitment and professional development and externships for current faculty; and

5. Addressing the needs of business and industry in identified priority and emerging sectors.

**Strong Workforce Recommendations:** 1 2 3 7 15 20

## 20) Information Computer Technology/Coding

**College Lead:** LA City College

\$750,000

**College Partners:** Compton, East, Harbor, Long Beach, Mission, Pierce, Southwest, LA Trade-Tech, Valley and West



### LA High Tech Bridge and Coding Boot Camp

The Bridge to Coding training comprises a 12-week session where students are prepared with contextualized information to enter the Coding Boot Camp. Students will be exposed to important aspects of being a new employee, including: Workplace Success, Shining as a New Employee, Oral and Written Communication for the IT office environment, Workplace Behavior, Emotional Intelligence, Cultural Diversity, and Interviewing Skills. The 16-week Coding Boot Camp is designed to prepare programmers and coders to transition into job openings in the Information & Communication Technologies (ICT) industry. Training in the LA High Tech Bridge & Coding Boot Camp (HTB2C) includes an 8-week (2 days per week) paid internship. Students completing the Bridge to Coding will learn how to: Communicate effectively in the workplace; Develop excellent internal and external customer services; Satisfy employer expectations; Understand personality assessment and goal-setting; Understand workplace culture; Engage in teamwork and effective collaboration; and Build effective workplace habits, interviewing and networking skills. Students completing the Coding Boot Camp will learn how to: Develop web applications using a web full stack programming environment; Design, implement and test web applications; Design web user interfaces using HTML, CSS and JavaScript; and Use web services to transfer data and add interactive components to web pages.

#### **Regional Priorities Addressed:**

1. Maximizing sustained industry engagement;
2. Strengthening career pathways and programs of study;
3. Expanding opportunities for work-based learning;
4. Attending to the need for new CTE faculty recruitment and professional development and externships for current faculty; and
5. Addressing the needs of business and industry in identified priority and emerging sectors.

**Strong Workforce Recommendations:** 1 2 3 7 15 20

## 21) Information Computer Technology/Graphic Design

**College Lead:** Santa Monica

\$320,000

**College Partners:** Harbor, Mission, Pasadena, Rio Hondo, Santa Monica and West



### Graphic Design and UX 2 + 2 Pathways

This project is to lead the consortium in aligning this pathway with industry standards. The colleges will develop, update and align curriculum in E-commerce, social media (Facebook Certification) and digital marketing. The project includes full program development, career pathway development and alignment, K-16 curriculum alignment and sequencing, work-based learning, employer engagement, outreach and recruitment, equipment and professional development. In addition, SMC is offering a high quality, affordable and in-demand bachelor's degree in Interaction Design that will cost students just over \$10,000. Only two private universities in California offers a bachelor's degree in Interaction Design (also referred to as User Experience Design). The program at these two universities costs around \$160,000. It is important to open the opportunity to partner colleges to train students for a career that pays well and will launch them into the middle class while meeting a dire need in the tech industry. SMC will partner with PCC and GCC and others, to develop programming that aligns with SMC's associate degree to prepare students to enter the SMC bachelor's degree program in junior standing (completions of 60 units) from their Graphic Design program or related.

#### **Regional Priorities Addressed:**

1. Maximizing sustained industry engagement;
2. Strengthening career pathways and programs of study;
3. Expanding opportunities for work-based learning;
4. Attending to the need for new CTE faculty recruitment and professional development and

**21) Information Computer Technology/Graphic Design**

**College Lead:** Santa Monica

\$320,000

**College Partners:** Harbor, Mission, Pasadena, Rio Hondo, Santa Monica and West

**Graphic Design and UX 2 + 2 Pathways**

This project is to lead the consortium in aligning this pathway with industry standards. The colleges will develop, update and align curriculum in E-commerce, social media (Facebook Certification) and digital marketing. The project includes full program development, career pathway development and alignment, K-16 curriculum alignment and sequencing, work-based learning, employer engagement, outreach and recruitment, equipment and professional development. In addition, SMC is offering a high quality, affordable and in-demand bachelor’s degree in Interaction Design that will cost students just over \$10,000. Only two private universities in California offers a bachelor’s degree in Interaction Design (also referred to as User Experience Design). The program at these two universities costs around \$160,000. It is important to open the opportunity to partner colleges to train students for a career that pays well and will launch them into the middle class while meeting a dire need in the tech industry. SMC will partner with PCC and GCC and others, to develop programming that aligns with SMC’s associate degree to prepare students to enter the SMC bachelor’s degree program in junior standing (completions of 60 units) from their Graphic Design program or related.



**Regional Priorities Addressed:**

1. Maximizing sustained industry engagement;
2. Strengthening career pathways and programs of study;
3. Expanding opportunities for work-based learning;
4. Attending to the need for new CTE faculty recruitment and professional development and externships for current faculty; and
5. Addressing the needs of business and industry in identified priority and emerging sectors.

**Strong Workforce Recommendations:** 1 2 3 7 15 20

**Appendix D: Regional Economic Development and Workforce Collaboratives**

Collaborative/ Initiative/ Organization	Members/Partners	Purpose
<p><b>L.A. Regional Workforce Collaborative</b></p>	<p>Los Angeles Area Chamber of Commerce, LAEDC, Southern California Leadership Council, California EDGE Coalition, Hospital Association of Southern California, LAOCRC, LACCD, Glendale College, Rio Hondo College, East L.A. College, Long Beach USD, LAUSD, L.A. County Board of Supervisors, LA County Dept. of Probation, LA County Dept. of Workforce Development, Aging and Community Services, L.A. City Mayor’s Office, City of L.A. Dept. of Economic and Workforce Development, L.A. County Workforce Development Board, Southeast L.A. Workforce Development Board, Anti-Recidivism</p>	<p>Convene select group of diverse workforce development organizations and leaders from business, economic development, local and regional government, K-12 and higher education, labor, community based organizations serving highest priority populations with barriers to education and employment, workforce boards and philanthropy to adopt shared strategies, align efforts, leverage resources and expertise, develop a shared agenda. coordinate implementation of regional priorities.</p>

Collaborative/ Initiative/ Organization	Members/Partners	Purpose
	Coalition, Building Skills Partnership, United Way, Southern California College Access.	
<b>L.A. Community College-Workforce Development Board Collaborative</b>	19 Community Colleges Deans of Economic and Workforce Development, 2 SB1070 Directors, 7 WDB Executive Directors in L.A. County, 6 Deputy Sector Navigators and COE. EDD LMI and LAEDC support specific initiatives.	Workforce system alignment, coordination and collaboration between community colleges and WDBs, two of the largest workforce development systems in the region. Working Groups on Data, Policy and Training were created to address the 3 top shared priorities. One effort was launched to adopt universal usage of a common naming protocol for industry sectors based on NAICs terms, the national standard. Another is to coordinate on a single investment in regional sector research and collaborate to ensure that LAEDC Jobs and Economy report is tailored to the needs and priorities of both systems. Quarterly meetings following LAOCRC meetings.
<b>Los Angeles Performance Partnership Pilot for Youth (LA P3)</b>	L.A. County Workforce Development Board, City of L.A. Workforce Development Board, L.A. County Board of Supervisors Deputies from 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Districts, City of L.A. Office of the Mayor, Econ and Workforce Dev Dept., LA N'Sync, Annenberg Foundation, LAUSD, LA Community College	Implement federally granted pilot initiative to improve social well-being, education and employment outcomes for disconnected youth age 16-24. This includes increase of available services, intensive and comprehensive coordination of services and sustainability of services over short, medium and long term. Monthly Steering Committee Leadership and Quarterly Partners Meetings Bi-Weekly Work Group and Ad Hoc Committees.

Collaborative/ Initiative/ Organization	Members/Partners	Purpose
	<p>District, 8 County Departments: CEO, Workforce Development, Public Social Services, Office of Education, Mental Health, Children and Family Services, Health Services, Probation, and CBOs such as Alliance for Children’s Rights.</p>	
<p><b>Back on Track BOT-LA</b></p>	<p>California State Attorney General Office, LA County, City of LA, Foothill, Verdugo, Selaco and South Bay WDBs, LA County Dept. of Workforce Development, Aging and Community Services.</p>	<p>Regional coordination and alignment of efforts to support employment and training efforts, support and processes among the seven WDBs to increase employability and training for the re-entry population. We strive to change the reentry potential of the incarcerated population. We have made great gains from our collaboration in producing a model that is both innovative and effective. Our Town Hall meeting provides an opportunity for us and designated speakers to address our BOT-LA in-custody participants as a group. Monthly Meetings.</p>
<p><b>L.A. Opportunity Youth Collaborative (OYC)</b></p>	<p>Alliance for Children’s Rights, Children’s Law Center of California, LAUSD, DCFS, County Office of Child Protection, LA Chamber/Unite LA, iFoster, Children’s Law Center of CA, First Place for Youth, Extraordinary Families, Coalition for Responsible Community Development, and approximately 40-50 CBOs serving foster and disconnected youth.</p>	<p>Advance collective goals of OYC, seek common ground between OYC’s goals and strategies and priorities of own organization and other collaborative efforts as the governance body to achieve collective impact, build effective programs and pathways, use data to guide decisions and assess impact, develop supportive policies, and leverage funding to support and sustain innovation. Quarterly OYC meetings.</p>

Collaborative/ Initiative/ Organization	Members/Partners	Purpose
<b>Regional Transportation and Warehousing Sector Education and Training Providers Collaborative</b>	LA Trade-Technical College and Los Angeles City College lead a regional effort with other higher education and training providers, including Community College Vice Presidents, deans, program/grant/ contract education directors, faculty and workforce development boards and practitioners.	Launched by the US Dept. of Transportation in coordination with other transportation and logistics workforce development initiatives in Southern California counties to identify areas of strength/capacity in existing training and education programs; plan programmatic enhancements and expansion; identify gaps to launch/implement a regional strategy and refine a regional strategy and action framework for education and workforce development; develop new and strengthen existing regional partnerships among training and education providers in the transportation and warehousing sector. Quarterly Meetings.
<b>Pomona Manufacturing Career Pathways Group</b>	LA County America’s Job Center, Mt. SAC, Mt. SAC Adult Education, Pomona Valley Chamber of Commerce, Pomona Unified School District, LAOCRC, Goodwill Southern California and various local manufacturing businesses and employers.	The main function will be to look at the training/employment needs of the employers in the region and ways to bridge the skills gap. LA County will assist us in looking at creating and paying for training opportunities to get the right people in open positions. Monthly meetings.
<b>LA Metro Transportation Workforce Investment Now! WIN Initiative</b>	Led by 3 divisions at Metro including Diversity and Inclusion, 7 WDBs, 18 Community Colleges, over 20 workforce development CBOs, L.A. County AJCCs and L.A. City WorkSource Centers.	The largest regional transportation organization convenes stakeholders and leaders to support and participate in regional initiative to coordinate efforts to prepare jobseekers from diverse communities and priority populations with barriers to employment for expected quality career opportunities in one of the highest growth industry sectors in the greater Southern California region.
<b>Creative Collaborative</b>	City of LA and County of LA WDBs, Screen Actors Guild, County of LA Arts Commission, California Fashion Association, Otis College, FIDM.	Launch in first Quarter 2017 to strategically coordinate preparing a pipeline of talent for career opportunities in the entertainment industry.
<b>SB 350/Regional HVAC Workforce Collaborative</b>	Alma Salazar, LA Chamber; Bruce Noble, Rio Hondo College; Rafael Carbajal; Rick Miranda, Cerritos College; Robert Sainz; Bernie Kotlier	Identify opportunities for regional collaboration that unify initiatives and funding streams to build a fully-qualified workforce to meet California’s energy efficiency mandates, with the goal of unlocking economic growth



Collaborative/ Initiative/ Organization	Members/Partners	Purpose
	<p>LMCC Energy; Jim Caldwell Don Langston, Airerite; Carlos Santamaria, CEES Advisors.com and EIEE Consulting; Tom Bowen, ABM; Bryan Merica, IDMLO; Celina Shands, Full Capacity Marketing; Kecia Davison, ABM; Wayne Alldredge, VCA-Green; Cecilia, ELP Advisors; Cherry Li-Bugg, North OC Comm College District; Gerardo Ruvalcaba, LA City EWD, Libby Hall; Matt Eagan IDMLO; Kish Rajan, Southern Calif Leadership Council.</p>	<p>through investment in high performance buildings. Monthly Meetings hosted at LAEDC by Southern California Leadership Council.</p>
<p><b>AB 86 Regional Adult Education Consortium</b></p>	<p>Burbank, Culver City, Los Angeles, Montebello School Districts, Community Colleges: LA, ELAC, Harbor, Pierce, Mission, Southwest, Trade Tech, LA Valley and West LA, Cerritos, Long Beach, El Camino, College of Canyons, Antelope Valley.</p>	<p>Educational entities and partners to work collaboratively to build a more comprehensive, efficient and focused system of educational service delivery for adults to create a sustainable and innovative system that will be responsive to the future training needs in the region.</p>
<p><b>Slingshot Regional Initiative</b></p>	<p>L.A. City WIB, Foothill WDB, Verdugo WDB, SELACO WDB and South Bay WDB, El Camino College, Rio Hondo College, Glendale College.</p>	<p>\$1M funding from California WDB for a pilot regional training initiative to improve income mobility in high-growth sectors, improve regional collaboration and strengthen systems alignment. The WDBs selected a Healthcare Navigators project to develop a career pathway for mid-level positions in health care coordination/case management.</p>
<p><b>Rapid Response Regional Roundtable</b></p>	<p>Rapid Response Practitioners, representing Anaheim, Foothill, Imperial County, L.A. City &amp; County, Northern California Indian Development Council, Orange County, Pacific Gateway, Riverside County, San Bernardino City and County, Verdugo WDB, DOL and regional EDD representatives.</p>	<p>Share information and best practices in the implementation of Rapid Response funding and develop high quality solutions and services for businesses and workers addressing economic transitions. Regional coordination on assistance to laid off persons and to transition them to new careers.</p>
<p><b>Volunteers of America-LA</b></p>	<p>LAOCRC, Dept. of Rehab., L.A.</p>	<p>Training for hardcore re-entry populations to</p>

Collaborative/ Initiative/ Organization	Members/Partners	Purpose
<b>(VOALA) Training to Work Career Pathways Collaborative 1 and 2</b>	County WDB, Community Career Development, Probation Dept., State Parole, Pathways to Home, Five Keys Charter School, LA Trade Tech and employment and training nonprofits.	get job-ready, and to promote well-being and connectedness as a way to remain productive members of society. Meetings every other month.
<b>L.A. Job Corps Community Relations Council</b>	LAOCRC, L.A. County, L.A. City and South Bay WDBs, community colleges including L.A. Southwest College and many community-based organization partners and some employers.	Job Corps is operated by the YWCA which offers a year-long residential and work-based learning program for youth ages 18-24 with mentoring, job readiness, occupational and on-the-job training leading to a certificate and placement in employment with career opportunities.
<b>Advanced Manufacturing Partnership for Southern California (AMP-SoCal)</b>	86 Partner Organizations from Business, Economic Development, Chambers of Commerce, Community College Districts, government, labor and higher education, including L.A. Pierce College.	AMP SoCal collaborates with organizations in both public and private sectors, across government, academia and industry, to strengthen the region's aerospace and defense manufacturing economy. Led by the Price School USC Center for Economic Development, it is focused on the southernmost 10 counties in California, a federally designated Investing in Manufacturing Community Partnership (IMCP) region. AMP SoCal's shared goal is to provide aerospace and defense manufacturers and their supply chain with the tools, talent, and capacity to master the future.
<b>Health Care Council</b>	Los Angeles Area Chamber of Commerce.	The council is a leader in providing the business perspective on key health care issues. The council supports reform efforts that promote shared responsibility for health care financing, expand access to coverage and quality care and create health professional workforce opportunities.
<b>Innovation and Technology (ITC) Collaborative</b>	Los Angeles Area Chamber of Commerce.	The Innovation & Technology Council identifies and engages with business clusters that have economic growth potential — including signature, emerging and innovative industry groups. The council aims to promote policies that will strengthen these industries, elevate their global reach, and drive job creation and regional economic prosperity.

Collaborative/ Initiative/ Organization	Members/Partners	Purpose
<b>E4 Mobility Alliance/Advanced Transportation Center of Southern California</b>	Los Angeles County Economic Development Corporation (LAEDC).	LAEDC assists growth of the advanced transportation and cleantech industries through in-depth economic research and reports, public policy advocacy, on-the-ground business assistance, real estate solutions, export assistance, and marketing and promotion of the industry's strengths. The LAEDC established the E4 Mobility Alliance which convenes several hundred stakeholders around current action items for the benefit of our regional economy and those businesses and jobs in new transportation and cleantech. LAEDC is also a founding partner of the Advanced Transportation Center of Southern California, which is new and starting to serve a role as a resource for this industry.
<b>Bioscience Collaborative</b>	Los Angeles County Economic Development Corporation (LAEDC).	LAEDC is fostering success and growth of the biosciences industry cluster in L.A. County. The collaborative approach helps leverage and coordinate our many regional resources to develop the L.A. region's potential as a premier bioscience capital. This will result in additional economic opportunity, job creation and future economic development of the region. Through its work on the L.A. County Biosciences Implementation Plan, as directed by the board of supervisors and county CDC, LAEDC has brought together a team of organizations to focus on building capacity in the industry, and growing business and job opportunities.
<b>SoCal Aerospace Council</b>	Los Angeles County Economic Development Corporation (LAEDC).	The council supports building the most competitive aerospace community in the world, to grow businesses and foster job creation. It combines a cluster of industry sectors including aerospace, defense, space and adjacent/enabling technology. Industry cluster development efforts include: 1) Business Development—facilitate growth and competitive advantage by understanding global markets, developing local capabilities, and leveraging our vast supply chain. 2) Technology Innovation—leverage global technology advancement with local technology innovation to grow ideas into new

Collaborative/ Initiative/ Organization	Members/Partners	Purpose
		offerings that create technological superiority for our national defense and commercial applications. 3) Policy Input—ensure the voice of our expansive local industry is heard and incorporated into specific policy recommendations that support the future vitality of our region.
<b>San Gabriel Valley Aerospace &amp; Advanced Manufacturing Sector Collaborative</b>	SCE, Northrop, Boeing, Vacco, Dow Hydraulics, Crown Precision. Education orgs: Azusa USD, Charter Oak USD, El Monte Rosemead Adult School, La Puente Valley ROP, PCC, Mt. SAC, ELAC, LACCD, USC, CSULA, CalPoly, La Verne, UCLA Extension, DSN.	Engage in meaningful conversations about workforce preparedness in the San Gabriel Valley. <i>Pending alignment with regional sector strategies.</i>
<b>San Gabriel Valley Healthcare Sector Collaborative</b>	Kaiser, City of Hope, Alta Med, Pomona Valley Hospital, Methodist Hospital, Hillcrest Retirement, Mt. SAC, DSN.	Engage in a meaningful conversation about workforce preparedness in the San Gabriel Valley. <i>Pending alignment with regional sector strategies.</i>
<b>LA Bioscience Collaborative</b>	CDC is the lead organization and host. Deputies from Supervisors Solis and Ridley-Thomas, L.A. County BOS, LAEDC, BioCom, UCLA, Cal Tech, USC, CSULA, LA County WDB, LA Bio Collaborative, leading entrepreneurs and biomed and biotech manufacturing companies.	Development and refinement of the L.A. County biosciences cluster. Bi-monthly meetings.
<b>Biosciences/Biotechnology Partnership Collaborative</b>	LA Valley College, City of LA, County of LA, Foothill, Selaco, South Bay, Verdugo WDBs, LA Chamber, BioCom, Grifols, SoCalBio.	Los Angeles Valley College leads a countywide workforce industry and sector strategy initiative that expands on a very successful federally funded pilot. Involvement and commitment of significant bioscience employers increases diverse workforce development partner involvement who are committed to coordination and partnership in employer engagement, priority setting and training investments.
<b>Southern California Biomedical Council (SoCalBio)</b>	LAOCRC.	SoCalBio is the trade association of the biomed, biotech, med tech, bio pharm and digital health industries in the Greater Los

Collaborative/ Initiative/ Organization	Members/Partners	Purpose
		<p>Angeles Region. It is a non-profit, member-supported trade association that serves the biotech, med tech, IVD and digital health six counties that comprise the Greater Los Angeles region (Los Angeles, Orange, Ventura, Santa Barbara, Riverside and San Bernardino). SoCalBio's programs help local firms gain access to capital, potential partners and other business services. The council promotes technology transfer and workforce training, while informing policy makers and the public at-large about the benefits of the region's bioscience industry. Monthly meetings.</p>
<b>L.A. Hi Tech Advisory Board</b>	<p>Beverly Hills USD, Culver City USD, LAUSD, Pasadena USD, Santa Monica/Malibu USD, L.A. City College, L.A. Mission College, L.A. Pierce College, L.A. Southwest College, L.A. Valley College, Pasadena City College, Santa Monica College, West L.A. College, CSU Dominguez Hills, L.A. County WDB, L.A. City WDB, ICT businesses.</p>	<p>Regional initiative led by community colleges with local K-12 school districts to develop and align curriculum at high school and community colleges to better link students to ICT career pathways and experiential learning opportunities to support their awareness, preparation and competitiveness for existing and future opportunities. Engage business partners to identify priority skills, occupations, certifications and degrees in existing and emerging occupations.</p>
<b>Uniquely Abled Glendale CNC/CMM Training Academy for the Manufacturing Industry</b>	<p>Glendale and LAVC Community Colleges, Verdugo WDB, Goodwill, LA County WDB, Regional Occupational Center, CA Dept. of Rehabilitation and multiple employers.</p>	<p>Provide CNC/CMM training to develop marketable skills of jobseekers for employment in the manufacturing marketplace. Curriculum is customized to the needs of people with low spectrum autism. First cohort (10 of 13) graduated in August 2016. Second cohort begins February 2017.</p>
<b>Prop. 47 Jobs and Services Task Force</b>	<p>L.A. County Board of Supervisors, L.A. County CEO, Director of Office of Diversion and Reentry, L.A. Area Chamber of Commerce, L.A. County Federation of Labor, California Endowment, L.A. Trade Tech, East L.A. College, Californians for Safety and Justice, Archbishop of LA, L.A. County Departments of Mental Health, Public Health, Probation, Workforce Development, and formerly incarcerated</p>	<p>The Safe Neighborhoods and Schools Act (Prop. 47), approved by voters in 2014, reduced some non-violent drug and property crimes from felonies to misdemeanors. Supervisors Solis and Ridley-Thomas established a task force to formulate a countywide plan for establishing public-private partnerships that provide eligible individuals with workforce development and employment opportunities and wraparound services. Several sub-committees were created to meet weekly.</p>

Collaborative/ Initiative/ Organization	Members/Partners	Purpose
<b>Los Angeles County Economic Development Corporation (LAEDC)</b>	<p>individuals.</p> <p>Several hundred of the leading businesses and employers in all of the priority high-growth industry sectors. Annual Business Friendliest Cities Awards.</p>	<p>LAEDC works harness the power of the private sector to guide economic development and create more widely shared prosperity; and increase economic opportunity and raise standards of living for L.A. County residents. It supports policies and initiatives for a skilled workforce, hosts economic forecast events, launched the E4 Mobility Alliance and InnovateLA, and leads the Advanced Transportation Center, Bioscience, Council and SoCal Aerospace Council.</p>
<b>Los Angeles Area Chamber of Commerce</b>	<p>More than 1,650 employers including small, medium and large businesses and educational institutions representing 35 industry sectors all of the priority sectors.</p>	<p>Participate in the Education and Workforce Development Policy Council, which convenes local business leaders interested in partnering with educators to improve public education, expand higher education access and develop a 21st century workforce capable of competing in a global economy. The council is focused on boosting job recovery while preparing future generations of workers. The chamber hosts many workforce development and education policy meetings and events and is committed to national, state and local leadership in higher education and workforce development policy. It acts as the regional coordinator of 10,000 summer and year-round jobs and internships for area youth.</p>
<b>Los Angeles Business Federation</b>	<p>Almost 200 leading private businesses, employers and educational institutions representing all of the priority high growth industry sectors.</p>	<p>Co-Lead the Workforce Development Council for one of the most prominent business advocacy organizations in the L.A. region which has made an explicit commitment to support and host public events to raise the profile of community colleges and workforce development.</p>
<b>San Gabriel Valley Economic Partnership</b>	<p>175 Members: Business &amp; Business Associations (66%), Government &amp; Government Associations (19%), CBO's (12%), Educational Institutions (7%).</p>	<p>Participate in the largest business membership organization in the San Gabriel Valley, which is one of the largest, most diverse and populous regions in L.A. County and which provides labor market information, job training resources and assists in the creation and retention of jobs and convenes industry sector and education partners.</p>