

2021-2024

STRONG WORKFORCE PROGRAM

Los Angeles Regional Plan



POWERED BY



California
Community
Colleges

CALIFORNIA COMMUNITY COLLEGES

LAOC RC

los angeles | orange county | regional consortium

Acknowledgements

Under the leadership of Dr. Adriene “Alex” Davis, Executive Director of the Los Angeles Orange County Regional Consortium, the Los Angeles Regional Consortium wishes to thank the following for their contributions to this planning process and resulting 2021-2024 Los Angeles Regional Plan:

- The Los Angeles Regional Plan Work Group
- Community College League of California
- Los Angeles/Orange County Center of Excellence for Labor Market Research
- Los Angeles Economic Development Corporation
- L. M. McSherry Consulting
- NewLeaf Training and Development

Los Angeles Regional Plan Work Group Members

Ruth Amanuel, Regional Director for Employer Engagement, Global Trade

Audrey Childers, Ed.D., Los Angeles Regional Chair, LAOCRC

Ozzie Lopez, Ed.D., Regional Director for Employer Engagement, Health

Kendra Madrid, Dean of Continuing Education and Workforce Development, East Los Angeles College

Juan Madrigal, Assistant Director, Los Angeles/Orange County Center of Excellence for Labor Market Research

Luke Meyer, Director, Los Angeles/Orange County Center of Excellence for Labor Market Research

Katie Mishler, Regional Director for Employer Engagement, Advanced Transportation & Logistics

Lucia Robles, J.D., Dean of Workforce Development, Los Angeles Community College District

Allison Tom-Miura, Dean of Adult and Continuing Education, West Los Angeles College

Michael Wangler, Dean of Career, Technical and Continuing Education, Citrus College

Anne Welsh-Treglia, Ed.D., Coordinator II, Division of Assessment, Support and Monitoring, Office of Career and Technical Education, Los Angeles County Office of Education

Marcia Wilson, Ph.D., Dean, Pathway Innovation and Institutional Effectiveness, Los Angeles Trade-Technical College

Table of Contents

Acknowledgements.....	2
Executive Summary.....	5
Introduction: Los Angeles/Orange County Regional Consortium	8
Los Angeles/Orange County Regional Consortium Governance Structure.....	8
Los Angeles Background	10
Population Characteristics	11
Living Wage Performance Metric.....	13
Historical Background: Los Angeles Regional Plan, 2017-2020.....	14
Stakeholders.....	14
Priority Sectors, 2017-2020.....	14
Impact of COVID-19 on Priority Sectors	15
K-12 Strong Workforce Program	19
Historical Background	19
Los Angeles Regional Planning Process for 2021-2024	21
Gathering Stakeholder Input.....	21
Summary of Stakeholder Input	29
K-12 Activities and Future Plans: Career Pathways Specialist Project	38
Regional Assets and Investments.....	39
Summary of Regional Strong Workforce Projects, 2020-21	44
2020 Regional Economic Overview and COVID-19 Impacts	47
Local Unemployment and Job Loss	48
Hard-hit Industries	51
Data Analysis Informing the 2021-2024 Los Angeles Regional Plan.....	54
Priority and Emerging Sectors Analysis.....	54
Employment and Projected Demand by CCCCCO Sector	55
Priority and Emerging Sector Wages.....	58
Supply-and-demand Analysis	59
SWP Regional Outcomes	61
Program Recommendation Requests	61
Headcount.....	62
Awards	64
Noncredit	65
Transfers	66

2021-2024 Regional Priorities	67
2021-2024 Priority and Emerging Sectors	69
Conclusions and Recommendations	73
Future directions: 2021-2024	74
Appendix A. Los Angeles K-12 SWP Project Investments	77
Appendix B. Summary of Los Angeles Regional SWP Projects, 2019-20	81
Appendix C. TOP Codes by CCCCCO Priority and Emerging Sector for Programs Offered in the Region ..	84
Appendix D. Top 10 Occupations for Each Priority and Emerging Sector	89
Appendix E. LaunchBoard Metrics for Each Priority and Emerging Sector	92
Appendix F. References Cited	97

Acronym Reference List

AJCC – America’s Job Centers of California	LAOCRC – Los Angeles/Orange County
CCCCO – California Community Colleges	Regional Consortium
Chancellor’s Office	LAUSD – Los Angeles Unified School District
CCW – Center for a Competitive Workforce	LEAs – Local Educational Agencies
CDE – California Department of Education	NAICS – North American Industry
CE – Career Education	Classification System
K-12 – Kindergarten through 12 th grade	RPU – Regional Planning Unit
ICT – Information and Communications	SOC – Standard Occupational Classification
Technology	SWP – Strong Workforce Program
LAACC – Los Angeles Chamber of Commerce	RDEEs – Regional Directors for Employer
LACCD – Los Angeles Community College	Engagement
District	ROP/Cs – Regional Occupational
LAEDC – Los Angeles Economic Development	Programs/Centers
Corporation	TAPs – Technical Assistance Providers
LA/OC COE – Los Angeles/Orange County	TOP – Taxonomy of Programs
Center of Excellence	WDB – Workforce Development Board

Executive Summary

The Los Angeles Regional Strong Workforce Program (SWP) Plan was developed through a collaborative process involving the consortium's 19 community colleges, seven (7) workforce development boards, industry stakeholders, and numerous civic leaders and representatives from organizations invested in improving and aligning career education (CE) in the region.

The following plan reflects a long-term and ongoing process to strengthen regional coordination and contains a road map for 2021-2024 to calibrate community college CE courses and programs to meet workforce demand fueling the regional economy, while strengthening pathways between K-12 and community colleges. The SWP planning process and outcomes reflected in this plan were based on the premise that deploying targeted, regional strategies to prepare the area's workforce can be advanced through a strong network of economic, training, education, and community partners. Ultimately, this work contributes to helping students enter high-demand jobs that pay living wages and that strengthen a competitive and growing regional economy.

The strategies outlined in this plan were developed with an eye toward effectiveness and efficiency, to maximize the availability of and the opportunities provided through SWP, public, and private resources. This plan complements and builds upon the consortium's mission to provide pathways that train skilled workers to enter careers that pay at or above a living wage. Equity focused strategies that lead to in-demand jobs and that remove barriers to employment can advance students in the region on the path to economic security and prosperity.

In addition to the state's legislative mandate, there were many considerations in developing the plan. First, there is growing concern about the depth of unemployment in the region stemming from the COVID-19 pandemic. This is compounded by rising concerns about permanent job loss, exacerbated by the closure of small businesses, consumer cost cutting, and increased automation. Meanwhile, the California Community Colleges Chancellor's Office (CCCCO) has urged community colleges to focus on offering more short-term credentials, perhaps through noncredit and not-for-credit, that can be completed in 4-12 weeks by displaced workers in need of marketable skills. Indeed, in 2020 the California State Legislature embedded such encouragement in Section 88821(g) of the California Education Code. In addition, regional planning takes into account the state's goal to produce 1 million more industry-valued credentials over the next decade.

All of these factors contribute to a large and growing need to reskill and upskill displaced workers and to lead existing and future community college students into career pathways that are either stable or growing over the next four years. The goal is to provide a clear sequence of CE coursework, programs, and pathways that provide affordable, industry-recognized training credentials that are aligned with employer-validated work readiness standards and competencies. Taken together, the strategies stemming from these considerations can help the region recover, rebuild, and renew as we work toward a post-pandemic economy.

In accordance with California Education Code Section 88823, the primary purpose of this four-year plan is to inform the development of strategies related to CE and workforce development courses, programs, and pathways in the Los Angeles region. The plan was developed in collaboration with education and workforce stakeholders described in Sections 88821, 88823, 88825, and 88831.

This plan is intended to inform strategies for the four-year period of 2021-2024, with annual updates provided each January. From 2019 to 2020, Los Angeles regional stakeholders engaged in a planning process described herein. The plan is organized chronologically and by major topic, beginning with historical background and ending with data informing the 2021-2024 plan. Historical background includes key points from the first SWP Los Angeles Regional Plan (2017-2020); then, a description is provided of the 2021-2024 plan development process; finally, data analysis and regional priorities are revealed. The plan ends with a discussion of the priority and emerging sectors for 2021-2024, which are also listed below for quick reference.

The Los Angeles regional planning process concluded in December 2020 with the adoption of strategic priorities and priority and emerging sectors for 2021-2024. This Los Angeles Regional Plan for 2021-2024 was vetted by the 19 Los Angeles community colleges in the fall of 2020 and approved by the LAOCRC Governance Council on January 14, 2021.

Los Angeles Regional Priorities, 2021-2024:

1. Consciously and intentionally infuse diversity, equity, and inclusion in all strategies and activities.
2. Maximize sustained industry engagement.
3. Strengthen CE career pathways and programs of study.
4. Implement strategies and activities to help students complete the CE pipeline.
5. Address the needs of business and industry in identified priority and emerging sectors.
6. Demonstrate the regional impact of SWP investments.
7. Support CE faculty professional development.
8. Explore and implement effective strategies for serving students in a COVID-19 environment.
9. Build and nurture relationships with internal and external stakeholders.

Los Angeles Regional Priority and Emerging Sectors, 2021-2024:

Priority Sectors:

- Advanced Manufacturing
- Advanced Transportation and Logistics
- Business and Entrepreneurship
- Energy, Construction, and Utilities
- Global Trade
- Health
- ICT/Digital Media
- Life Sciences/Biotech

Emerging Sector:

- Retail, Hospitality, and Tourism



Introduction: Los Angeles/Orange County Regional Consortium

Los Angeles/Orange County Regional Consortium Governance Structure

The Los Angeles/Orange County Regional Consortium (LAOCRC) is overseen by a 15-member Governance Council of district leaders and is guided by a five-member CEO Executive Committee. The Governance Council is convened in quarterly business meetings to help guide the region's career education (CE) goals and codify decisions on SWP investments.

The work of the Governance Council is supported by several subgroups: an 18-member College President Committee, a four-member Chief Instructional Officer/Chief Student Services Officer (CIO/CSSO) Liaisons Committee, a five-member Dean Resource Associates Committee, and a 28-member College Resource Leadership Council. LAOCRC convenes the region in monthly meetings, with the exception of July and August, to facilitate business meetings for College Resource Leadership Council members to take action on new CE programs and discuss other business items.

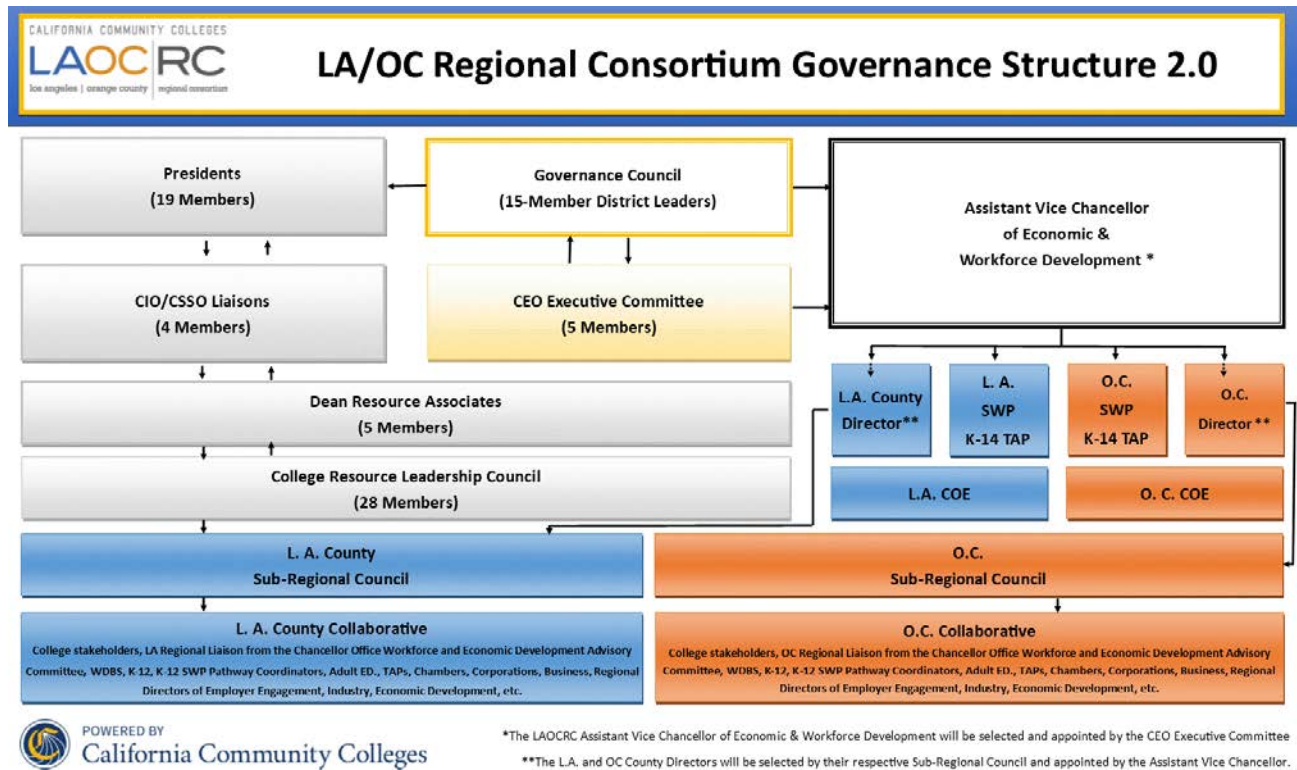
LAOCRC is headed by the Consortium's Executive Director/Assistant Vice Chancellor of Economic and Workforce Development, who supervises the Los Angeles County Regional Director and Orange County Regional Director, also called Regional Chairs. These are separate from the Regional Directors for Employer Engagement (formerly known as Deputy Sector Navigators).

Each Regional Chair facilitates a subregional council that is informed by a county collaborative comprising college stakeholders and representatives from workforce investment boards, K-12 schools, adult education, technical assistance providers (TAPs), chambers of commerce, industry and businesses, and Regional Directors for Employer Engagement (Exhibit 1). The Los Angeles/Orange County Center of Excellence provides labor market analysis to inform LAOCRC decision-making processes. The LAOCRC fiscal agent is the Rancho Santiago Community College District.

The LAOCRC macroregion spans Los Angeles and Orange counties and encompasses 28 community colleges, 10 workforce development boards, and a population of roughly 13.6 million residents. In Fall 2019, the last full semester before the impacts of COVID-19, the 28 community colleges served 544,962 students, according to Data Mart.¹

¹ California Community Colleges Chancellor's Office, Management Information Systems Data Mart. Retrieved November 9, 2020 from https://datamart.cccco.edu/Students/Student_Term_Annual_Count.aspx.

Exhibit 1. Los Angeles/Orange County Regional Consortium governance structure



Los Angeles Background

Los Angeles represents the largest and most diverse SWP microregion population in the state, encompassing 19 community colleges in Los Angeles County, more than 90 K-12 school districts, charter schools, and Regional Occupational Programs/Centers (ROP/Cs), one (1) county office of education, seven (7) workforce development boards, and a population of roughly 10 million residents. In Fall 2019, the 19 Los Angeles community colleges served 371,815 students. During the same period, the California Community Colleges served 1,568,630 students.² Exhibit 2 shows Los Angeles community colleges and districts.

Exhibit 2. Community colleges and districts served by the Los Angeles region

Community College District	Community Colleges
Cerritos	Cerritos College
Citrus	Citrus College
Compton	Compton College
El Camino	El Camino College
Glendale	Glendale Community College
Long Beach	Long Beach City College
Los Angeles	East Los Angeles College
	Los Angeles City College
	Los Angeles Harbor College
	Los Angeles Mission College
	Los Angeles Pierce College
	Los Angeles Trade-Technical College
	Los Angeles Southwest College
	Los Angeles Valley College
	West Los Angeles College
Mt. San Antonio	Mt. San Antonio College
Pasadena	Pasadena City College
Rio Hondo	Rio Hondo College
Santa Monica	Santa Monica College

² Ibid.

Population Characteristics

In Los Angeles County, the population of 10.1 million increased by 0.9% over the last five years, adding nearly 91,800 residents. By 2024, the county is expected to grow by 0.7%, increasing the total population to 10.2 million residents.

Los Angeles is the most populous county in the U.S. and is racially and ethnically diverse with about half of the population identifying as Hispanic, according to the U.S. Census Bureau.³ In Fall 2019, nearly 209,100 community college students in the county identified as Hispanic, accounting for 56% of the county's 371,815 community college students, according to Data Mart. This presents an opportunity for the community colleges to ensure that students have pathways to in-demand, high-wage jobs, since California Competes reports that only 46% of Californians identifying as Latinx earn a living wage, compared to 73% of Californians identifying as white.⁴

Dreamers and economically disadvantaged students also comprise a significant share of the community college population. For example, in the Los Angeles Community College District, about 7% of enrolled students are undocumented, and 60% of CE students are economically disadvantaged. According to California Competes, community college retention in the county totals 77%, about 8% of community college students transfer, and 69% of community college students graduate in five years.

A large proportion of the county is young, with residents under the age of 18 accounting for 21% of the population, according to the U.S. Census Bureau's American Community Survey.⁵ Among residents age 25 or older, the region has a great need for an educated and skilled workforce as this age

Los Angeles County by the numbers:

- 10.1 million residents
- \$19.7 billion economic contribution by the 19 community colleges
- 371,815 community college students in Fall 2019
- 264,252 CE students in Fall 2019
- 77% community college retention
- 8% transfer rate to 4-year institutions
- 21% of population is under 18
- 68% of the population has less than a bachelor's degree
- Average annual earnings for residents increase with educational attainment:
 - \$32,200, high school diploma
 - \$37,200, certificate
 - \$42,600, associate degree
 - \$62,800, bachelor's degree

Sources: California Competes, Data Mart, U.S. Census Bureau.

³ American Community Survey, U.S. Census Bureau, accessed November 10, 2020, <https://www.census.gov/programs-surveys/acs>.

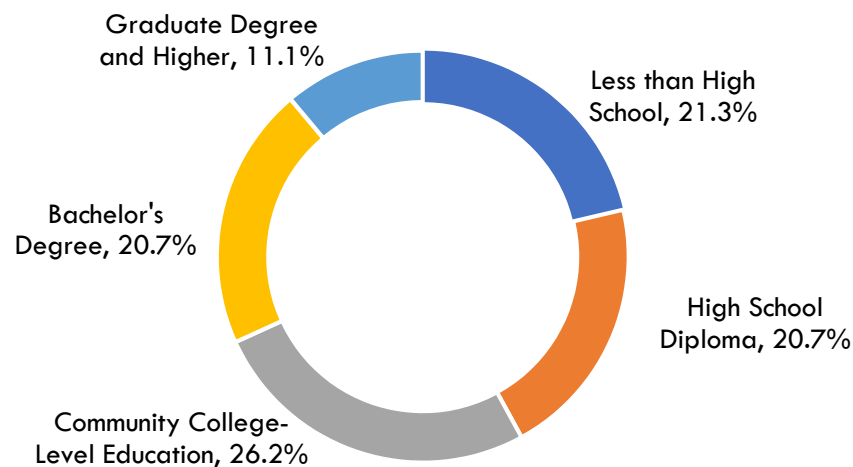
⁴ "Postsecondary to Prosperity Dashboard: Los Angeles," California Competes, accessed September 14, 2020, <https://californiacompetes.org/p2p/regions?region=los-angeles>.

⁵ Ibid.

group has a lower percentage of college attainment compared to other age groups. Exhibit 3 shows educational attainment in Los Angeles County:

- 11.1% of residents in the county hold a graduate degree or higher (1.4% below the state average)
- 20.7% of residents possess a bachelor's degree (0.1% below the state average)
- 26.2% hold a community-college level of education (some college or an associate degree) (3% below the state average)
- 20.7% hold a high school diploma or equivalent (0.1% above the state average)
- 21.3% have less than a high school diploma or equivalent (4.3% above the state average)

Exhibit 3. Educational attainment by level, Los Angeles County, age 25 and up⁶



Source: American Community Survey, 2018 five-year estimates.

Career education (CE) comprises a critical component of the education system in the county. The 19 regional community colleges enrolled 356,517 CE students in the 2018-19 academic year, and 264,252 CE students in Fall 2019. CE enrollment increased 2% between Fall 2016 and Fall 2019, according to Data Mart. In the 2018-19 academic year, 38,688 awards (degrees and certificates) were issued to 24,092 CE program-completing students.

⁶ The term "community college level education" includes the categories "some college, no degree" and "associate degree."

The community colleges are an integral part of Los Angeles County and contribute significantly to the regional economy, adding \$19.7 billion in total income to the county in 2018-19, about 2.5% of the county's GDP.⁷ This is the equivalent of supporting 216,243 jobs.

Living Wage Performance Metric

Preparing students for careers that pay a living wage is a priority for community college CE programs in the United States and California. As defined by the Chancellor's Office, a living wage is a regional measure of income needed to provide basic needs including housing, childcare, food, transportation, health care, and taxes.

For purposes of comparing post-college earnings to a living wage standard, the Chancellor's Office uses the living wage level for a single adult with no children in the county in which a college is located. Living wages included in the chart below are derived from the Insight Center's California Family Needs Calculator.⁸

The Insight Center's living wage standard accounts for basic needs by family size and county of residence, with different self-sufficiency minimums for each county in California. An additional 10% is added to the standard to allow for miscellaneous costs such as clothing, personal items, paper products, nonprescription medications, and household items.

At the time of this writing, the living wage for Los Angeles County was \$15.04 per hour (Exhibit 4). Additional family compositions are included in the table below for perspective.

Exhibit 4. Living wages in Los Angeles County

Household Size	Living Wage per Adult
1 adult	\$15.04
1 adult, 1 infant	\$31.15
1 adult, 1 school-age child	\$24.32
2 adults, 2 school-age children	\$16.89 each

⁷ Data provided during Emsi's presentation to the Los Angeles/Orange County Regional Consortium, September 15, 2020.

⁸ "Family Needs Calculator," Insight Center for Community Economic Development, 2020, accessed October 14, 2020, <https://insightccd.org/tools-metrics/self-sufficiency-standard-tool-for-california/>.

Historical Background:

Los Angeles Regional Plan, 2017-2020

Stakeholders

In 2016, administrators and faculty of the 28 colleges comprising the Los Angeles/Orange County Regional Consortium worked diligently to develop a plan in response to the needs of the region and the legislative intent of the Strong Workforce Program. 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 the 2017-2020 Los Angeles plan, Los Angeles consortium members consulted with the region's Deputy Sector Navigators (now called Regional Directors for Employer Engagement), the Los Angeles County Economic Development Corporation (LAEDC), the Los Angeles Area Chamber of Commerce, 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 resulting Los Angeles Regional Plan for 2017-2020 was vetted by the community college CE Deans and unanimously approved by the LAOCRC CEO Council and the 10 Chief Executive Officers of the community college districts in the Los Angeles region.

Priority Sectors, 2017-2020

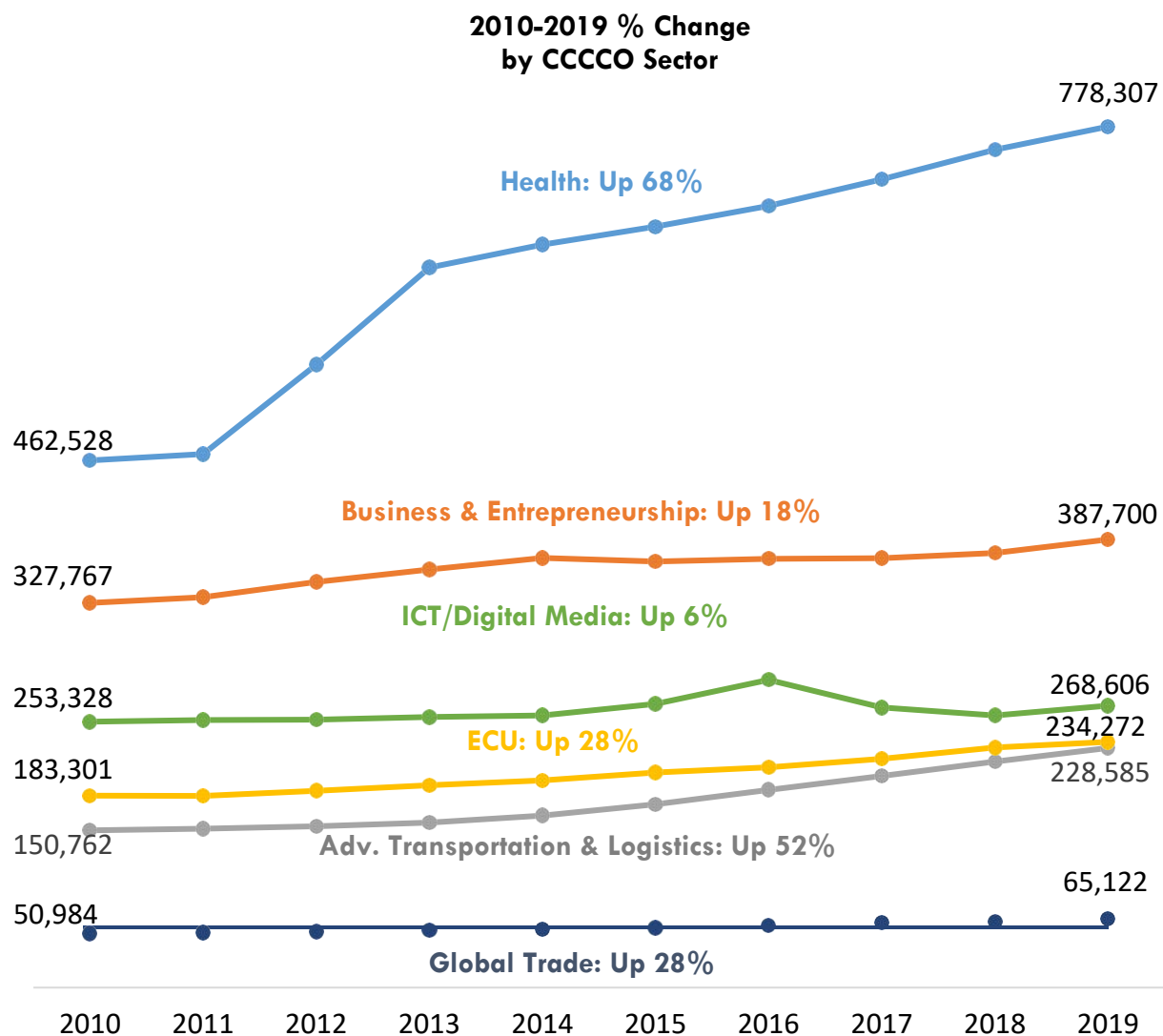
The 2017-2020 Los Angeles Regional Plan specified six CCCCCO priority sectors. Similar to the process conducted in 2021-2024, priority sectors were selected based on labor market information, including wage data, number of jobs projected to be available in the four-year period, and number of students completing related programs in the Los Angeles region. The six Los Angeles regional priority sectors for 2017-2020 were:

1. Advanced Transportation and Logistics
2. Business and Entrepreneurship
3. Energy, Construction, and Utilities
4. Global Trade
5. Information Communication Technology (ICT)/Digital Media
6. Health

The 2017-2020 Los Angeles Regional Plan also recommended adding life sciences/biotech as an emerging sector and dedicating resources to digital media. The plan recommended separating ICT and digital media to address the strength of the entertainment industry in Los Angeles. Although the plan recommended two Regional Directors for Employer Engagement for ICT/digital media in the Los Angeles region (one for ICT and one for digital media), the second position was not filled during the 2017-2020 plan period.

Three CCCCCO sectors led the region in employment from 2010 through 2019—health, business and entrepreneurship, and ICT/digital media (Exhibit 5).

Exhibit 5. Historical employment by CCCCCO priority sector, Los Angeles County, 2010-2019



Impact of COVID-19 on Priority Sectors

At the time of this report, COVID-19 was still causing shutdowns across industry sectors, and Los Angeles County was undergoing the most significant economic downturn since the Great Recession of 2007-2009. Summarized below is key information from media as well as reports by leading economic organizations that apply to the priority sectors selected during the 2017 planning process. Please note that these were the priority sectors from 2017 through 2020. Priority sectors for 2021-2024 are included in the *Conclusion and Recommendations* section of this document, and a discussion of how they were selected is provided in the section *Los*

Angeles Regional Planning Process for 2021-2024.

In examining sectors of the economy that have been hit hard by the pandemic in 2020, it is important to keep in mind that industry groupings do not perfectly align with the 12 CCCCCO sectors. This is because industry analyses are based on groupings of industries catalogued by the North American Industry Classification System (NAICS), while CCCCCO sectors are based on occupational groupings that use the Standard Occupational Classification (SOC) System. As a result, the titles that refer to NAICS industries vary from the titles that refer to CCCCCO sectors. (For example, the NAICS leisure and hospitality industry is related to, but not synonymous with, the CCCCCO retail, hospitality, and tourism sector.) However, industry analysis still provides insights into how CCCCCO sectors are impacted by the economic disruption and how they may recover, especially given issues with lagging data reporting and how rapidly the situation is evolving.

Advanced Transportation and Logistics—Compared to other industries in Los Angeles County, this sector shed fewer jobs than some harder hit industries such as food services, accommodation, tourism, and most entertainment-related industries between February and June 2020. According to data presented by the LAEDC during the August 2020 stakeholder convenings, the transportation, warehousing, and utilities industry contracted by 17,800 jobs, and wholesale trade lost 10,400 jobs.⁹ (Exhibit 17 on page 53 depicts industry job loss in the *2020 Regional Economic Overview* and *COVID-19 Impacts* section.) In September 2020, a number of logistics and e-commerce companies—including Kohl’s, DHL Supply Chain, and Amazon—announced hiring plans in the greater Los Angeles area fueled by increased online buying expected to extend into the holiday season.¹⁰ Also in September 2020, logistics and storage firm Mega Lion Inc. expanded its footprint by leasing 132,000-square-feet of warehouse space in Los Angeles County. This may be in line with a trend for high-ceiling warehouse distribution space resulting from accelerated e-commerce demand and a need for emergency inventory.¹¹ According to LA/OC COE analysis, two of the top three occupations with the most job postings in September 2020 were for advanced transportation and logistics positions—laborers and freight, stock, and material movers, hand (2,311 postings) and heavy and tractor-trailer truck drivers (2,219 postings).

Business and Entrepreneurship—The professional and business services industry shed the third greatest number of jobs from February to June 2020, a total of 61,800 jobs.¹² Nationally, three business and entrepreneurship occupations were among the top five occupations that experienced the greatest decline in demand (as measured by job postings): sales representatives, wholesale and manufacturing (except technical and scientific products); secretaries and administrative assistants (except legal, medical, and executive); and

⁹ “Los Angeles County’s Economic Base and COVID-19,” presentation made by Shannon Sedgwick, director of the LAEDC Institute for Applied Economics, during the LA Regional Stakeholder Convening held August 17, 2020.

¹⁰ Kevin Smith, “Logistics, e-commerce firms hiring 2,600 Inland Empire workers,” *Inland Daily Bulletin*, September 30, 2020, accessed October 12, 2020, <https://www.dailybulletin.com/2020/09/30/logistics-e-commerce-firms-hiring-2600-inland-empire-workers/>.

¹¹ Greg Cornfield, “Logistics firm signs 132K SF warehouse lease in LA County,” *Commercial Observer*, September 23, 2020, accessed October 12, 2020, <https://commercialobserver.com/2020/09/logistics-firm-signs-132k-sf-warehouse-lease-in-los-angeles-county-industrial/>.

¹² Ibid.

bookkeeping, accounting, and auditing clerks.¹³ The skill needs of workers in this sector are likely shifting, as more people transition to the gig economy and as small businesses adapt to new consumer demands and shopping habits.

Energy, Construction, and Utilities—The construction industry was relatively immune to the economic disruption caused by the pandemic in 2020. Construction lost the second smallest number of jobs, 6,900, in Los Angeles County between February and June 2020.¹⁴ Before the pandemic, housing starts had rebounded, and the state’s mandate that all new residential housing be zero net energy by 2020 was expected to fuel demand for green construction jobs, such as solar installers, HVAC technicians, and electricians.

Global Trade—This sector is largely driven by import and export activity at the ports of Long Beach and Los Angeles, and the Los Angeles International Airport (LAX). The ports were adversely affected by the trade war with China, but the Port of Long Beach reported in August 2020 a record-breaking month of moved cargo, and a 13% increase in imports.¹⁵ In July 2020, the Port of Los Angeles reported its highest month of cargo volume for the year.¹⁶ However, Beacon Economics reported in September 2020 that California exports declined by 12% compared to the previous year, and shipments of California manufactured and non-manufactured goods also dropped.¹⁷ Los Angeles World Airports remains the third largest airport in the world undergoing a \$14.7 billion renovation project in anticipation of the 2028 Olympic Games. Los Angeles continues to be an attractive epicenter for innovation and hub for new investments in the burgeoning sustainability sector such as renewable energy, ocean economy, and mobility. At the time of this writing, there were 11,000 foreign-owned establishments in Southern California creating over 461,000 jobs, 202,431 of which are in Los Angeles County.¹⁸ Strengthening the trade and logistics sector by incentivizing exports and educating the public on the crucial role of trade and logistics has been included in the Los Angeles County Roadmap to Recovery.¹⁹

Health—The health care and social assistance industry lost the fourth greatest number of jobs in the county in the spring of 2020, a total of 49,100.²⁰ However, this industry sector includes childcare workers, an occupation that is grouped within the CCCCCO education sector. (A high percentage of childcare workers were laid off in the spring of 2020 with center closures due to COVID-19. The *Data Analysis Informing the 2021-2024 Regional Plan* section clarifies health

¹³ “Which Workers Have Been Most Affected by the COVID-19 Pandemic?” On the Economy Blog, Federal Reserve Bank of St. Louis, July 30, 2020, accessed September 14, 2020, <https://www.stlouisfed.org/on-the-economy/2020/july/workers-affected-covid19-pandemic>.

¹⁴ Ibid.

¹⁵ Donna Littlejohn, “Long Beach Port cargo marks record August,” The Press-Telegram, September 11, 2020, accessed September 14, 2020, <https://www.presstelegram.com/2020/09/11/long-beach-port-cargo-marks-record-month-in-august>.

¹⁶ Mediha DiMartino, “Port of LA sees cargo gains for July,” Los Angeles Business Journal, August 13, 2020, accessed September 14, 2020, <https://labusinessjournal.com/news/2020/aug/13/port-la-sees-cargo-gains-july/>.

¹⁷ “California Exports Falter in Latest Numbers,” Beacon Economics, October 2020, accessed October 12, 2020, <https://beaconecon.com/publications/california-trade-report/>.

¹⁸ “Foreign Direct Investment in California, 2020,” World Trade Center Los Angeles, May 25, 2020, accessed September 30, 2020, <https://laedc.org/wp-content/uploads/2020/05/WTCLA-2020-FDI-Report-FINAL-c.pdf>.

¹⁹ “Roadmap to Recovery,” Los Angeles County, 2020, accessed October 12, 2020, <https://covid19.lacounty.gov/recovery/>.

²⁰ “Los Angeles County’s Economic Base and COVID-19,” presentation made by Shannon Sedgwick, director of the LAEDC Institute for Applied Economics, during the LA Regional Stakeholder Convening held August 17, 2020.

care employment and projected demand for the CCCC health sector.) In September 2020, health care occupations comprised four of the top five most in-demand jobs nationally: registered nurses, medical assistants, medical secretaries, and nursing assistants.²¹ Historically, the health care sector has been a large and expanding sector in Los Angeles County, with strong growth potential, and it overshadows most industries in terms of total employment.²²

ICT/Digital Media—Within this sector the motion picture and recording industry was substantially impacted in 2020, and as new efficiencies are adopted, numerous media reports have indicated that the industry may never return to doing business the way it used to. This has implications for many occupations that contribute to movie production. The number of people employed in motion picture and sound recording fell by 48.3% in Spring 2020.²³ According to SPB Global, “Looking at the information sector as a whole...job losses in the motion picture and sound recording subsector comprised more than 85% of all sector job losses,” in April 2020.²⁴ This sector also includes broadcasting, publishing telecommunications, data processing, and new media industries. The movie and recording industry aside, two of the six occupations with the most job postings in the county were for computer occupations, all other (2,119 postings), and software developer, applications (1,915 postings) in September 2020, according to Burning Glass. There has been strong demand for nearly all IT-related jobs in Los Angeles County, and given the rising importance of remote work, the Information and Communications Technology (ICT) sector might prove to be more resilient than other sectors since ICT workers directly support the infrastructure required for remote work.



²¹ “Which Workers Have Been Most Affected by the COVID-19 Pandemic?” On the Economy Blog, Federal Reserve Bank of St. Louis, July 30, 2020, accessed September 14, 2020, <https://www.stlouisfed.org/on-the-economy/2020/july/workers-affected-covid19-pandemic>.

²² “Health Care Services in the LA Basin: A High-growth Industry,” Center for a Competitive Workforce, May 2018, accessed September 30, 2020, <https://competitiveworkforce.la/health-care-services>.

²³ Bryan Pietsch, “20.5 million people lost their jobs in April. Here are the 10 jobs that were hit the hardest,” Business Insider, May 12, 2020, accessed September 14, 2020, <https://www.businessinsider.com/jobs-industries-careers-hit-hardest-by-coronavirus-unemployment-data-2020-5>.

²⁴ “US motion picture, sound recording workers hit hard by job losses in April,” S&P Global Market Intelligence, May 11, 2020, accessed September 14, 2020, <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/us-motion-picture-sound-recording-workers-hit-hard-by-job-losses-in-april-58565221>.

K-12 Strong Workforce Program

Historical Background

In 2017 the California State Legislature approved the K-12 Strong Workforce Program, which was chaptered in California Education Code Section 88827.²⁵ The legislature committed \$150 million annually for projects led by local educational agencies (LEAs) that included:

- Partnership with at least one community college in the region
- Activities to strengthen CE pathways between K-12 and the community college

K-12 SWP stakeholders include LEAs, community colleges and four-year institutions, and collaborative partners from industry, nonprofit, public service, and community service areas. A crosswalk showing the relationship between CCCC sectors and California Department of Education (CDE) sectors is shown at right.

In response to the legislation, the Los Angeles region convened LEAs to engage and assist them in the application process. The region established a K-12 Selection Committee that reviewed applications and selected awardees.

State legislation mandates that the selection committee be composed of current or former K-12 CE teachers and administrators, charter school representatives, career guidance counselors, representatives of industries that are prioritized by the consortium, at least one community college faculty or administrator, and other K-12 education stakeholders, or other stakeholders, as determined by the consortium.

CCCCO-to-CDE Crosswalk

CCCCO	CDE
Agriculture, Water & Environmental Technologies	Agriculture & Natural Resources
Business & Entrepreneurship; Global Trade	Business & Finance; Marketing, Sales & Service
Energy, Construction & Utilities	Building & Construction Trades; Energy, Environment & Utilities
Education & Human Development	Education, Child Development & Family Services
Health; Life Sciences/Biotech	Health Science & Medical Technology
Retail, Hospitality & Tourism	Fashion & Interior Design; Hospitality, Tourism & Recreation
ICT/Digital Media	Information & Communication Technologies
Advanced Manufacturing	Manufacturing & Product Development
Public Safety	Public Services
Advanced Transportation & Logistics	Transportation

Source: <https://www.cccco.edu/About-Us/Chancellors-Office/Divisions/Workforce-and-Economic-Development/Strong-Workforce-Program/Events/K12-SWP-Industry-Sector-Crosswalk>.

²⁵ California Education Code, Title 3, Division 7, Part 54.5, Section 88827, https://leginfo.ca.gov/faces/codes_displaySection.xhtml?lawCode=EDC§ionNum=88827.

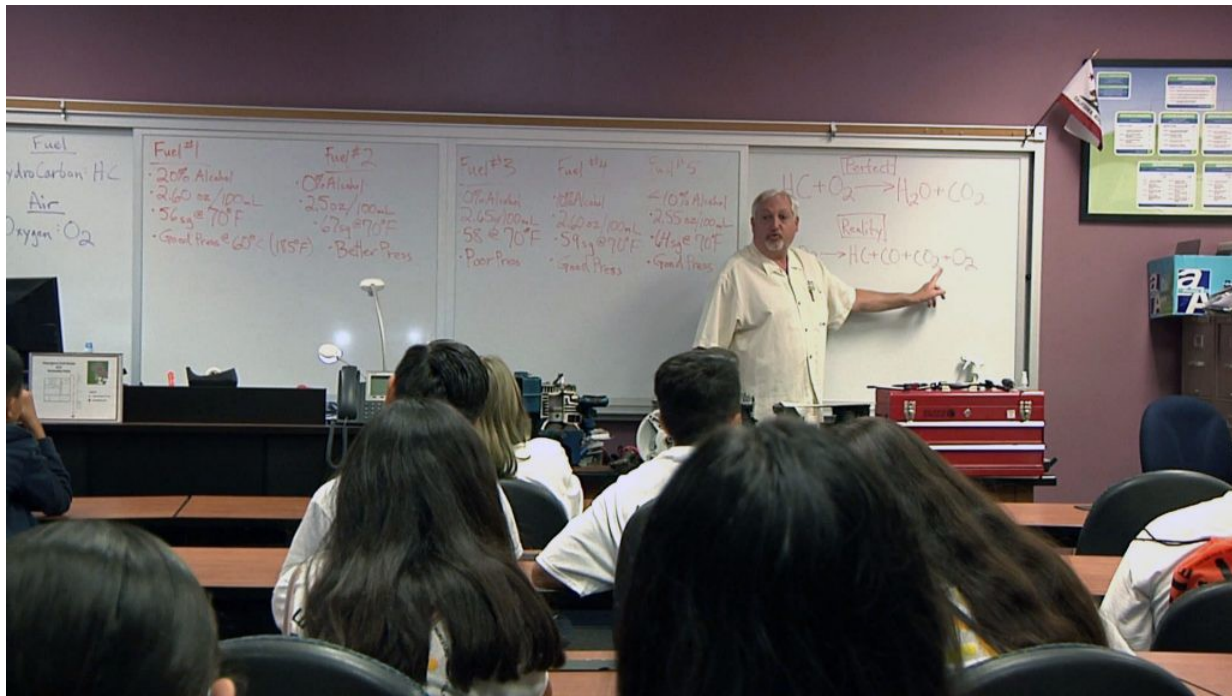
K-12 SWP performance and funding periods (“rounds”) are 30 months. The first round of K-12 SWP funding was effective fiscal year 2018-2019; however, the funding period began statewide on July 1, 2019. Similarly, Round 2 of K-12 SWP funding was effective fiscal year 2019-2020 but became available July 1, 2020.

Round 3 (FY 2020-21) of K-12 SWP funding begins January 1, 2021. Future rounds of K-12 SWP funding are expected to begin with the corresponding fiscal year.

For Round 1, the Los Angeles region received 93 applications for funding and awarded funding to 42 projects (Exhibit 6). Round 2 saw 45 applications and 36 awardees. For Round 3 there were 48 applications and 37 awards. Appendix A lists K-12 SWP projects for Rounds 2 and 3.

Exhibit 6. Applications, awards, and funding for Los Angeles K-12 SWP projects

Round	Fiscal Year	Performance Period	LA K-12 SWP Allocation	Number of Applications	Number of Awards
1	2018-2019	July 1, 2019-Dec. 31, 2021	\$26,059,654	93	42
2	2019-2020	July 1, 2020-Dec. 31, 2022	\$24,643,796	45	36
3	2020-2021	Jan. 1, 2021-June 30, 2023	\$25,339,879	48	37



Los Angeles Regional Planning Process for 2021-2024

Both complex and layered, the workforce development system in Los Angeles County is diverse and has many strengths—a predominantly young workforce, a robust international trade infrastructure, and a wide array of industries from entertainment to aerospace and digital technology. SWP legislation mandates that the community college regional consortia conduct stakeholder engagement to align strategies and identify priority projects that are informed by labor market analysis. In Los Angeles County, a key component of the engagement process involved reconsideration of the Los Angeles region’s priority CCCCCO sectors since many industries in the county experienced pandemic-related disruption and the economic recovery may extend into at least 2023.

The economic recovery has been compounded by the depth of layoffs and the number of business closures in the region, a particular concern in Los Angeles County, whose regional economy is supported by a high percentage of small businesses. The large number of displaced workers presents an opportunity for reskilling and upskilling, but at the same time, there are concerns that community college students may defer their education due to family hardships, thereby exacerbating the shortage of middle-skill workers. As a result, the community colleges have been deliberate in and mindful of how they can be synergistic in their goals to maximize the impact of the SWP in the region.

This section describes the development process for the 2021-2024 Los Angeles Regional Plan. It includes a 2020 regional economic overview and the impacts of COVID-19, a description of stakeholder input into the 2021-2024 plan, and a broad description of regional assets and investments, many of which use braided funding to achieve desired outcomes. Finally, a summary of regional SWP projects for the fifth year of funding, 2020-21, is provided.

Gathering Stakeholder Input

Strong Workforce Program legislation requires collaboration with Workforce Development Boards (WDBs) and alignment with WDB plans, and that colleges in Los Angeles actively work with their local WDBs. Thus, WDB plans were considered in stakeholder input for the 2021-2024 Los Angeles Regional Plan. In addition, stakeholder input was collected through engagement activities including regional retreats, monthly meetings of Los Angeles Collaborative partners, and SWP Stakeholder Convenings specifically designed to elicit input for the regional plan. Input was collected from stakeholders in industry, nonprofit, community organizations, community college and four-year universities, K-12 partners, and others.

This section begins with WDB stakeholder input and continues with a description of stakeholder input activities.

Workforce Development Boards

The workforce development system is a critical component of the regional economy, and the 19 Los Angeles community colleges are tasked with working to align their efforts with the seven workforce development boards in the county. The workforce development boards (WDBs) have adopted career pathway objectives related to their priority sectors. Some of the objectives include fostering demand-driven skills attainment that enables the upward mobility of all Californians, as well as aligning, coordinating, and integrating programs and services throughout the Los Angeles Basin.

In its 2017-2020 plan (the most recent available), the Los Angeles Basin Regional Planning Unit (RPU) highlighted several goals which became particularly relevant during the COVID-19 pandemic, which accelerated the digitization and automation of work, resulted in widespread layoffs, and spurred the expansion of some aspects of the gig economy. (See list of recommendations at right.)

The City of Los Angeles WDB's 2021 Plan includes the goal of *increasing access to career pathways through industry sector strategies*. The plan highlights several areas of focus, such as preparing workers to enter the New Green Economy, reducing the severe shortage of teachers in the region, and developing more apprenticeships. The plan discusses increasing apprenticeship opportunities in nontraditional employment sectors and funding the Sector Strategy Center at Los Angeles Valley College to promote training in high-demand sectors. The plan also devotes attention toward developing pathways to support Mayor Eric Garcetti's New Green Deal to create 300,000 green jobs by 2035 and 400,000 by 2050. Planned efforts on this front include:

- Collaborating with the Los Angeles Community College District (LACCD) to develop more pipelines for employment in green construction industry professional services.
- Working with local trade and technical schools to create additional Electric Vehicle (EV) workforce pipelines.

Los Angeles Basin Regional Planning Unit 2017-2020 Recommendations:

- **Expand the Definition of Foundational Skills**—Literacy and numeracy skills are required for workplace success. The definition of foundational skills should be expanded to include digital literacy/technology skills and customer service skills.
- **Invest in Incumbent Worker Training**—Businesses value and desire this service as much (or more) than training and referral of new workers. Can a regional protocol be developed for training/"up-skilling" currently employed individuals?
- **Recognize and Address the "Gig" Economy**—There is wide recognition of the gig economy and its importance for many workers, particularly younger workers. What role should our system play in helping gig workers to manage this approach to employment? Entrepreneurial skills training, particularly for youth and young adults, should be expanded.

Source: "2017-2020 Workforce and Opportunity Act Regional Plan," Los Angeles Basin Regional Planning Unit, p. 6, <https://workforce.lacounty.gov/wp-content/uploads/2017/02/LA-RPU-Draft-Regional-Plan-for-PublicComment.pdf>.

- Partnering with construction projects to provide more green opportunities for local hiring and disadvantaged workers in city contracts.
- Creating and expanding workforce training programs for landscape managers on the installation and care of native plants.
- Expanding partnerships and retraining programs to better prepare workers for alternatives to jobs that are expected to be automated.

The City of Los Angeles WDB plan stresses the need to focus on careers in early childhood education and development, and developing career ladder opportunities to address the long-term undersupply of teachers in Los Angeles schools and the shortage of licensed child care centers and family child care homes, which only have the capacity to serve 13% of working parents with infants and toddlers.

Each of the seven WDBs in the region have identified four to six priority sectors that drive economic growth within their boundaries. These priority sectors are compared and discussed below.

Given its prominent role in guiding and supporting economic development in the region, the LAEDC's priority sectors are also included in this section. LAEDC's criteria for choosing its target industries for the region were:

- 1) Industry growth rate
- 2) Potential job creation
- 3) Industry competitiveness
- 4) Higher prevailing wages

Using NAICS, LAEDC identified six industries as targets for specific economic and workforce development interventions, and these industries are similar to the sectors selected by the Los Angeles Basin Regional Planning Unit (Exhibit 7). While there is some variation in the sector titles used to describe these industries by the LAEDC, WDBs, and community colleges, many of the titles overlap with only small differences in the occupations occurring within the sectors.

There are, however, some key differences in the priority sector names used by LAEDC, WDBs, and the CCCC. For example, the Los Angeles Basin Regional Planning Unit identified transportation and logistics while the LAEDC identified trade and logistics as a priority sector. The Los Angeles Basin Regional Planning Unit identified health care, while LAEDC identified health services (an industry sector that does not include all the occupations included in the CCCC health sector). Similarly, the Los Angeles Basin Regional Planning Unit selected hospitality and tourism, while LAEDC selected leisure and hospitality.

Exhibit 7. Crosswalk of priority sectors identified by the Los Angeles Basin Regional Planning Unit, LAEDC, and CCCCCO

Los Angeles Basin RPU Priority Sectors	LAEDC Priority Sectors	CCCCO Sectors
Construction	Construction industries (construction of buildings, heavy and civil engineering construction, specialty trade contractors)	Energy, Construction & Utilities
Advanced manufacturing (including biotech)	Selected manufacturing (fashion, aerospace, analytical instruments, pharmaceuticals, medical devices)	Advanced Manufacturing Life Sciences/Biotech
Transportation and logistics	Trade and logistics	Advanced Transportation & Logistics
Information and communications technology (including entertainment and music recording)	Entertainment and infotech	ICT/Digital Media
Health care	Health services	Health
Hospitality and tourism	Leisure and hospitality	Retail, Hospitality & Tourism

In Exhibit 8, to illustrate its alignment with the WDBs in the region, the Los Angeles Regional Consortium’s priority sectors are highlighted in blue.²⁶ Aside from advanced manufacturing, and hospitality and tourism, the Los Angeles Basin Regional Planning Unit’s priority sectors are the same as the Los Angeles Regional Consortium. There is only one sector for which all the WDBs have aligned, but for which the consortium is not aligned—advanced manufacturing. (Note: The LAEDC, Long Beach WDB, South Bay WDB, Los Angeles County WDB, and the Los Angeles Basin Regional Planning Unit have selected the construction industry as a priority sector in their plans. This sector is grouped within CCCCCO’s energy, construction, and utilities sector for the regional community colleges.) For the purpose of illustrating discrete priority sectors, advanced transportation has been ungrouped from logistics in the table below since some WDBs have selected one but not the other as a priority sector.

Two WDBs—Verdugo and the City of Los Angeles—have selected biotech as a priority industry and are collaborating on developing pathways for this sector. They have signed a partnership agreement to participate and assist in developing the sector pathway for bioscience. The Los Angeles Basin Regional Planning Unit groups biotech within advanced manufacturing. Regarding

²⁶ The Foothill WDB does not appear to have identified priority sectors in its 2017-2021 plan. The plan briefly describes promoting retention in training, on the job, and in career path progression, and participating in the Citrus College Adult Education Consortium. The SELACO WDB plan also does not appear to identify priority sectors, but Cerritos College and the PAACE Consortium are identified as key partners.

its selection of biotech, the Los Angeles Basin Regional Planning Unit plan states, “Many jobs are highly-skilled and highly-compensated and many include positions that require workers with community college degrees or advanced technical training. In addition, the expected retirement of aging skilled craftsmen presents an opportunity for apprenticeships, new entrants, and those moving up the career ladder.”²⁷ Composed of seven middle-skill occupations, the CCCCCO life sciences/biotech sector is one of the smallest CCCCCO sectors in the county in terms of employment size, with 61,533 workers in 2019. According to LA/OC COE data analysis included in the *Data Analysis Informing the 2021-2024 Los Angeles Regional Plan* section, the life sciences/biotech sector is not projected to undergo any growth through 2024. However, 3,325 annual openings are still projected for the seven occupations.

Exhibit 8. Comparison of Los Angeles Regional Consortium, local workforce development boards, and LAEDC priority sectors

Industry Sector	LA Regional Consortium	Long Beach WDB ¹	South Bay WDB	Verdugo WDB ²	City of LA WDB ³	LA County WDB ⁴	LA Basin RPU ⁵	LAEDC
Advanced Manufacturing		x	x	x	x	x	x	x
Advanced Transportation	x				x		x	
Logistics	x	x			x	x	x	x
Bioscience/Biotech				x	x			
Business & Entrepreneurship	x			x				
Energy, Construction & Utilities	x	x	x			x	x	x
Global Trade	x	x				x		x
Health Care/Health Services	x	x	x	x		x	x	x
ICT/Digital Media	x	x	x	x	x	x	x	x
Retail, Hospitality & Tourism		x		x		x	x	x

¹These sectors were identified for the development of pathway models for both low-skill and middle-skill workers. Long Beach WDB identifies “Logistics & Goods Movement” as its priority industry (pp. 10-13 of plan). For the purpose of the table, this is marked in the logistics and global trade boxes.

²Verdugo WDB’s business-related target industry is called “Professional and Business Services” (p. 4 of plan).

³These sectors are called out under “Increase access to career pathways through Industry Sector Strategies,” pp. 2-7 of the 2019-2020 plan. The 2020-2021 plan focuses on activities in response to the pandemic.

⁴LA County WDB’s ICT/digital media priority industry is referred to as “Entertainment and Infotech” on page 9 of its plan and in the plan by the Los Angeles Basin Regional Planning Unit. In Los Angeles County WDB’s plan and the LAEDC report, health services is identified as a priority industry, not health care.

⁵Target sectors are discussed on pages 9-10 of the 2017-2020 Los Angeles Basin Regional Planning Unit plan.

²⁷ “Regional Plan 2017-2020,” Los Angeles Basin Regional Planning Unit, February 1, 2017, accessed October 12, 2020, p. 10, https://workforce.lacounty.gov/wp-content/uploads/2017/02/LA-RPU-Draft-Regional-Plan_for-PublicComment.pdf.

Stakeholder Engagement Activities

From late 2019 through 2020, the Los Angeles region gathered input and insights from a diverse array of educational, industry, workforce, and community-based stakeholders, and held strategizing sessions, with the goal of strengthening and expanding new and existing regional sector career pathways. Through multiple workshops, retreats, and work group meetings, strategic regional planning partners were engaged to identify key challenges and opportunities in the region and develop solutions to overcome obstacles and improve outcomes. Given the profound economic disruption caused by the pandemic, the stakeholder engagement process also involved wrestling with the effects of changing workplaces on occupations, businesses, and the overall health of industries critical to the regional economy.

In the Los Angeles region, key participants included the 19 Los Angeles community colleges, local K-12 educational agencies (including unified school districts, ROPs, charter schools, and the Los Angeles County Office of Education), Regional Directors for Employer Engagement, LAEDC, the Los Angeles Area Chamber of Commerce, seven workforce development boards, adult education providers, business and industry partners, and community-based organizations.

Los Angeles Retreat, 2019

The Los Angeles Regional Plan Work Group was formed during the 2019 Los Angeles retreat held September 27, 2019. In addition, attendees provided input on broad topics to include in the 2021-2024 plan. There was consensus on including a description of the unique contribution of Los Angeles to the state economy, as well as a regional labor market analysis to inform planning for the next four years.

Work Group Monthly Meetings

Twelve stakeholders volunteered to meet monthly for the purpose of drafting the 2021-2024 Los Angeles Regional Plan. Membership included the Los Angeles/Orange County Center of Excellence Director, the Regional Chair, three Regional Directors for Employer Engagement, a representative from the Los Angeles County Office of Education (LACOE), and five community college CE deans. Four of the five deans also sit on the College Resource Leadership Council (CRLC).

Monthly Los Angeles Collaborative Meetings

Los Angeles stakeholders meet monthly to maintain communication and progress toward regional goals. The Los Angeles Collaborative meeting includes college CE deans and faculty, administrators, staff, SWP project leads, K-12 partners, and others. In June 2020, the Los Angeles Collaborative held a strategy session, followed by a survey and follow-up session in July 2020, and focused on regional priorities in light of COVID-19. Three major themes emerged: K-14 pathways, job placement, and data and industry sectors. Regional priorities were set in each of the three areas. Although these regional priorities were developed only for the 2020-21 academic year, they provided valuable input into regional planning for the 2021-2024 plan. The seven regional priorities for 2020-2021 are listed in the *Summary of Stakeholder Input* section of this document.

Los Angeles SWP Stakeholder Convenings

The Los Angeles Regional Plan Work Group convened 129 workforce and education partners to provide input during two Los Angeles Regional Stakeholder Convenings held August 17 and August 20, 2020. Participating in the meetings were Los Angeles Regional Plan Work Group members and representatives from various stakeholder groups, including industry; workforce development; economic development; non-profit, for-profit, and public entities; K-12 educators, four-year colleges and universities; and others. Roughly 38% of participants were from community colleges, with another 34% from K-12, 34% from workforce development, 18% from employers and industry, 13% from economic development, and 13% from public agencies. Many participants represented more than one stakeholder group.

Two presentations set the stage for determining community college priorities that are responsive to labor market demands over the next four years. Shannon Sedgwick, director of the Applied Economic Institute, LAEDC, discussed the impact of the COVID-19 pandemic on California and Los Angeles County. Luke Meyer, director of the Los Angeles/Orange County Center of Excellence, provided an overview of emerging/high growth industries identified by his organization to be “economically critical.” For each sector, Meyer provided metrics on regional demand and student outcomes for priority and emerging sectors in the region and state.

Breakout sessions then provided the opportunity for input from stakeholders. The three breakout session topics were consistent with earlier themes from monthly Los Angeles Collaborative meetings. A description of each breakout is provided below, and a summary of the stakeholder input is provided in the *Summary of Stakeholder Input* section.

- 1) ***Strengthening K-14 Pathways***, which assessed current partnerships between K-12 and community colleges in the Los Angeles region, including strengths, challenges, and opportunities. The session also explored strategies to help students clarify their career path, enter the path, and stay on the path.
- 2) ***Strengthening Job Placement***, which assessed the state of job placement through CE programs in the Los Angeles region and explored strengths, challenges, and opportunities. Future priorities were also discussed.
- 3) ***Data and Industry Sectors***, in which participants discussed and evaluated the priority industry sectors identified by the Los Angeles/Orange County Center of Excellence. Participants were asked to share additional emerging sectors and identify projects and programs that will help the region respond to workforce needs.

K-12 Stakeholder Input Session

A K-12 Stakeholder Input Session was held October 23, 2020. The session included a workshop on personal and interpersonal effectiveness, followed by an overview by the Regional Chair of the SWP funding stream and the project application and approval process for the last three

rounds of K-12 SWP funding. Attendees were then broken into groups with facilitators to discuss best practices and effective strategies for strengthening K-14 pathways in the region. Nearly 40 individuals participated in breakout groups to discuss and develop suggestions and recommendations for 2021-2024 K-12 strategies and priorities. Among those in attendance were 10 of the 11 K-12 Pathway Coordinators for the Los Angeles region.

Twelve school districts were represented by event registrants: ABC Unified School District, Bassett Unified School District, Beverly Hills Unified School District, Centinela Valley Unified High School District (CVUHSD), Downey Unified School District, Glendale Unified School District, Inglewood Unified School District, Long Beach Unified School District, Los Angeles Unified School District, Montebello Unified School District, Rowland Unified School District, and San Gabriel Unified School District.

Educational institutions, government agencies, and non-profits with registered representatives included: Bayha Group, California Advancing Pathways for Students, Cal Learns, East San Gabriel Valley ROP, EYP Ventures/Exploring Your Potential, Five Keys Schools and Programs, Los Angeles County Office of Education, LA Promise Fund, New Designs Charter Schools, Rio Hondo College, Santa Monica College/SMMUSD, SIATech Charter High Schools, and TriCities ROP.

Los Angeles Retreat, 2020

The Los Angeles Virtual Planning Retreat was held October 30, 2020 to strengthen collaboration within the Los Angeles region, provide professional development, and move forward as a team in planning 2021-2024 regional priorities. The event was facilitated by NewLeaf Training and Development. Two keynote speakers made presentations on legislative activity and statewide trends impacting the California Community Colleges: Jonathan Lightman, who serves as an advisor to the Community College League of California, and Ryan McElhinney, who serves as policy and advocacy manager for the Community College League of California.

Nearly 50 individuals attended the event. All 19 Los Angeles community colleges had representatives in attendance: Cerritos College, Citrus College, Compton College, East Los Angeles College, Glendale Community College, El Camino College, Long Beach City College, Los Angeles City College, Los Angeles Harbor College, Los Angeles Mission College, Los Angeles Pierce College, Los Angeles Southwest College, Los Angeles Trade-Technical College, Los Angeles Valley College, Mt. San Antonio College, Pasadena City College, Rio Hondo College, Santa Monica College, and West Los Angeles College.

Other partners with representatives who registered for the event included the Chancellor's Office, California Community Colleges Workforce Economic Development Division, Health Workforce Initiative, Los Angeles County Office Education, Los Angeles Unified School District, and Pasadena Bio Collaborative.

Summary of Stakeholder Input

2020-2021 Regional Priorities

With the arrival of COVID-19, campuses made a sudden and drastic move in March 2020 from primarily in-person instruction to offering almost all instruction and student services remotely. With this sudden change in mind, and to guide the selection of SWP regional projects undertaken by the 19 community colleges and K-12 SWP investments, the Los Angeles Collaborative adopted seven regional priorities for 2020-2021:

1. Maximize sustained industry engagement through participation in industry councils and collaborative efforts, and creation of regional industry advisory boards;
2. Strengthen career pathways and programs of study in partnership with K-12 school districts, adult education providers, and labor/registered apprenticeships;
3. Increase opportunities for work-based learning along the continuum through industry partnerships;
4. Attend to the need for new CE faculty recruitment (teacher pipeline) and professional development and externships for current faculty to ensure alignment with dynamic industry skills and knowledge;
5. Address the needs of business and industry in identified priority and emerging sectors;
6. Support regional marketing, curriculum alignment, streamlined regional processes and regional labor market data collection, and analysis for data-informed decision-making; and
7. Explore effective strategies for serving students in a COVID-19 environment.



Input from Los Angeles SWP Stakeholder Convenings

As discussed previously, the Los Angeles Regional Plan Work Group convened 129 workforce and education partners to provide input during two Los Angeles Regional Stakeholder Convenings. Participants included the Los Angeles Small Business Development Center, the Los Angeles World Trade Center, UNITE-LA, California State University at Dominguez Hills, the Greater Los Angeles Federal Executive Board, Caltrans, and the Coalition for Responsible Community Development. Also participating were community college and K-12 partners, key talent, the Los Angeles Chamber of Commerce, and LAEDC. Many of the entities that participated have strong ties to industry leaders and to initiatives targeting high-growth and priority industries in the region. Participants selected the breakout session they wanted to attend.

This section summarizes input received in the breakout sessions at the stakeholder convenings on August 17 and August 20, 2020.

Input from Breakout Session 1: Strengthening K-14 Pathways

Regional investments in strengthening K-14 pathways have resulted in many positive outcomes, but considerable work remains to be done. One positive outcome in the region has been an increase in articulation and dual enrollment. Adult education providers and ROPs have leveraged state funding to strengthen pathways. New K-12 Pathway Coordinators will further strengthen these relationships.

Stakeholders also discussed challenges in the region. Lack of communication and coordination between high schools and community colleges has been a key challenge in creating successful partnerships. Concerns were raised that high schools and colleges often develop career pathways independently and attempt to marry them retroactively.

Although K-12 Pathway Coordinators will help in this sphere, high turnover among community college personnel and relationships that are often between individuals rather than programs were cited as obstacles. Having contact information, such as email addresses, associated with a program and not a person could ameliorate this. Relationship-building between K-12 and community college faculty would benefit from “externships” for high school faculty and college counselors.

It was also recommended that community colleges improve communication about career pathways to high school counselors and that a website clearinghouse with contact information for community college programs be created. The possibility of establishing a regional “Data Integrity” function was raised as a way to ensure all parties are using the same data when developing partnerships, strategies, and solutions.

Another challenge was identified by K-12 educators who pointed out that a lack of standard operating procedures means they have to learn different policies and procedures for each

college. The idea of developing regional standard operating procedures was raised, although it was noted that differences would still remain.

The fact that many high schools and community colleges were still in the early stages of building pathways presented an opportunity for coordination and alignment. It was recommended that college and K-12 career pathways should be developed together to create a smooth pipeline that takes advantage of the strengths of both systems. Participants highlighted the importance of garnering input from industry in pathway development, perhaps in the form of advisory groups. Sharing of best practices could improve consistency across the region.

Another challenge involved dual enrollment, namely, finding enough college faculty to agree to participate and securing high school teachers who meet the minimum qualifications to teach dual enrollment classes. The amount of paperwork involved in enrolling students was described as “hard to manage,” but colleges are working to streamline that. The idea of creating a dual enrollment handbook was proposed.

Strategies for LA colleges to strengthen K-14 pathways:

- Conduct outreach to middle school students to ensure they are aware of CE opportunities when they enter high school.
- Work with high school counselors to make sure they place an emphasis on CE training as an alternative to four-year college.
- Leverage the work of other organizations, such as GEAR UP, since counselors are often overburdened.
- Educate parents about opportunities and what is required of their students.
- Create externship opportunities for high school faculty to promote understanding of dual enrollment.

Input from Breakout Session 2: Strengthening Job Placement

The traditional role of community colleges is changing. Historically, community colleges have served as educational and training providers, but new emphasis is being placed on the colleges to assist students with job placement. Many of these job placement activities are new to the community colleges. However, models that have proven successful do exist and, in breakout sessions, stakeholders brainstormed additional ideas to take forward.

The relationship between community colleges and workforce systems was noted as a strength, with some colleges utilizing these organizations as their primary means of placing students. The resourcefulness of faculty in finding internships and jobs for students was identified as another strength. Participants also felt they could tap into their strong alumni networks to create new partnerships with employers.

However, the need to centralize and track these activities was noted. For example, Long Beach City College used a customer relationship management (CRM) platform to track faculty relationships with industry. Long Beach City College also described using a career coach to help with placements. Tracking job placements was cited as another challenge, with placement

efforts often being faculty-driven rather than centralized. Limited investment in technology designed to track placements and outcomes was a concern. A portal created by the Center for a Competitive Workforce (CCW), an SWP funded project in the Los Angeles region, was discussed as a good concept, but some participants had problems implementing it. A recommendation was made to evaluate it as a viable model and determine what would need to be done to make it more useful.

Strategies for LA colleges to strengthen job placement:

- Get buy-in from CEOs to fund job placement and tracking activities and commit to sustaining that funding.
- Move away from individually driven job placement activities and transition to a centralized system.
- Coordinate events that connect community colleges and industry, such as advisory boards and job placement fairs.
- Open advisory board positions to students. This will create a trickle down of information to the student population.

Input from Breakout Session 3: Data and Industry Sectors (Metrics/Data-driven Coordination)

Critical sectors identified by participants were health care, import and export activities related to global trade, and health/social services. Information technology, supply and inventory management, and facilities maintenance were also noted as key sectors. In light of the COVID-19 pandemic, participants felt jobs related to the “essential workforce” should be an important focus. Participants agreed that the region’s tourism industry would bounce back after the pandemic and should continue to be considered a key industry. Participants also noted the need to consider the interconnected nature of these sectors, for example crossover between tourism and facilities management, and global trade and inventory management.

Cross-sector skills that are in demand across sectors were discussed. These included quantitative skillsets, such as data analytics, and soft skills needed to use and communicate the data. The need to create programs and internship opportunities with input from employers was identified as an important step in ensuring programs fit the needs of employers.

Strategies for the LA region to utilize data effectively:

- Create a portal to connect community colleges with industry to ensure programs meet employer needs.
- Work with industry to create “socialization” opportunities between students and industry, such as mentorship and work-based learning opportunities that help students stay on track, realize the value of a program, and understand the opportunities that await them upon completion of a course.
- Develop new programs that focus on science and health-related fields with an emphasis on teaching hybrid cross-sector skills.

K-12 Stakeholder Input to the 2021-2024 Los Angeles Regional Plan

During the stakeholder input session on October 23, 2020, participants discussed three questions pertaining to K-14 pathways in the region.

1. What can K-12 educators do to help students in the Los Angeles region successfully transition from the K-12 system to postsecondary education?
2. How can we strengthen the CE pipeline between K-12 and community colleges in the next four years?
3. Of the strategies and activities identified above, what should the region prioritize? What resources would be needed?

This section summarizes common themes, strategies, and recommendations resulting from those discussions.

Extra student support—Participants discussed the extra support and counseling that high school students need for college readiness. Early exposure to college and potential careers—through field trips, guest speakers from industry, visits from community college counselors, and targeted CE career counseling—was mentioned as critical for high school students. Glendale Community College’s work in this area was cited as a model that could be replicated. Virtual site visits and actual field trips to campuses were noted as incredibly important. More virtual workshops or tours as well as FAFSA and college application workshops were suggested to provide students with the knowledge and skills needed to be empowered to apply to college and pursue a career. Incorporating exposure to workforce readiness skills into curricula for high school students was suggested as a strategy for providing students with context for transitioning between college and a career. In addition, student support specialists are needed to help students with the postsecondary transition, and a trauma-informed approach could be used to address students’ needs. Having a CE/academic counselor or student support specialist at each high school could help more students navigate the transition. El Camino College’s CVUHSD Resource Guide website for students was cited as a model that could be replicated. The website provides high school students with information on CE programs, dual enrollment, financial aid, and student support services.

Dual enrollment—The importance of earning early college credits through dual enrollment for high school students emerged as a common theme. Alternative scheduling approaches, such as zero-period CE courses, were mentioned as a strategy to help special student populations, such as special ed and ESL, because these students usually cannot fit CE into traditional schedules. The need to promote dual enrollment more among high school students and improve student access was emphasized. Also mentioned was the need to expose middle school students early on as to what their dual enrollment options are and how to enroll. Workshops for parents and students about the “process” and information about AA/AS degrees and certificates could help improve access.

Strengthen K-14 pipeline—One common theme was facilitating more communication and interaction between middle school and high school teachers, and between high school

counselors and community college counselors. An annual workshop, monthly meetings, or regular information sessions held year-round were suggested to strengthen communication between high school and community college counselors. Coordination and communication between high school and community college counseling for pathway development was stressed as important for improving the pipeline. Including community colleges at the onset of pathway creation would help with articulation and dual enrollment development. Another area of need is supporting high school counselors who are pulled in many different directions, including helping students with life issues, disciplinary matters, and introducing students to opportunities at four-year colleges and universities, with little time to devote to promoting CE pathways or figuring out how to highlight CE opportunities.

Systematized processes—Participants discussed how the scale of the Los Angeles region necessitates systematized articulation agreements and dual enrollment (AB 288) courses rather than having “one-offs.” For example, Los Angeles Unified School District has 400+ pathways that link to nine community colleges. Regarding articulation, there are different processes and structures in place at each college, and stakeholders would like more guidance from the Chancellor’s Office for streamlining and creating universal systems/structures to improve the process and provide more transparency for local educational agencies (LEAs). The K-14 Career Pathways Specialists were mentioned as critical to improving the process. Stakeholders requested that systems of awarding credit be addressed, and the Career and Technology Education Management Application (CATEMA) system for articulated credit that is used by Glendale College and Rio Hondo College was cited as a model. Working on a system to easily transfer credits from one college to another was stressed since that would provide more flexibility for students, such as those in the juvenile court system, and could build upon similar efforts underway for foster youth and returning veterans. Aligning for-credit, paid work experiences with WorkSource Centers and other local work programs for youth was recommended for students who need to work to support their families.

Continuous communication—Improving and expanding communication channels was a common theme in a variety of areas. Regarding articulation, establishing forums for continuous communication/meetings between the community colleges and LEAs was suggested, in addition to using the K-14 Career Pathway Specialists and K-12 Pathway Coordinators to facilitate that communication. Stakeholders recommended concentrating on counselor inclusion (such as through an annual counselor collaborative/workshop/conference). A previous grant project that brought together 90 high school counselors to engage with community colleges was suggested as an effective strategy that could be replicated. More outreach and education is needed to help the education community know more about the K-14 Career Pathway Specialists and understand who is housed at each of the community college districts.

Stakeholder Input during the Los Angeles Retreat, 2020

During the Los Angeles Retreat held on October 30, 2020, roughly 40 participants in five breakout groups discussed guiding questions pertaining to regional priorities and priority sectors in the region.

Group facilitators posed the same guiding questions in each breakout group:

1. What do you see as job placement priorities for the Los Angeles region in the next four years? Please cite any evidence you have that supports the areas you selected.
2. What do you see as priorities for Los Angeles community colleges for the next four years?
3. What key strategies will strengthen the pipeline between K-12 and community college in the next four years?
4. Based on the data in the regional plan, where do you see gaps between supply of skilled workers and labor market demand?
5. Which industry sectors are emerging or important in the Los Angeles region based on evidence?
6. Please provide three ideas that would help the Los Angeles region to respond to industry and workforce needs in the next four years.

This section summarizes common themes, strategies, and recommendations resulting from those discussions.

1. Job placement priorities:

- Helping displaced workers and people who are changing careers to retrain or upskill during the COVID-19 economic recovery and beyond. This could involve expanding and integrating cooperative education programs that combine classroom and on-the-job learning with work experience and internship placements. More apprenticeships could be created through employers and workforce development boards.
- Addressing systemic barriers to meet industry needs and improving working relationships with employers and industry.
- Identifying new pathways for retraining workers, with attention toward jobs that pay well and are not impacted by the pandemic. For example, displaced restaurant and hotel workers could enter the biotech industry, which values their soft skills.
- Rethinking the approach in developing work experience opportunities for students. Some industry partners have said work experience and internships are challenging for them to offer because they are not set up for that and would rather just hire students, whereas other industries are begging for students to fill work experience slots. The region could be more industry responsive when developing work experience and pre-apprenticeship pipelines.
- Improving the documentation and tracking of student job placement and using social media to track student employment outcomes, such as through a small exit survey conducted by information technology students at the community colleges. Participants suggested trying to centralize job placement data, hiring more personnel, and connecting students to jobs virtually.

- Preparing students for job placement, informing them of opportunities, and providing job readiness courses.
- Developing a more standardized, centralized way of managing business contacts and placing students in jobs, with guidance from the Chancellor’s Office to support these efforts.

2. Community college priorities through 2024:

- Implementing a marketing campaign to change perceptions about community colleges. Participants stressed the need to market the community colleges as promising opportunities for high schoolers and as an area deserving more attention from high school counselors who tend to be focused on getting students into four-year postsecondary institutions. A marketing campaign should focus on two-year certificates as a cost-effective option for families that can lead to high-wage careers within the first several years of employment.
- Preparing for the “gray tsunami” as more baby boomers enter retirement, with programs targeting knowledge and skills needed for managerial positions.
- Exploring best practices, such as Long Beach City College’s job placement program, for possible implementation at a regional level.
- Evaluating the impact of artificial intelligence (AI) on key sectors in the region, such as advanced manufacturing, information technology, and biotech.
- Shifting from narrowly focusing on single occupations or sectors to focusing on competency skills clusters that can be applied to occupational clusters or across sectors. Instead of isolating sectors individually, there is a need to recalibrate to focus on skill sets and common competencies across a broader spectrum.
- Increasing the focus on credentials, skills development (specifically the level of skills needed to enter a particular occupation), and equipping students with more competencies.
- Forming subgroups of faculty across the region to share existing curricula, develop new curricula, and apply for grants.
- Creating a regional college application process that allows students to take courses at other colleges and allows students more choices as to which college they attend.
- Developing new ways to respond more rapidly to employer needs; a faster, more flexible curriculum development process; and a process to vet new and emerging sectors.

3. Strengthening the K-14 pipeline:

- Moving away from the siloed approach for credit, noncredit, and not-for-credit programs. A regional priority should be to figure out ways to leverage program types and link them, so they are no longer considered separate from one another.
- Expanding K-12 career exploration opportunities and academies held during the summer and after school, with a focus on promising industry sectors and industry crossover with transferrable skills.
- Continuing existing efforts in the areas of dual enrollment, articulation and alignment, and early college exposure in middle school, so students enter high school with a better understanding of the pathways that are available to them. Another approach that received support was credit by exam whereby a high school student takes the final exam of an entry-level college course and earns credit if they pass.
- Standardizing community college processes to make the transition easier for students who are leaving high school and entering college.
- Keeping pathway and high school engagement strong and establishing a joint regional advisory with college faculty and high school counselors to solidify pathways among K-12, community colleges, and industry.

4-5. Emerging and important sectors:

- | | |
|--------------------------|---|
| • Health care | • Energy, construction, and utilities (construction trades, MC3 pre-apprenticeship) |
| • Information technology | • Global trade |
| • Life sciences/biotech | • Mechanics and aircraft mechanics |
| • Advanced manufacturing | • Jobs within the supply chain |
| • Engineering | |
| • Welding and machining | |
| • ICT/digital media | |

K-12 Activities and Future Plans: Career Pathways Specialist Project

As discussed in the previous sections, stakeholder input regarding K-14 pathways was gathered throughout the 2021-2024 planning process. In addition, the Los Angeles region supported a regional SWP project whose purpose was to strengthen relationships between regional high schools and ROPs so that career pathways from high school through college would lead to employment. The Career Pathways Specialist Project established activities and goals for 2019-2020 and beyond, which are given below. Outcomes from the first three years of the project are provided in Exhibit 9.

K-12 Activities:

- ☐ Identify, revise, and develop career pathways between secondary and postsecondary educational institutions
- ☐ Review, revise, and develop articulation agreements
- ☐ Identify dual enrollment opportunities and develop AB 288 & Non 288 MOUs
- ☐ Incorporate credit and noncredit programs
- ☐ Integrate work-based learning into career pathways

Future plans:

- ☐ Continue to revise/develop K-14 career pathways
- ☐ Engage K-12 Pathway Coordinators
- ☐ Collaborate with guided pathway coordinators
- ☐ Implement work-based learning strategies into every career pathway
- ☐ Integrate a coordinator position into each college, leading to sustainability

Exhibit 9. K-12 outcomes comparison, 2017 through 2019

Category	2017	2018	2019
Articulation Agreements	361	520	598
Number of Students Who Received Credit	2,431	5,332	3,884
CE Dual Enrollment Classes	118	255	561
Number of Students Who Received Credit for CE Dual Enrollment	3,395	5,000	10,940
Non-CE Dual Enrollment Classes	793	603	843
Number of Students Who Received Credit for Non-CE Dual Enrollment	5,473	8,612	17,329
Total Students Served	11,299	19,470	39,903
Noncredit Articulation Agreements	NA	NA	34
Number of Students Who Received Credit for Noncredit classes	NA	NA	345
Number of High Schools Served	NA	NA	488

Regional Assets and Investments

This section describes various funding sources and partnerships in Los Angeles that complement efforts to strengthen the region through quality education and training. Due to Los Angeles County's size and complexity, and the large number of projects and initiatives in the region, a complete list of all assets and investments could not be included. However, this section summarizes key assets and investments that are propelling the region forward and advancing the goals of the Strong Workforce Program. These projects involve regional coordination with K-12 school districts and WDBs and are building more efficient systems for the delivery of education and training. They are helping to meet regional labor market demand while improving and expanding critical CE pathways.

In recent years, several state funding streams contributed toward implementing strategies and building a foundation in the region for preparing CE students to enter stable, in-demand jobs that pay solid wages. Senate Bill 1070, which created the Career Technical Education Pathways Program, has assisted with improving CE pathways and led to the work now being conducted through the Strong Workforce Program (a \$248 million allocation for the community colleges) and through the K-12 Strong Workforce Program to create, support, or expand high-quality CE at the K-12 level (a \$150 million allocation for local education agencies).

These efforts have been leveraged and built upon through five rounds of Career Technical Education Incentive Grant funding. Funding through the Carl D. Perkins Vocational and Technical Education Act (Perkins Act), recently reauthorized as the Strengthening Career and Technical Education for the 21st Century Act (Perkins V), has also been critical in supporting existing and developing new CE programs in the region and complements the goals of the Strong Workforce Program. In June 2020, the 11 community college districts in the Los Angeles region completed Perkins V Comprehensive Local Needs Assessments to guide local program delivery. Districts evaluated their performance in six areas, including meeting federal accountability measures, alignment with local labor market needs, quality of programs offered, and progress toward implementing CE programs.

Early on, the focus of much of the work in the region was on strengthening community college CE pathways, but as many goals and accomplishments have been realized, attention has been directed toward aligning K-14 pathways, fostering demand-driven skills attainment for students and incumbent workers, and incorporating more accountable, outcomes-based measures. Adult Education Block Grant funding has further helped the region to align, coordinate, and integrate services through the ongoing work of several adult education consortia, including the Los Angeles Regional Adult Education Consortium, Partnership for Adult Academic and Career Education (PAACE) Regional Consortium, Citrus College Adult Education Consortium, South Bay Adult Education Consortium, Pasadena Area Consortium, and Rio Hondo Region Adult Education Consortium.

Other assets in the region include key talent: the Regional Directors for Employer Engagement, the Los Angeles/Orange County Center of Excellence for Labor Market Research, the statewide Community Education Technical Assistance Providers (TAP) hosted at Mt. San Antonio College, and the K-14 Technical Assistance Providers and K-12 Pathway Coordinators assigned to the LA/OC region.

Business and Workforce Partners

The Los Angeles Area Chamber of Commerce (LAACC) has been active in supporting sectors that are economic drivers in the region. To that end, LAACC has formed several centers to advance economic vitality, including the Center for Small Business Success, the Center for Global Trade and Foreign Investment, and the Center for Innovation and Technology. LAACC also hosts a Health Sector Collaborative with representatives from K-12, community colleges, business, and employers. In addition, the Center for Business Advisory is informed by a number of advisory councils, in the areas of diversity, equity, and inclusion/human resources; education and workforce development; energy, water, and environmental sustainability; global initiatives; government and fiscal affairs; health care; innovation and technology; land use, construction, and housing; and transportation and goods movement.

America's Job Centers of California (AJCC) are important providers of workforce training and support services for displaced workers in the county. These include Alhambra AJCC, Baldwin Park AJCC, East LA/West San Gabriel Valley AJCC, East San Gabriel Valley AJCC, Rio Hondo AJCC, Rancho Dominguez AJCC, Slawson AJCC, South LA AJCC, Southeast LA AJCC, West Covina AJCC, Whittier AJCC, and Willowbrook AJCC. WorkSource Centers also provide important resources for job seekers and are a critical component of the workforce development system. The City of Los Angeles Economic and Workforce Development Department operates 16 WorkSource Centers and three portal offices throughout Los Angeles. In addition, 10 colleges in the Los Angeles region have WorkSource staff co-located on their campuses.

Regional Project Spotlight: **Noncredit Skill Building**

Since 2017, the Noncredit Strong Workforce Los Angeles regional project led by Mt. SAC and other regional faculty has provided short-term noncredit CE skill-building courses that meet the needs of high-demand career fields and prepare students for college.

These courses are designed for a unique population of adults, many of whom have gaps in basic skills, face significant barriers, and are not prepared for college-level CE coursework. As the only fully noncredit SWP project in the Los Angeles region, this project has prepared students to be ready for CE credit coursework by taking noncredit contextualized and pre-CE courses to decrease the skills gap. All 19 community colleges have actively participated, which has led to the building of a community of practice among faculty across the region.

One focus of this project has been to support colleges in their connections with local WorkSource Centers and other agencies. For example, several colleges are closely connected with America's Job Centers of California to support students in attending class and gaining employment. Ten of the region's colleges have WorkSource Center staff co-located on their campus and engage with them frequently through their adult education consortia.

Over the past three years, this faculty-driven project created over 100 new noncredit CE and workforce preparation certificates for the region. This shared work has resulted in a 160% increase in the number of students earning noncredit CE Chancellor's Office-Approved Certificates from 2015-16 to 2018-19 (from 409 to 1,063).

Source:

<https://files.constantcontact.com/355163a6301/916e5867-c53f-48bd-94cd-45a04cbe85c5.pdf>

The goals and wide-ranging activities of the WDBs in the region are another essential component of the deliberate and mindful work being conducted to align and expand career pathways. For example, the Los Angeles County WDB has identified as one of its goals creating more middle-skill credentials with the aim of developing trainings with the following partner colleges in the Los Angeles region: Citrus College, Mt. San Antonio College, Rio Hondo College, and Santa Monica College.

Additional Projects

Regional Directors for Employer Engagement and workforce development boards have identified projects and partnerships in which community colleges have recently or are currently involved in that are addressing workforce needs in Los Angeles County. Due to the size of the region, all projects could not be included in this section. Projects and partnerships in the Los Angeles region that are cross-sector or cross-agency include:

- ❑ *Hire LA's Youth* is a partnership with the Los Angeles City Council, the Los Angeles Workforce Delivery System, LACCD, the Los Angeles Area Chamber of Commerce, and local businesses and community organizations to provide job opportunities for Angelenos between the ages of 14 and 24.
- *WIN-LA* (Workforce Initiative Now Metro Los Angeles) focuses on creating career pathways in construction, professional services, transit operations, and maintenance into Metro's job opportunities.
- ❑ *The City of Los Angeles YouthSource Centers* is a dropout recovery and reengagement system that works to increase the educational and workforce outcomes of all young adults in Los Angeles. Partners include LAUSD and LACCD.
- ❑ *City of Los Angeles Sector Strategy Center* at Los Angeles Valley College provides WIOA-related services to local city residents and free training in manufacturing, biotech, and public transportation.
- ❑ *The Port of Long Beach Maritime Center of Excellence* at Long Beach City College is a regional asset supported by the global trade, and advanced transportation and logistics CCCC sectors as an example of short-term training that can be offered in both sectors. The center offers a variety of programs for middle-skill supply chain and logistics occupations.
- *Metro's Transportation Career Academy Program (TCAP)* began as a "school within a school" in cooperation with the Los Angeles Unified School District and the Norwalk/La Mirada Unified School District. For the past 23 years, the program has provided paid summer internship opportunities to junior and senior high school students and offers students an opportunity to learn about careers in transportation and how to apply

classroom theories and concepts to “real-world” work situations at one of the nation’s largest public transportation agencies.

- ❑ A cross-sector collaboration among business and entrepreneurship, advanced transportation and logistics, and global trade, the Digital Badge program offered through the *Proven Ready initiative* offers students the opportunity to learn critical skills, explore career paths, and earn digital credentials to display on their LinkedIn profiles or other online portfolios.

Additional projects and collaborations by sector are shown in Exhibit 10.

Exhibit 10. Examples of collaborations and projects in Los Angeles County

Project	Description
Advanced Manufacturing	
Advanced Manufacturing and Engineering Technology Linked Learning (AMETLL) Consortium	Received a California Career Pathways Trust (CCPT) grant to address the shortage of workers in manufacturing and engineering. South Bay WIB is the work-based learning intermediary for five local school districts and El Camino College.
Aerospace Engineering Apprenticeship Program	Under a state Workforce Accelerator Fund 3.0 grant and the Advanced Manufacturing Partnership for Southern California (AMP SoCal), project partners include West Los Angeles College, Training Funding Partners, and Tooling U-SME (Society of Manufacturing Engineers). Addresses new and emerging technologies, increased demand, and impending retirement of a skilled, aging workforce, which represent significant workforce challenges for the aerospace industry.
Biotech Bridge Training Academy	This six-week bio-manufacturing training program at Los Angeles Valley College is supported in part with funds provided by the City of Los Angeles.
Advanced Transportation & Logistics	
Transportation Career Academy Program (TCAP)	TCAP provides paid summer internship opportunities to junior and senior high school students who are transit dependent, reside in Los Angeles County, live in close proximity of a Metro Rail station, and whose schools are located near Metro’s rail expansion efforts.
Business & Entrepreneurship	
Nasdaq Entrepreneurial Center Internship Program	Thanks to the efforts of the business and entrepreneurship sector, students from Pasadena City College and Glendale Community College have completed the Nasdaq Entrepreneurial Center paid internship program where they worked directly with founders of startup companies.
Energy, Construction & Utilities	
Construction and Utilities Pathways Program (CUPP)	Through the South Bay WIB, the goal of CUPP is to supply a pipeline of qualified candidates by providing support services and access to training and employment in the construction industry.
Construction Pre-Apprenticeship Training	After the City of Long Beach entered into Project Labor Agreements for nearly \$500 million in new public projects, contractors communicated the need for additional workers with specific skill sets. Working with the LA/OC Building Trades Council and Long Beach City College, the Pacific Gateway Workforce Innovation Network developed a program that includes a six-week pre-apprenticeship

Project	Description
	training. Those completing the program receive three certificates: Building Trades Multi-Craft Curriculum (MC3), 10-hour OSHA Certification, and CPR/First Aid Training Certification.
Global Trade	
The California International Trade Center (CITC)	Hosted by Long Beach City College, the center leverages digital services and tools to empower small- and medium-sized business to grow sales in overseas market and engages companies locally to optimize their e-commerce strategies domestically and globally, which is particularly pertinent given the accelerated shift to e-commerce for businesses during the pandemic.
Global Virtual Internship Program	The California International Trade Center works with colleges through its Global Virtual Internship Program where students along with their digital marketing mentor work with real life clients in areas of global website optimization, social media, and adversity strategy. Smaller businesses do not have the bandwidth to implement a global e-commerce strategy nor do they have the resources to manage interns. Through this virtual internship program students help meet this business need and put into practice what they are learning in the classroom.
Health	
Care Coordination Career Pathway	Funded by the State SlingShot initiative to meet the growing demand of regional employers for care coordination/managed care in the health care industry. The project included six LA region WDBs, the Ventura WDB, and the Los Angeles and South Central Coast Regional Directors for Employer Engagement. The project developed three levels of care coordination curriculum for use by ROPs, colleges, and incumbent worker training programs.
Pharmacy Technician Training Collaboration	A partnership with the Los Angeles County WDB, South Los Angeles AJCC, and Richard N. Slawson Occupational Center.
ICT/Digital Media	
Verdugo Creative Technologies Consortium (VCTC)	The VCTC develops career pathways in digital manufacturing and digital media for local high school and community college students. VCTC Information sector partners are Warner Bros Entertainment Inc., Nickelodeon, Cartoon Network Studios, The Motion Picture Editors Guild, and The Art Director's Guild.
Retail, Hospitality & Tourism	
Los Angeles Hospitality Training Academy	A partnership with Los Angeles County WDB, UNITE LA, and Los Angeles Unified School District's Division of Adult and Career Education (DACE) to provide skills and customer service training, vocational ESL classes, skills upgrades, vocational classes, and "bridge training" to move participants into entry-level jobs and then a career.

Summary of Regional Strong Workforce Projects, 2020-21

In past years, strategies to achieve SWP goals have involved faculty professional development, enhanced industry engagement, regional alignment of curriculum between K-12 schools and community colleges, modifying curriculum to incorporate industry standards, and upgrading equipment, supplies, and technological resources.

Alignment among K-12 stakeholders, the community colleges, and industry and employers remains a focal point for SWP projects in the region. Additionally, current projects are addressing job placement, program development targeted at in-demand skill sets, and developing noncredit and short-term programs.

For the 2020-21 funding year, nine regional SWP projects were funded in Los Angeles for a total of \$12,518,307. Exhibits 11 and 12 provide a breakdown of the funding and brief descriptions of funded projects.

Exhibit 11. Percentage allocation of SWP funds, 2020-21 academic year

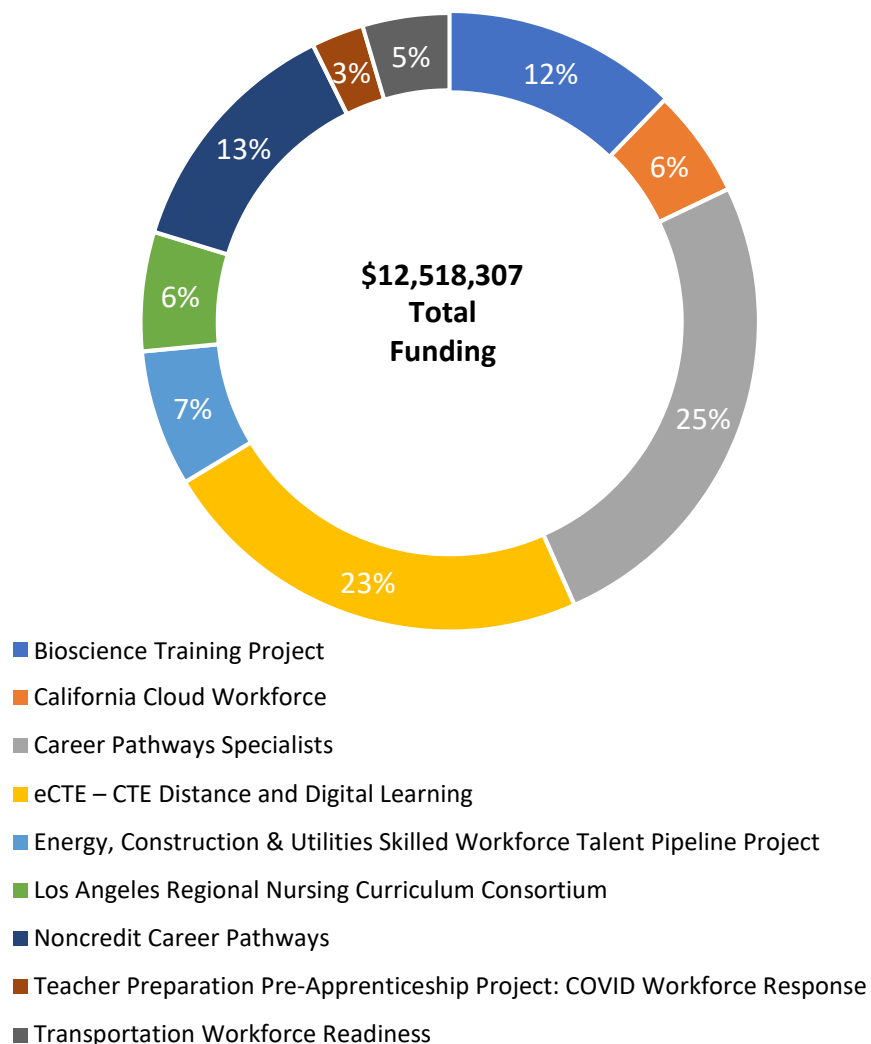


Exhibit 12. Summary of Los Angeles regional SWP projects, 2020-21 academic year²⁸

Project	Description	2020-21 Investment
Bioscience Training Project	This project aims to increase the availability of trained biological technicians, chemical technicians, and process technicians through programs offered by 16 community colleges in Los Angeles County to meet workforce demand in bioscience industries. This funding will allow colleges to strengthen bioscience skill sets through curriculum, professional development, and marketing.	\$1,531,179
California Cloud Workforce	The latest phase of this project is focused on addressing industry certification and employment preparedness in cloud computing. The project team will implement a guidebook for team internships. Local companies needing cloud solutions will be served and students will be engaged in a structured way to present a prototyped solution. This team internship model will require the recruitment and coordination of 30 employers, yielding 600 internships per year.	\$710,000
Career Pathways Specialists	The Career Pathways Partnership funds one Career Pathways Specialist at each of the 19 community colleges in Los Angeles County to facilitate the development of career pathways among high school, ROP, adult education, and community college programs. The Career Pathways Specialists provide the knowledge and skills to develop alignment using dual enrollment course offerings, CE courses, and articulation agreements.	\$3,189,510
eCTE – CTE Distance and Digital Learning	The overall goal of this project is to increase colleges' capacity to deliver more, high-quality CTE eLearning (including state-of-the-art digital tools) in three industry sectors: advanced manufacturing; advanced transportation and logistics, and health. These sectors are in-demand, have been and will remain essential for responding to the COVID-19 crisis, will be critical for economic recovery, and are rapidly transforming due to new and emerging technologies. These sectors also have been chosen because community college programs in these sectors all have lab components that are difficult to teach via eLearning.	\$2,875,000
Energy, Construction & Utilities Skilled Workforce Talent Pipeline Project	By aligning curriculum and outcomes with industry-valued skills, competencies, standards, and credentials, this project's goal is to place program completers in well-paying, high-demand careers. Objectives include increasing energy, construction, and utilities sector enrollment by 10%, increasing instructional sections, convening project partner meetings and regional industry advisories, offering faculty professional development, placing student interns (WBL) and jobs to careers, and supporting faculty externships.	\$894,172
Los Angeles Regional Nursing Curriculum Consortium (RNCC) –	This project will develop a common, regional nursing curriculum that is integrated into a fully articulated ADN-BSN concurrent enrollment pathway, decreases units, and eliminates redundant content.	\$780,000

²⁸ Summaries of LA SWP Projects for 2016-17, 2017-18, 2018-19, and 2019-20 are available at www.laocrc.org.

Project	Description	2020-21 Investment
Regional Nursing Curriculum	Additionally, the participating ADN programs will attain national accreditation. Once implemented, the curriculum will provide a streamlined, cost-effective pathway from ADN to BSN serving diverse students and meeting the needs of the regional health care industry.	
Noncredit Career Pathways	Four goals underpin this project's framework: 1. Develop noncredit short-term training and career pathways that can be completed in less than one year in business and entrepreneurship; health; ICT/digital media; and energy, construction, and utilities. 2. Establish and increase capacity for colleges to offer noncredit distance education as an ongoing modality that will ensure CE access to students, particularly underrepresented populations. 3. Develop short-term competency-based education (CBE) pathways in the specified industry sectors as a viable instructional delivery method for in-person and distance learning that will eventually follow as an option in noncredit. Regional faculty will collaborate to develop noncredit programs that rely on module-based instruction, faculty assessment, and other CBE components. 4. Expand noncredit data collection for the 19 colleges to more fully report CE successes and meet the needs of noncredit students.	\$1,625,000
Teacher Preparation Pre-Apprenticeship Project: COVID Workforce Response	This project will directly impact COVID-related workforce gaps in public education in the Los Angeles area by offering and streamlining pre-apprenticeship opportunities (i.e., contextualized/extended learning/work-based learning) for students in education, early childhood education, and CE-related fields. There are four essential pieces to this project: providing pre-apprenticeship work-based learning, offering faculty and student professional development, creating shared standards in teacher preparation, and addressing inequalities in the education system.	\$343,746
Transportation Workforce Readiness	This project is designed to benefit students, colleges, and employers. Students are trained in career readiness competencies and receive job placement when completing transportation-related CE programs and the short-term TWR noncredit program. Colleges receive ready-to-use, modularized curriculum that requires few resources and gain access to employers within Los Angeles County's transportation industry network. Employers can expedite hiring through a pre-screened pool of diverse candidates deemed "work-ready" who meet minimum entry-requirements.	\$569,100
TOTAL		\$12,518,307

2020 Regional Economic Overview and COVID-19 Impacts

As of September 2020, nearly 243,000 cases of COVID-19 and more than 5,800 deaths had been reported in Los Angeles County.²⁹ The gravity of the pandemic has been far reaching, disproportionately affecting workers of color, young workers under the age of 24, workers with lower educational attainment, and workers who earn less than \$35,000 per year.³⁰ Workers in lower-income jobs often do not have the option to complete their duties without interacting with the public and have been less likely to be able to work remotely during the pandemic. Compounding the situation, layoffs have been more prevalent among low-skill, low-wage jobs that are not expected to rebound as quickly as other jobs. Industry sectors with a higher proportion of these jobs are expected to take longer to recover, including store-based retail, tourism, and restaurants.

Of particular relevance to the community colleges are statistics concerning young adults and middle-skill workers. California unemployment claims are highest among 16-to-19-year-olds, 39%, and 20-to-24-year-olds, 44.8%, as a percentage share of the cohort, according to the LAEDC. The share of unemployment is highest among individuals with only a high school education, 56.6%. Nearly a third, 27%, of Los Angeles workers with an associate degree/some college were unemployed in September 2020.

Workers with higher levels of educational attainment were more insulated from layoffs and have been more likely to telework during the pandemic. By industry, 66% of workers in educational services, 62% in finance and insurance, and 60% in professional and technical services teleworked, compared to just 7% in accommodation and food services, and 6% in

Southern California Impacts

Heavy job losses have been projected and documented in retail and food services occupations. The brick-and-mortar retail industry was already struggling due to the rise of online shopping, and these challenges were exacerbated during the pandemic. In addition, cultural and tourism centers in Los Angeles were heavily impacted by closures and reduced travel in 2020.

Nearly 1 million workers were employed in retail in 2019 in Southern California. Restaurants, bars, and other dining locations accounted for another 1 million jobs in Southern California.

Other occupational groups estimated to suffer heavy losses are:

- Community and Social Service
- Arts/Design/Entertainment/Sports/Media
- Personal Care and Service

Personal care and service is estimated to lose 71.5% of employment from 2019 to 2020, which is the highest of any occupational group. Hairdressers, travel agents, childcare workers, and fitness trainers fall into this category.

Source: "Employment Impact of COVID-19: Southern California," LAEDC, April 21, 2020, https://ewddlacity.com/images/reports/ap21/APpy21_03EconForecast.pdf.

²⁹ "Los Angeles County Emergency Operations Center Covid-19 Update," County of Los Angeles, September 1, 2020, accessed September 14, 2020, https://content.govdelivery.com/attachments/CALACOUNTY/2020/09/01/file_attachments/1532034/9.1.20_COVID-19_Update.pdf.

³⁰ "Which Workers Have Been Most Affected by the COVID-19 Pandemic?" On the Economy Blog, Federal Reserve Bank of St. Louis, July 30, 2020, accessed September 14, 2020, <https://www.stlouisfed.org/on-the-economy/2020/july/workers-affected-covid19-pandemic>.

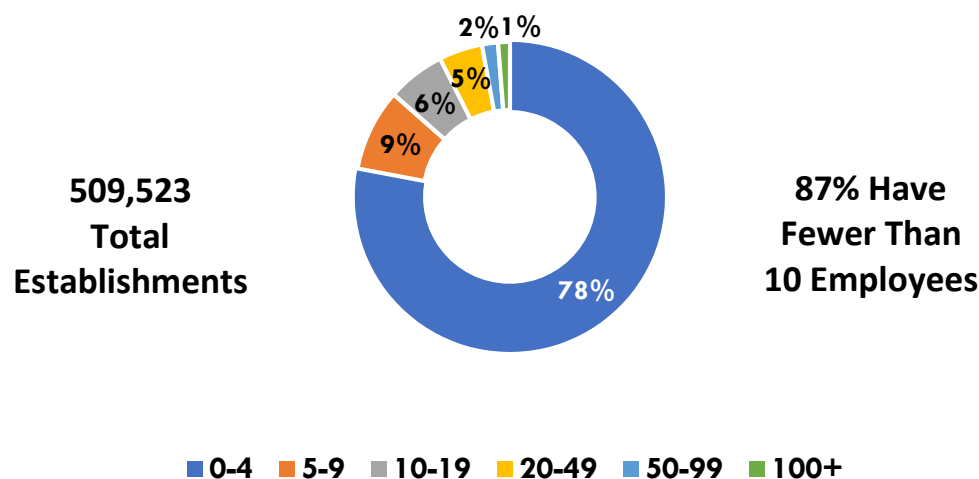
agriculture, according to responses to supplemental questions from the Current Population Survey aimed at measuring the effects of COVID-19 on the labor market.³¹

Remote work is changing not only the workplace as we know it, but the labor market, and some of those changes are likely to remain after the pandemic. One in six workers is projected to continue working from home or co-working at least two days a week, and one-fifth of the workforce could be entirely remote after the pandemic.³² Higher-skill jobs in business and finance, engineering, the sciences, and legal services are much less prone to disruption and have reported fewer job losses than other industries in the region. According to the LAEDC, management occupations, which typically span many different sectors, account for nearly 600,000 jobs in Southern California and have been relatively sheltered.

Local Unemployment and Job Loss

WARN notices provide an idea of how large businesses and corporations are faring during the pandemic. Numbers from the California Employment Development Department show that from March 2020 through September 2020, 1,416 businesses in Los Angeles County issued WARN notices that they are closing, affecting 169,000 employees.³³ Small businesses, which are not part of the WARN tracking system, have been particularly hard hit and many have permanently closed. Small businesses immediately faced liquidity issues during the COVID-19 shutdown, but federal government stimulus dollars benefited a substantial number of large businesses.³⁴ This is particularly concerning in Los Angeles County, where 93% of businesses employ fewer than 20 workers and 87% have fewer than 10 employees (Exhibit 13).

Exhibit 13. Los Angeles County businesses by number of employees, 3rd quarter, 2019



³¹ "Supplemental data measuring the effects of the coronavirus (COVID-19) pandemic on the labor market," Labor Force Statistics from the Current Population Survey, Bureau of Labor Statistics, October 2, 2020, accessed November 5, 2020, <https://www.bls.gov/cps/effects-of-the-coronavirus-covid-19-pandemic.htm>.

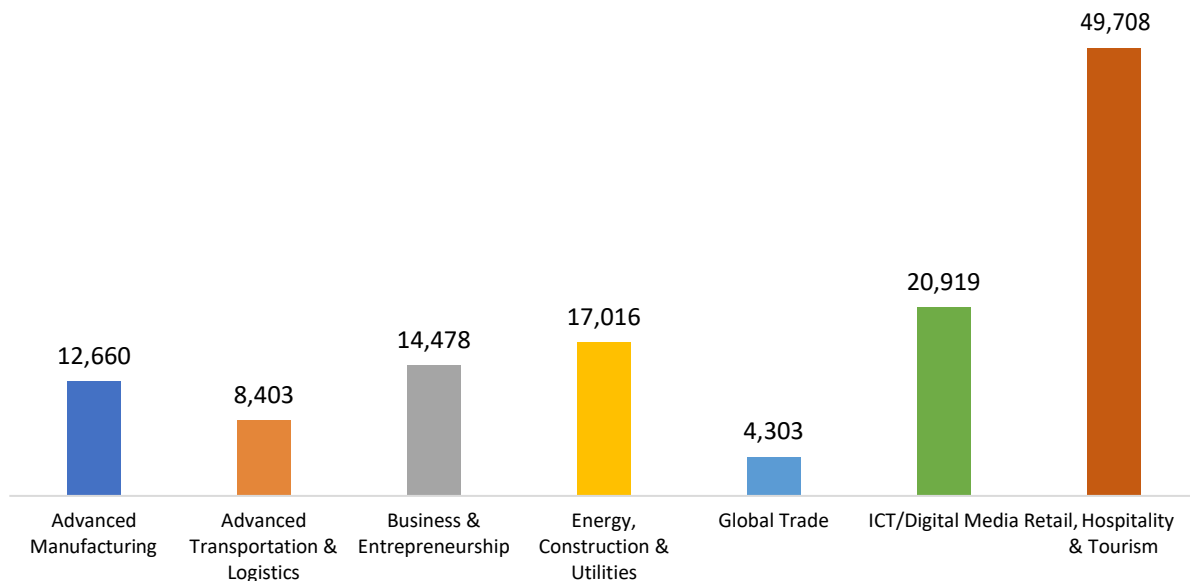
³² Derek Thompson, "The Workforce Is about to Change Dramatically," The Atlantic, August 6, 2020, accessed September 14, 2020, <https://www.theatlantic.com/ideas/archive/2020/08/just-small-shift-remote-work-could-change-everything/614980/>.

³³ "Worker Adjustment and Retraining Notification (WARN) Information for Employers," California Employment Development Department, 2020, accessed November 5, 2020, https://edd.ca.gov/jobs_and_training/Layoff_Services_WARN.htm.

³⁴ Jessica Silver-Greenberg, David Enrich, Jesse Drucker and Stacy Cowley, "Large, Troubled Companies Got Bailout Money in Small-Business Loan Program," April 26, 2020, accessed September 30, 2020, <https://www.nytimes.com/2020/04/26/business/coronavirus-small-business-loans-large-companies.html>.

Exhibit 14 shows the number of businesses in Los Angeles County by CCCC sector. Due to an extremely high number of establishments, health care establishments, which totaled 240,784 in the county in 2019, were not included in the chart below as the number would distort how the data is displayed. Similarly, two sectors with a low number of establishments in 2019 were also not included: agriculture, water, and environmental technologies with 441 establishments; and life sciences/biotech with 2,867 establishments. With a total of nearly 50,000 establishments, the retail, hospitality, and tourism sector had the second largest number of business establishments in Los Angeles County after the health sector. The ICT/digital media sector had nearly 21,000 establishments, and energy, construction, and utilities had more than 17,000.

Exhibit 14. Number of business establishments by CCCC sector, Los Angeles County, 2019*



***Note:** Not shown are agriculture, water and environmental technologies (441 establishments), life sciences/biotech (2,867 establishments), and health care (240,874 establishments).

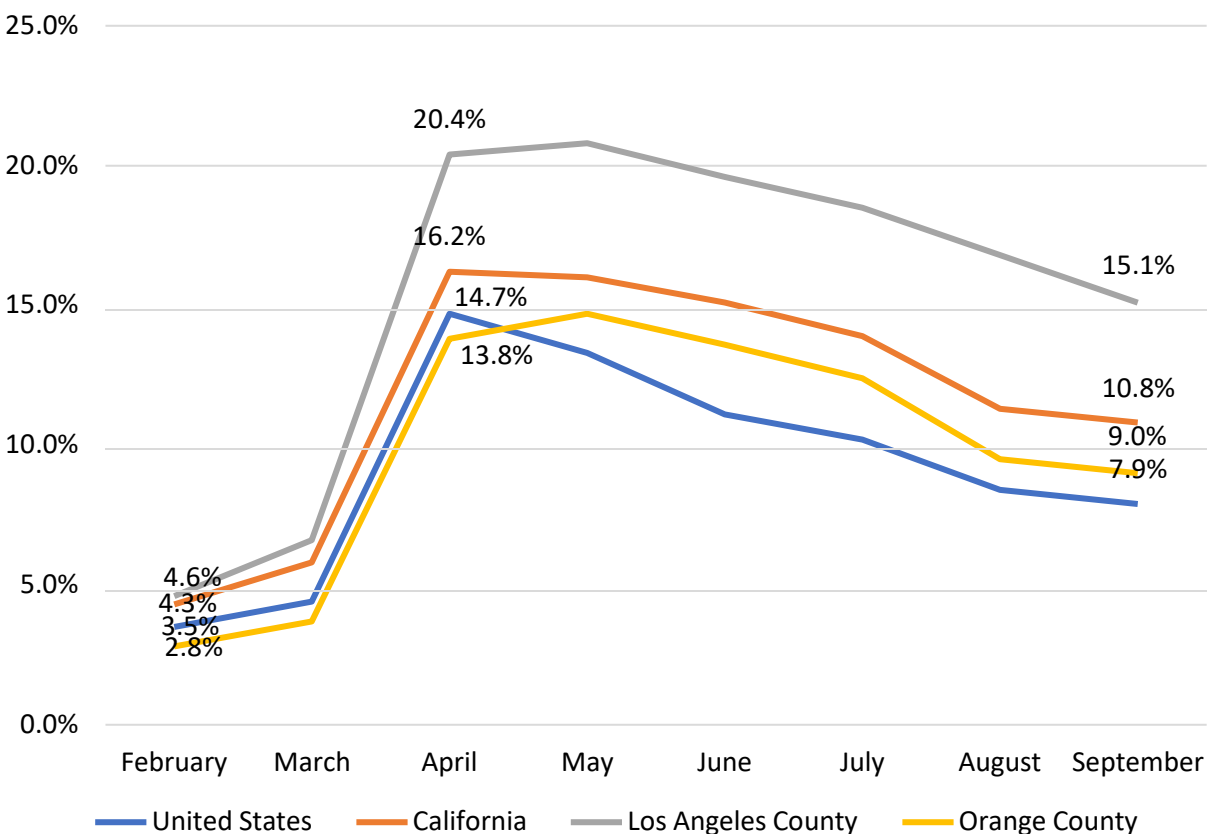
The 2020 pandemic spurred the increased digitization and automation of many industries and the adoption of new technologies and tools, as many people continue to work remotely and as workplaces develop new ways of conducting work with social distancing measures in place. There appear to be opportunities to reskill and upskill displaced workers, as many of the changes resulting from the pandemic are expected to endure beyond. Some economists have speculated that the hoped-for “V-shaped” recovery may not happen and warned in September 2020 that many job losses have yet to hit, and the rate that jobs are being added to the economy is slowing.³⁵ As of the end of August 2020, Los Angeles County’s unemployment rate was 16.6%, second only to Imperial County (22.9%) as having the highest unemployment rate in

³⁵ Ben Popken, “August jobs report may appear rosy, but most job cuts have yet to hit, economists warn,” NBC News, September 4, 2020, <https://www.nbcnews.com/business/economy/august-jobs-report-may-appear-rosy-most-job-cuts-have-n1239323>.

California, according to a presentation by Robert Eyler, an economist and Dean of the School of Extended and International Education at Sonoma State University.³⁶

By comparison, Orange County fared better in 2020 with the 22nd highest rate of unemployment in the state. At 15.1%, the unemployment rate in Los Angeles County was higher than the nation and the state in September 2020 (Exhibit 15). LAEDC economists have attributed the high unemployment rate to implications from the renewed shutdown and the composition of industries that make up Los Angeles County's economic base (including entertainment, tourism, retail, and restaurants). The LAEDC estimates that 46% of jobs in Los Angeles County are in high-risk industries. This includes arts, entertainment, and recreation; motion picture and sound recording; and retail. In September 2020, a study by Yelp found that Los Angeles led the nation's metro areas with the greatest number of business closures, with 7,500 permanent closures.³⁷ It is also worth noting that Los Angeles County's unemployment rate exceeds levels seen during the Great Recession and mirrors levels of the Great Depression.

Exhibit 15. Comparison of 2020 unemployment rates in Los Angeles County, Orange County, California, and the nation



Source: Bureau of Labor Statistics and California Economic Development Department

³⁶ Robert Eyler, "Ask an Economist (COVID-19) – September 21, 2020," Chabin Concepts, <https://www.chabinconcepts.com/video>.

³⁷ "Yelp: Local Economic Report," Yelp, September 2020, accessed September 30, 2020, <https://www.yelpeconomicaverage.com/business-closures-update-sep-2020>.

Hard-hit Industries

Los Angeles County's economy is fueled by a wide range of industries, including tourism; motion pictures; international trade driven by the Ports of Long Beach and Los Angeles; a growing creative and tech culture including Silicon Beach (located in the Westside region of the Los Angeles metropolitan area); aerospace and defense; and fashion. But the COVID-19 economic disruption hurt some industries in the county more than others. As of July 2020, there were roughly 4.1 million jobs in the county. As shown in Exhibit 16, before the COVID-19 pandemic, the largest industry sectors in Los Angeles County were: health care and social assistance; government; professional and business services; accommodation and food services; retail trade; and manufacturing.

Exhibit 16. Employment and projected occupational demand by industry, Los Angeles County

NAICS	Industry	2019 Jobs	2024 Jobs	2019-2024 Change	2019-2024 % Change
62	Health Care and Social Assistance	778,307	905,432	127,125	16%
90	Government	621,682	629,963	8,281	1%
72	Accommodation and Food Services	461,897	507,680	45,783	10%
44	Retail Trade	451,291	449,503	(1,788)	(0%)
54	Professional, Scientific, and Technical Services	374,111	395,506	21,395	6%
31	Manufacturing	351,910	310,305	(41,605)	(12%)
56	Administrative and Support and Waste Management and Remediation Services	325,139	332,695	7,556	2%
81	Other Services (except Public Administration)	281,153	279,849	(1,304)	(0%)
51	Information	229,370	232,950	3,580	2%
48	Transportation and Warehousing	228,585	256,766	28,181	12%
42	Wholesale Trade	227,363	215,360	(12,003)	(5%)
23	Construction	222,047	238,203	16,156	7%
61	Educational Services	176,831	193,982	17,151	10%
52	Finance and Insurance	155,639	153,380	(2,259)	(1%)
71	Arts, Entertainment, and Recreation	136,029	146,938	10,909	8%
53	Real Estate and Rental and Leasing	117,445	123,695	6,250	5%
55	Management of Companies and Enterprises	62,561	63,488	927	1%
22	Utilities	12,225	12,079	(146)	(1%)
11	Agriculture, Forestry, Fishing and Hunting	5,328	3,979	(1,349)	(25%)
21	Mining, Quarrying, and Oil and Gas Extraction	2,007	1,730	(277)	(14%)
TOTAL		5,221,133	5,453,483	232,350	4%

Source: Emsi 2020.3; QCEW, non-QCEW, and self-employed

Historically, the retail, hospitality, and tourism CCCC sector has accounted for a substantial number of jobs in the county due to the preponderance of tourism activities in the Los Angeles/Orange County area and given the region's role in international trade. Sectors that involve a high degree of human contact, such as those offered by the retail, hospitality, and tourism sector, have been hardest hit during the pandemic, and it may take longer for the general public to become comfortable consuming those services again even after a vaccine is

available.³⁸ However, although the leisure and hospitality industry sector may take longer to recover, UCLA economists expect the state to rebound faster than the nation in business, scientific and technical services, and in the information sector due in part to demand for new technologies and new ways of working.³⁹

In the years immediately preceding the pandemic, the leisure and hospitality industry sector in Los Angeles County underwent tremendous growth, but these gains were erased during the pandemic and could take some time to return. An article in *The Atlantic* notes that spending on travel, food, and entertainment surged from 2000 to 2019 nationally, and employment in leisure and hospitality increased three times faster than the rest of the labor force.⁴⁰ In 2020, layoffs in the leisure and hospitality industry sector accounted for about half of jobs lost in California, and economists do not expect restaurant employment to return to levels seen before the pandemic.⁴¹

One way to measure job loss is by examining decline in payroll employment. According to the LAEDC, the three industries with the greatest decline in payroll employment in Los Angeles County during the pandemic were:

- ❑ Leisure and hospitality, -171,600 jobs
- ❑ Trade, transportation, and utilities, -65,400 jobs
- ❑ Professional and business services, -53,900 jobs

Occupations in food services, information, professional and business services, and health care and social assistance contracted substantially during the pandemic. Analysis of industry subsectors that lost the greatest number of jobs shows that food services and drinking places shed 110,800 jobs between February and June 2020 (Exhibit 17). Information lost 63,000 jobs, and professional and business services declined by 61,800 jobs. Industries with the smallest job loss included mining and logging, financial activities, construction, and wholesale trade.

Los Angeles County added 183,000 jobs between May and June 2020, but as of July 2020, there were 863,000 unemployed people in Los Angeles County, according to the California Employment Development Department.⁴² Industries that added the most jobs were leisure and hospitality; trade, transportation, and utilities; and manufacturing. Economists have cautioned that the longer the economic crisis lasts, the more the effects will ripple out, affecting other industries as customer bases dry up, households face liquidity shortages, and unemployment becomes chronic and longer term.

³⁸ "Technology and the Post COVID Economy," UCLA Anderson Forecast, UCLA Anderson School of Management, September 30, 2020, <https://www.anderson.ucla.edu/centers/ucla-anderson-forecast/september-2020-economic-outlook>.

³⁹ Margot Roosevelt, "California's economic recovery will be like a slow 'Nike swoosh,'" *The Los Angeles Times*, June 24, 2020, accessed September 14, 2020, <https://www.latimes.com/business/story/2020-06-24/la-fi-california-economic-forecast-coronavirus-2020>.

⁴⁰ Derek Thompson, "The Workforce Is About to Change Dramatically," *The Atlantic*, August 6, 2020, accessed September 14, 2020, <https://www.theatlantic.com/ideas/archive/2020/08/just-small-shift-remote-work-could-change-everything/614980/>.

⁴¹ Margot Roosevelt, "California's economic recovery will be like a slow 'Nike swoosh,'" *The Los Angeles Times*, June 24, 2020, accessed September 14, 2020, <https://www.latimes.com/business/story/2020-06-24/la-fi-california-economic-forecast-coronavirus-2020>.

⁴² "Monthly Data Release," California Employment Development Department, 2020, accessed November 10, 2020, <https://www.labormarketinfo.edd.ca.gov/data/monthly-data-release.html>.

Since job number reporting tends to lag, job postings by employers have been used as an indicator of how workforce demand is weathering the pandemic. Employers in Los Angeles County with the most job postings in August 2020 were Amazon, Anthem Blue Cross, Northrop Grumman, and Allied Universal, according to an LA/OC COE analysis of job posting data provided by Labor Insights from Burning Glass.⁴³ In-demand occupations in Los Angeles County based on job postings were registered nurses; sales representatives; laborers and freight, stock, and material movers; and retail salespersons. (Job postings for retail salespersons bounced back immediately after the reopening, but the recovery of store-based retailers has slowed and substantially trails non-store retailers, such as Amazon.⁴⁴)

Exhibit 17. Numerical change in jobs, Los Angeles County, February-June 2020



Source: August 17 and 20, 2020 presentation by LAEDC Director Shannon Sedgwick at the LA Regional Stakeholder Convenings

⁴³ "Labor Insight Real-Time Labor Market Information Tool," Burning Glass Technologies, 2020, accessed August 30, 2020, <https://www.burning-glass.com/products/labor-insight/>.

⁴⁴ "Technology and the Post COVID Economy," UCLA Anderson Forecast, UCLA Anderson School of Management, September 30, 2020, <https://www.anderson.ucla.edu/centers/ucla-anderson-forecast/september-2020-economic-outlook>.

Data Analysis Informing the 2021-2024 Los Angeles Regional Plan

This section provides data analysis conducted by the Los Angeles/Orange County Center of Excellence (LA/OC COE). Unless otherwise cited, the LA/OC COE analyzed data from their customary sources, including but not limited to Data Mart, LaunchBoard, Emsi, Burning Glass, and EDD.

Priority and Emerging Sectors Analysis

CCCCO selected 12 sectors as areas of focus for SWP statewide. Through their regional planning process, each regional consortium is required to select priority sectors that contribute to the economic vitality of its macroregion. CCCCCO sectors are organized by Standard Occupational Classification (SOC) System titles and codes, i.e., occupations that are primarily associated with a given sector. Sector employment size is affected by the number of occupations grouped within that sector. For example, the business and entrepreneurship sector encompasses the largest number of occupations, a total of 46, while only three occupations are grouped within global trade (Exhibit 18).

The business and entrepreneurship sector leads the other sectors in terms of employment size. There are 15 programs identified by Taxonomy of Programs (TOP) codes that prepare students for the occupations grouped within business and entrepreneurship, and all 19 Los Angeles community colleges offer related programs. Metrics from the California Community College Chancellor's Cal-PASS Plus LaunchBoard are determined using TOP codes. As a result, if a sector has fewer related TOP codes, its metrics may be lower than another sector that has more TOP codes associated with it.

It should be noted that while employment numbers and LaunchBoard outcomes appear low for the global trade sector in this section and the following section of this report, this is due to the low number of TOP and SOC codes assigned to the sector; this sector has significant crossover with the business and entrepreneurship sector and is known to be contributing to the economic vitality of the region. Ten community colleges in the region offer programs with TOP codes related to global trade. Please note, several other sectors have crossover with business and entrepreneurship including advanced transportation and logistics, and retail, hospitality, and tourism.

Other sectors with a large number of occupations include health, advanced manufacturing, and ICT/digital media. These sectors also have the greatest number of related TOP codes in the region. Sectors with a small number of occupations include life sciences/biotech (seven occupations) and education and human development (also seven occupations). Appendix C shows TOP codes associated with each priority and emerging sector selected in the 2021-2024 planning process.

Exhibit 18. Number of occupations and program inventory by CCCCCO sector, Los Angeles County

	CCCCO Sector	Number of Middle-skill Occupations	Number of Related TOP Codes	Number of Colleges Offering Programs
1	Advanced Manufacturing	31	16	17
2	Advanced Transportation & Logistics	26	13	15
3	Agriculture, Water & Environmental Technologies	15	16	9
4	Business & Entrepreneurship	46	15	19
5	Education & Human Development	7	11	19
6	Energy, Construction & Utilities	27	16	17
7	Global Trade	3	1	10
8	Health	32	33	19
9	ICT/Digital Media	30	33	19
10	Life Sciences/ Biotech	7	4	10
11	Public Safety	13	9	19
12	Retail, Hospitality & Tourism	18	12	17

Employment and Projected Demand by CCCCCO Sector

In 2020, COVID-19 caused an abrupt disruption to all industry sectors, unprecedented job loss, an exponential increase in unemployment insurance claims, and uncertainty regarding when the economy will rebound and what the new normal will look like.

At the time of this writing, it is not possible to quantify the full impact of COVID-19 on projections of occupational employment. While the data presented in this section does not adequately reflect the impact of COVID-19, it can be used as a point of reference for decision making. The algorithms used to calculate projected job growth do not take into account the economic disruption from the pandemic; instead, the projections shown in this section are based on long-term, historical trends. As such, they must be taken with a grain of salt since some sectors—in particular retail, hospitality, and tourism—are not expected to rebound as quickly as shown in the following data analysis.⁴⁵

It is also important to keep in mind that most economists are predicting that the economy is entering a recession that will last until at least 2022 or 2023. For planning purposes, it is paramount to consider the sectors that are more likely to offer job openings for students entering the job market from 2021-2024, as well as the sectors that have had strong historical, long-term growth.

⁴⁵ The economic implications and slow rebound expected for retail, hospitality, and tourism were discussed in detail during the “Technology and the Post-COVID Economy” presented by UCLA’s Anderson economists, September 30, 2020. (<https://www.anderson.ucla.edu/centers/ucla-anderson-forecast/september-2020-economic-outlook>)

The analysis in this section addresses 2019 employment and forecasted employer demand for CCCCCO sectors and is based on occupational groupings using the SOC System. Although not the largest sector by employment, the health sector has the greatest number of annual openings, 94,250, and the strongest projected growth, 16% through 2024 (Exhibits 19 and 20). The business and entrepreneurship sector has substantial annual openings, a total of 72,739.

Data shown for retail, hospitality, and tourism should be regarded with caution as these projections do not incorporate 2020 declines in employment and permanent job loss in this sector. ICT/digital media and energy, construction, and utilities also lead other sectors in job numbers and annual openings. Even without COVID-19 impacts factored in, contraction is projected for advanced manufacturing (a 12% decline) and agriculture, water, and environmental technologies (a 25% decline). Employment growth for the life sciences/biotech sector will be stagnant, but the sector is still expected to offer 3,325 annual openings.

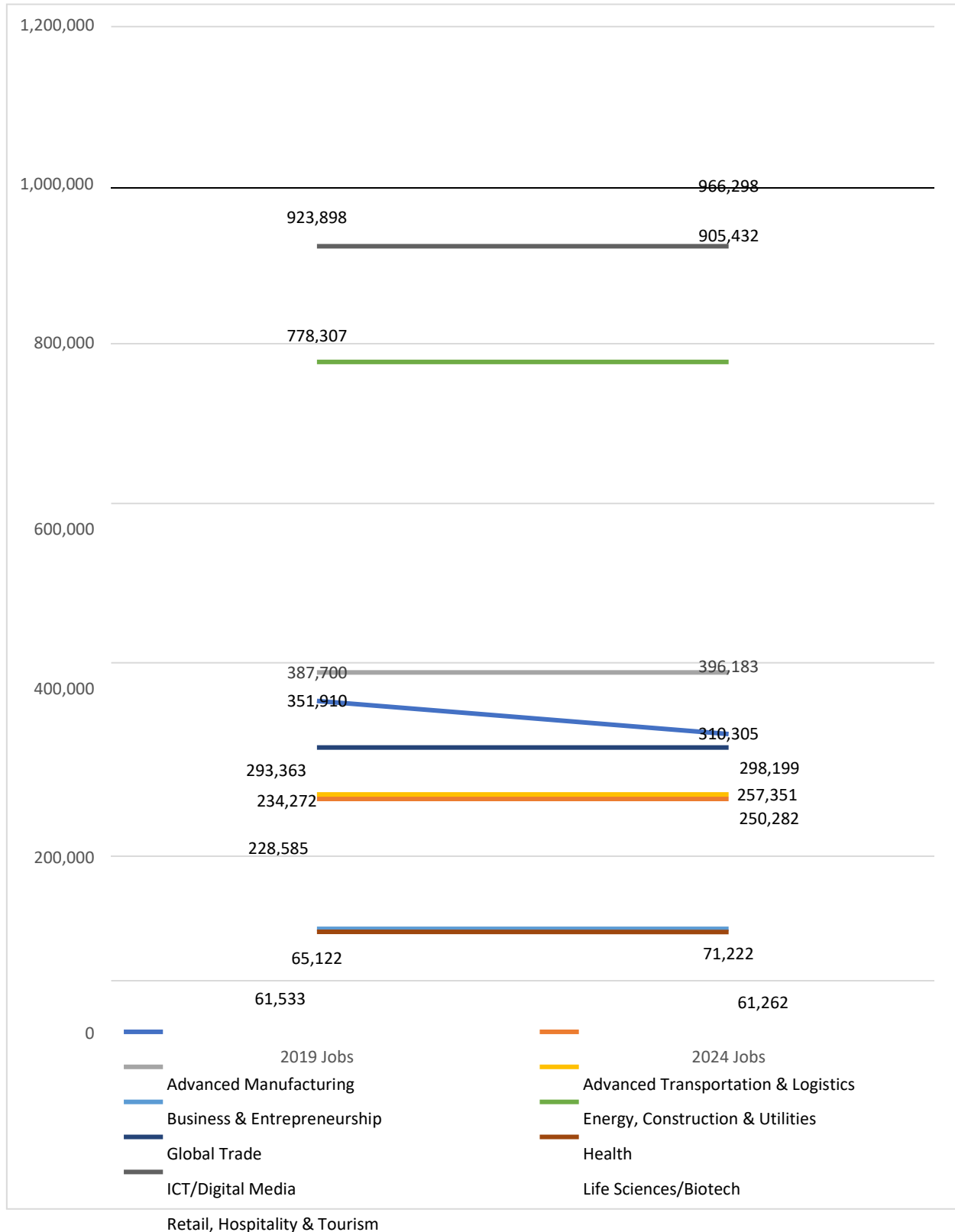
Data shown in Exhibit 19 was used in the selection of the nine priority and emerging sectors during the 2021-2024 planning process. Advanced manufacturing and life sciences/biotech were added to the six priority sectors selected in 2017, and retail, hospitality, and tourism was added as an emerging sector.⁴⁶

Exhibit 19. CCCCCO sector employment and projected demand, Los Angeles County

	CCCCCO Sector	2019 Jobs	2024 Jobs	2019- 2024 Change	2019- 2024 % Change	Annual Openings
1	Advanced Manufacturing	351,910	310,305	(41,605)	(12%)	14,692
2	Advanced Transportation & Logistics	228,585	257,351	28,766	12%	10,981
3	Agriculture, Water & Environmental Technologies	5,328	3,979	(1,349)	(25%)	4,850
4	Business & Entrepreneurship	387,700	396,183	8,483	2%	72,739
5	Education & Human Development	N/A	N/A	N/A	N/A	18,253
6	Energy, Construction & Utilities	234,272	250,282	16,010	7%	15,278
7	Global Trade	65,122	71,222	6,100	9%	11,438
8	Health	778,307	905,432	127,125	16%	94,250
9	ICT/Digital Media	293,363	298,199	4,836	2%	16,572
10	Life Sciences/Biotech	61,533	61,262	(271)	0%	3,325
11	Public Safety	N/A	N/A	N/A	N/A	3,702
12	Retail, Hospitality & Tourism	923,898	966,298	42,400	5%	40,520

⁴⁶ The retail, hospitality, and tourism (RHT) sector was included as *emerging* rather than *priority* due to its large presence in the region, coupled with drastic job loss during the pandemic and estimated gradual recovery (see footnote #45).

Exhibit 20. Employment in 2019 and projected demand for the CCCCCO priority and emerging sectors, Los Angeles County



Priority and Emerging Sector Wages

In addition to employment and projected occupational demand, a wage analysis also was conducted for each of the nine CCCCCO priority sectors selected during the 2021-2024 planning process. Appendix D shows the entry-level wages for the top 10 occupations with the most annual openings for each of the nine CCCCCO priority and emerging sectors. At the time of this writing, the living wage for one adult in LA County was \$15.04/hour. Exhibit 21 highlights each occupation by sector that has the most annual openings and that pays at least a living wage. More than 9,000 annual openings are projected for secretaries and administrative assistants (except legal, medical, and executive), and nearly 6,900 annual openings are projected for bookkeeping, accounting, and auditing clerks. Two other occupations to note with high demand are registered nurses with nearly 6,500 annual openings and first-line supervisors of office and administrative support workers, 5,223 annual openings.

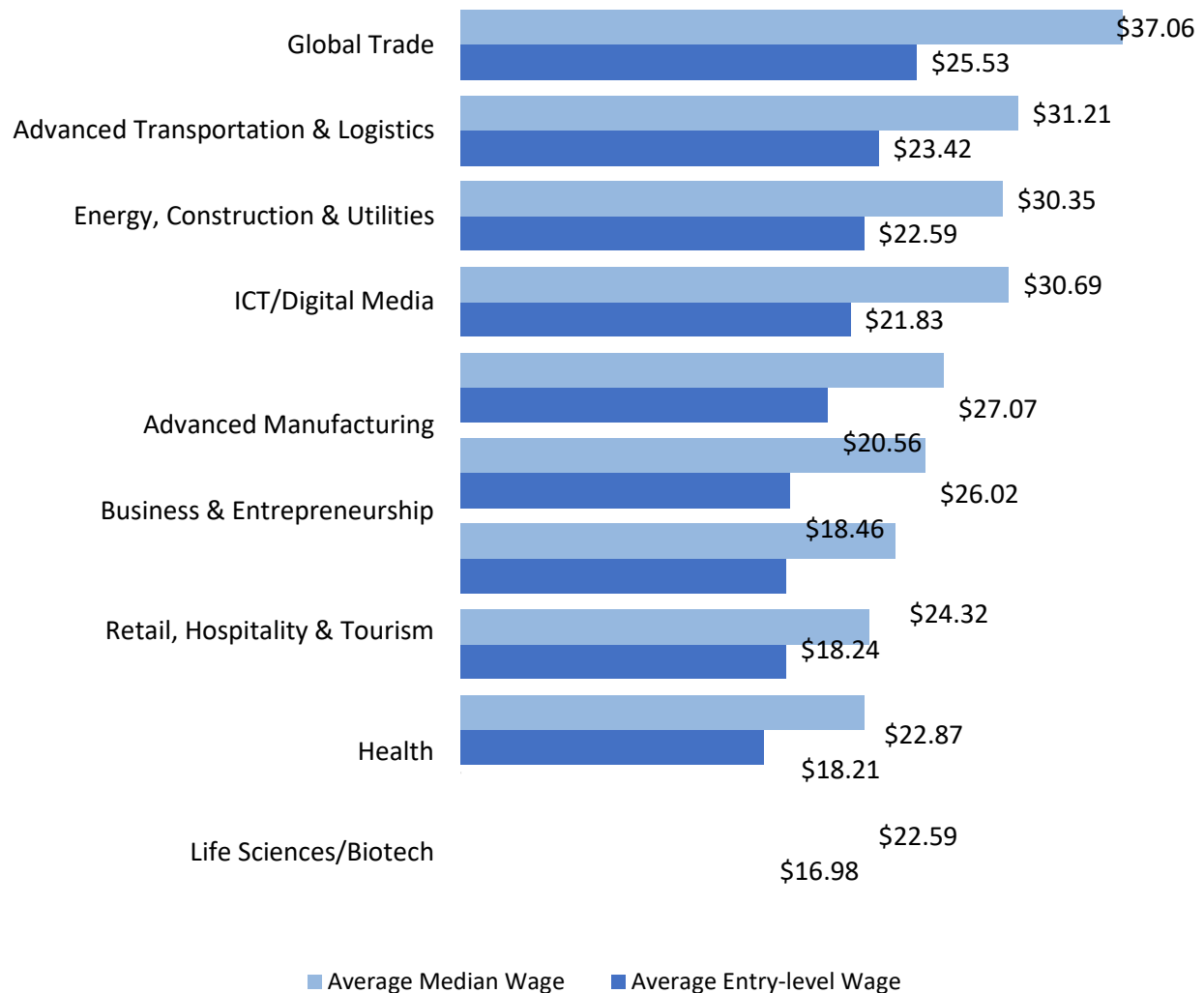
Exhibit 21. Entry-level wages for occupations with the most annual openings in each CCCCCO priority and emerging sector

CCCCCO Sector	Occupation	Annual Openings	Entry-Level Hourly Wage
Advanced Manufacturing	First-Line Supervisors of Production and Operating Workers	1,431	\$20.53
Advanced Transportation & Logistics	Production, Planning, and Expediting Clerks	2,084	\$17.41
Business &	Bookkeeping, Accounting, and	6,870	\$17.14
Energy, Construction & Utilities	Electricians	2,023	\$22.17
Global Trade	Business Operations Specialists, All	5,057	\$25.23
Health	Registered Nurses	6,470	\$38.82
ICT/Digital Media	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	9,030	\$15.91
Life Sciences/Biotech	Clinical Laboratory Technologists and Technicians	742	\$17.79
Retail, Hospitality &	First-Line Supervisors of Office and	5,223	\$22.25

Exhibit 22 shows a comparison of average entry-level and median hourly wages for middle-skill occupations comprising each of the nine CCCCCO priority sectors. Global trade, advanced transportation, and energy, construction, and utilities have the highest average entry-level wages. These three sectors also offer the highest average median wages. Sectors with the

lowest average entry-level wages are retail, hospitality, and tourism; health; and life sciences/biotech. Within the health sector, there is wide variation in wages among occupations which affects the overall average entry-level wage and average median wage for the sector. For example, home health aides earn an entry-level wage of \$11.53/hour and a median wage of \$13.61/hour, which is below the county's living wage. By comparison, registered nurses earn an entry-level wage of \$38.82/hour and a median wage of \$48.13/hour.

Exhibit 22. Average entry-level and median hourly wages for the nine CCCC priority and emerging sectors



Supply-and-demand Analysis

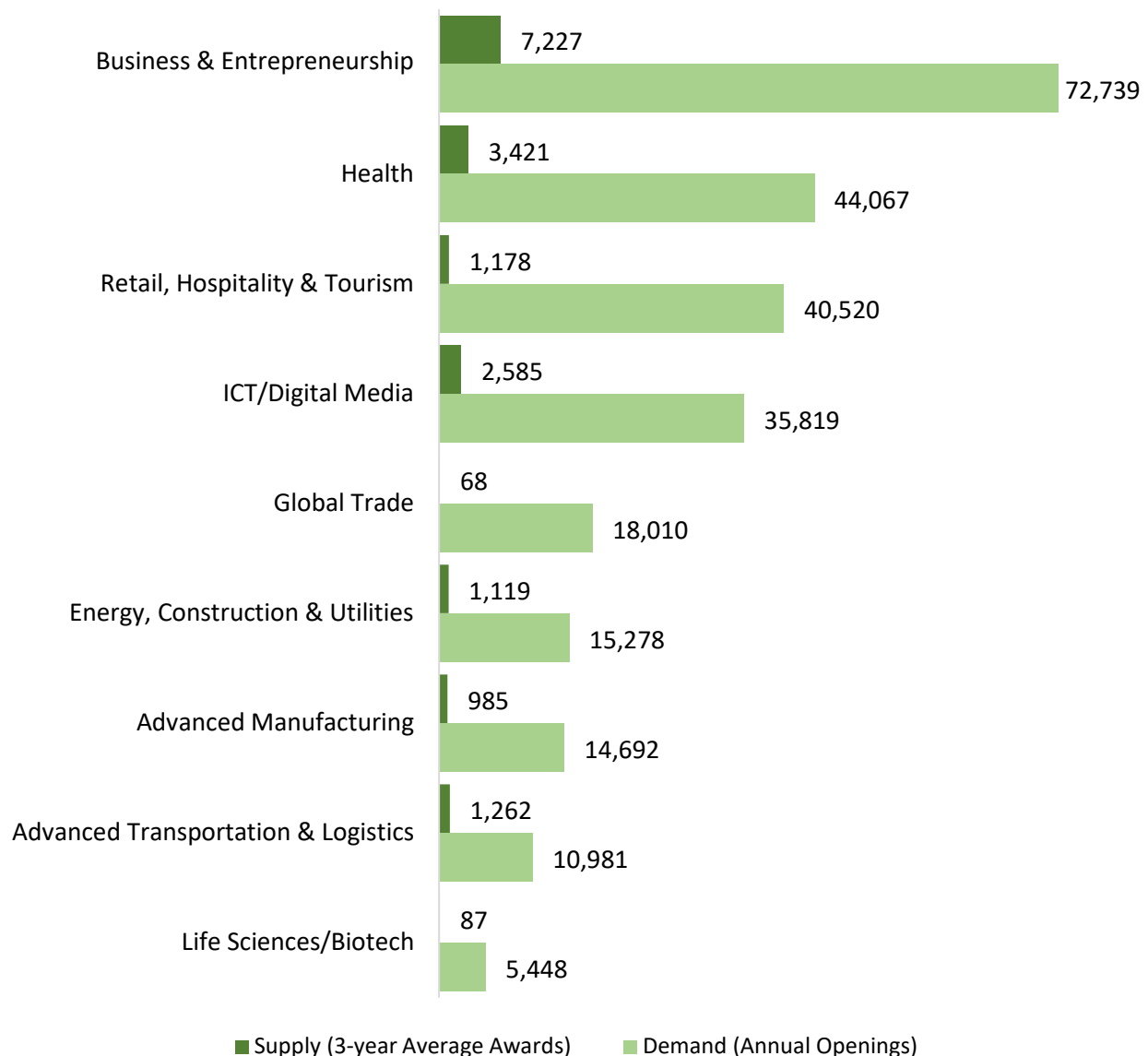
The LA/OC COE conducted an analysis of community college supply and workforce demand to inform the selection of priority and emerging sectors. Three-year-average annual awards (degrees and certificates) were calculated for each of the nine CCCC priority and emerging sectors identified during the 2021-2024 planning process. Average awards were then compared with the total number of annual openings projected for each sector.

By far, of the nine sectors, the business and entrepreneurship sector has the largest number of annual openings a total of 72,739, followed by the health sector, 44,067 (Exhibit 23). Sectors

with the smallest number of annual openings are advanced transportation and logistics (10,981 annual openings), and life sciences/biotech (5,448 annual openings).

The three sectors conferring the greatest number of awards on average each year are: business and entrepreneurship, 7,227 awards; health, 3,421 awards; and ICT/digital media, 2,585 awards. Even though these sectors lead the region in number of awards conferred, they still do not come close to meeting projected demand. Substantial workforce gaps exist for these sectors. For example, the workforce gap for the business and entrepreneurship sector totals 65,512, jobs. Sectors conferring the lowest number of awards on average each year are global trade (68 awards), life sciences/biotech (87 awards), and advanced manufacturing (985 awards).

Exhibit 23. Supply-and-demand comparison for the nine CCCC priority and emerging sectors



SWP Regional Outcomes

Program Recommendation Requests

Exhibit 24 shows program recommendation requests from Los Angeles community colleges received by the Los Angeles/Orange County Center of Excellence, organized by sector during the last two academic years. In the 2018-19 academic year, program requests were greatest in the areas of ICT/digital media, 76 requests, and business and entrepreneurship, 23 requests. In the following academic year, program requests were greatest for the same sectors, but dropped considerably in number.

In the 2019-20 academic year, sectors with the fewest requests were global trade; agriculture, water, and environmental technologies; and life sciences/biotech. Overall, requests for academic year 2019-20 were 20% lower than 2018-19 due to the pandemic. “Unassigned” means the requestor did not indicate a TOP code on the request form.

Exhibit 24. Program requests by sector from Los Angeles community colleges⁴⁷

Sector	2018-19	2019-20	Total	% Change
Advanced Manufacturing	19	13	32	(32%)
Advanced Transportation & Logistics	13	12	25	(8%)
Agriculture, Water & Environmental Technologies	7	2	9	(71%)
Business & Entrepreneurship	23	31	54	35%
Education and Human Development	17	12	29	(29%)
Energy, Construction & Utilities	11	8	19	(27%)
Global Trade	4	0	4	(100%)
Health	12	11	23	(8%)
ICT/Digital Media	76	42	118	(45%)
Life Sciences/Biotech	2	3	5	50%
Public Safety	9	4	13	(56%)
Retail, Hospitality & Tourism	10	20	30	100%
Unassigned	21	21	42	0%
TOTAL	224	179	403	(20%)

⁴⁷ This information was compiled by the Los Angeles/Orange County Center of Excellence.

Headcount

The following sections discuss the regional California Community College Chancellor’s Cal-PASS Plus LaunchBoard metrics for the six priority sectors selected in 2017 for the Los Angeles region. (Appendix E contains all LaunchBoard metrics for the six CCCCCO priority sectors selected in 2017 and the additional three sectors selected during the 2021-2024 planning for use as benchmarks in future assessments.) These metrics demonstrate the progress in the region that programs have made to calibrate student metrics with workforce needs. Despite a slight decline in student headcounts over the last four years, total awards, noncredit milestones, and transfers all increased, indicating that SWP projects implemented since 2017 that targeted the six CCCCCO priority sectors appear to be having an impact in the region.

Key finding: *Despite a slight decline in student headcounts over the last four years, total awards, noncredit milestones, and transfers all increased, indicating that SWP projects implemented since 2017 appear to be having an impact in the region.*

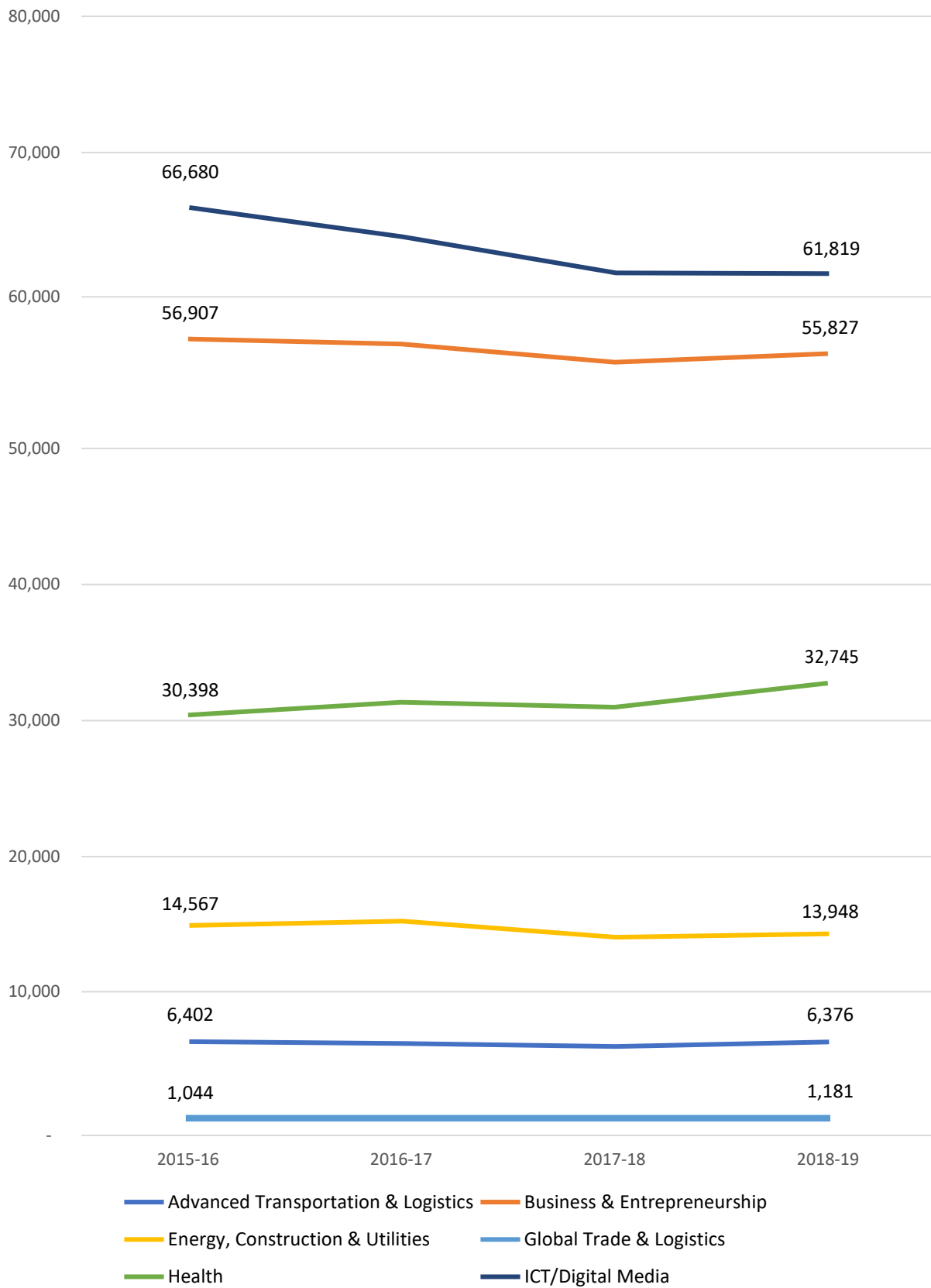
Of the six sectors selected in 2017, the two sectors with highest headcounts in the 2018-19 academic year were ICT/digital media, and business and entrepreneurship, with 61,819 and 55,827 students respectively (Exhibits 25 and 26). Sectors with the lowest headcounts in the 2018-19 academic year were advanced transportation and logistics with 6,376 students, and global trade with 1,181 students.

The student headcount for all 12 CCCCCO sectors in the 2018-19 academic year was 256,499. The overall headcount for the six sectors slightly declined over the last four years, from 175,998 to 171,896. Headcount increased over the last four years in health and global trade.

Exhibit 25. Headcounts for six CCCCCO sectors, 2015-16 to 2018-19 academic years

CCCCCO Sector	2015-16	2016-17	2017-18	2018-19
Advanced Transportation & Logistics	6,402	6,255	6,039	6,376
Business & Entrepreneurship	56,907	56,533	55,196	55,827
Energy, Construction & Utilities	14,567	14,888	13,702	13,948
Global Trade	1,044	1,039	1,123	1,181
Health	30,398	31,348	30,972	32,745
ICT/Digital Media	66,680	64,525	61,876	61,819
TOTAL	175,998	174,588	168,908	171,896

Exhibit 26. Headcounts for the six CCCCCO sectors, 2015-16 to 2018-19 academic years



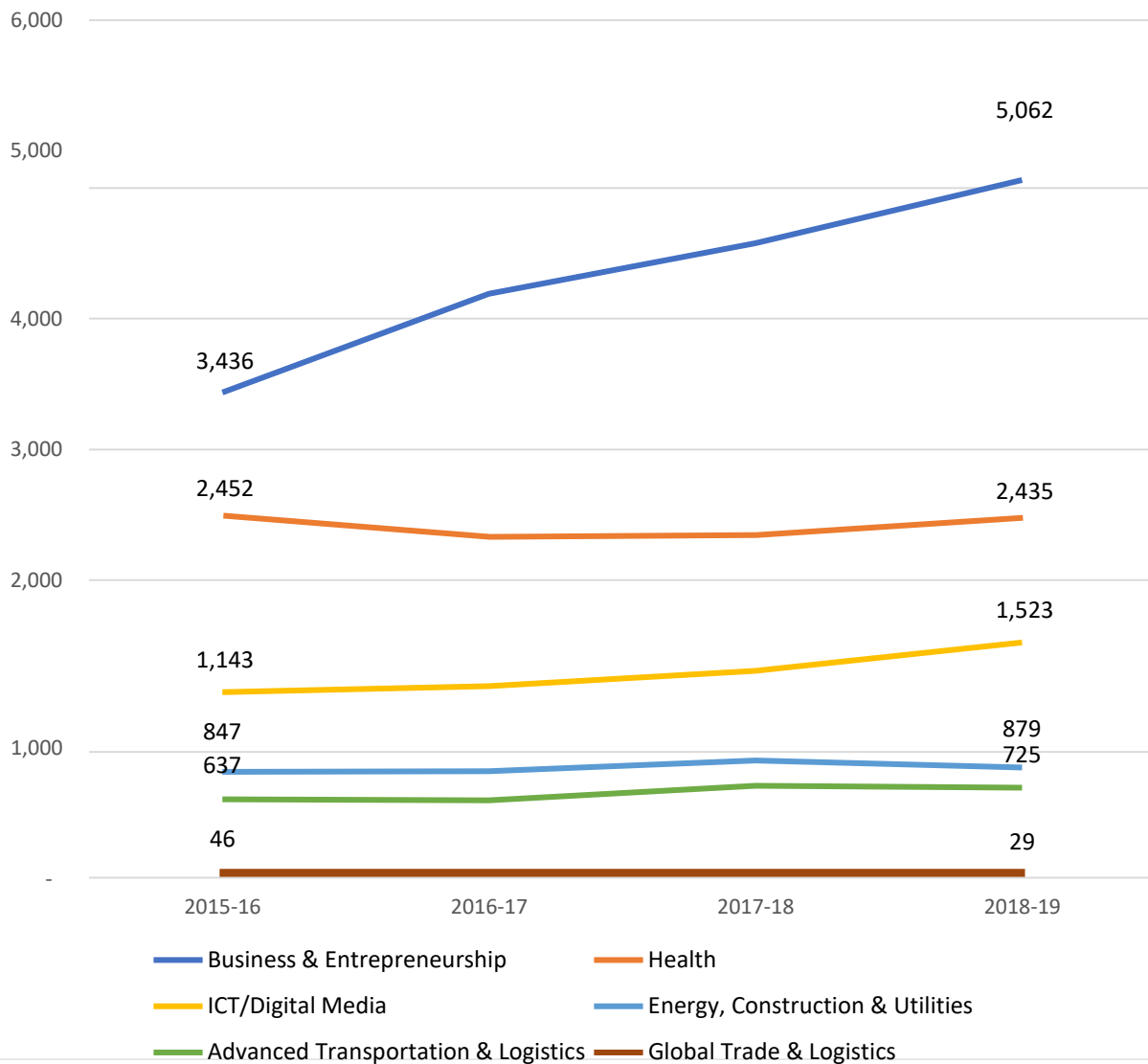
Awards

Awards (certificates, degrees, and apprenticeships) data were also analyzed. Over the last four years, despite a decline in overall student headcount, awards have increased, from 8,561 in 2015-16 to 10,653 in 2018-19 (Exhibits 27 and 28). Sectors with notable increases are business and entrepreneurship, ICT/digital media, and advanced transportation and logistics.

Exhibit 27. Awards for the six CCCCCO sectors, 2015-2016 to 2018-19 academic years

CCCCCO Sector	2015-16	2016-17	2017-18	2018-19
Business & Entrepreneurship	3,436	4,191	4,579	5,062
Health	2,452	2,289	2,304	2,435
ICT/Digital Media	1,143	1,189	1,307	1,523
Energy, Construction & Utilities	847	851	934	879
Advanced Transportation & Logistics	637	628	740	725
Global Trade	46	38	30	29
TOTAL	8,561	9,186	9,894	10,653

Exhibit 28. Awards for the six CCCCCO sectors, 2015-2016 to 2018-19 academic years



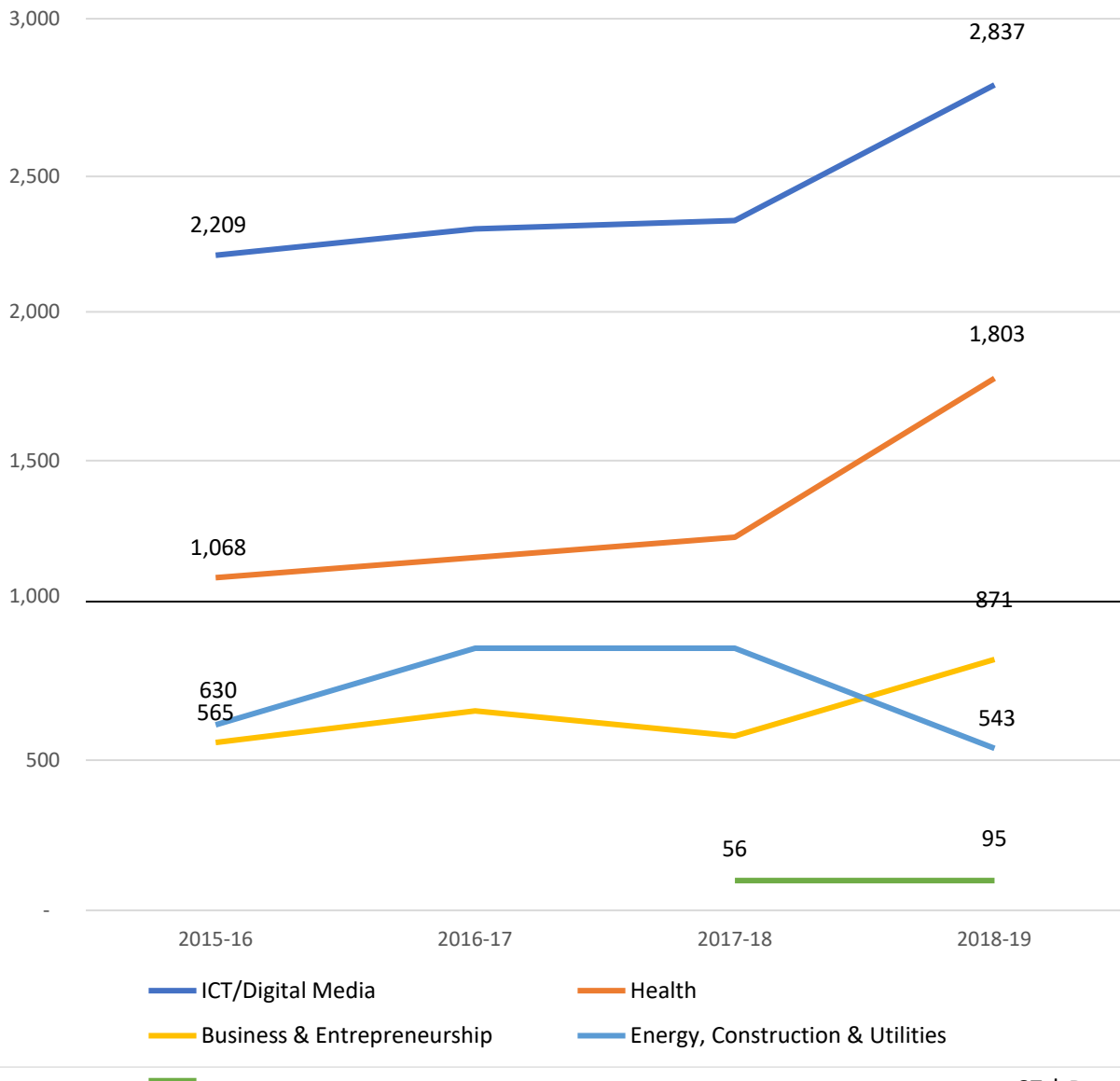
Noncredit

Noncredit milestones also increased over the last four years (Exhibits 29 and 30). Noncredit milestones were highest for the ICT/digital media sector, totaling 2,837 in 2018-19. Other sectors displaying an increase are health, and business and entrepreneurship.

Exhibit 29. Students who attained a noncredit workforce milestone in a single year

CCCCO Sector	2015-16	2016-17	2017-18	2018-19
ICT/Digital Media	2,209	2,306	2,337	2,837
Health	1,068	1,142	1,217	1,803
Business & Entrepreneurship	565	681	589	871
Energy, Construction & Utilities	630	912	912	543
Advanced Transportation & Logistics			56	95
Global Trade				
TOTAL	4,472	5,041	5,111	6,149

Exhibit 30. Students who attained a noncredit workforce milestone in a single year



Advanced Transportation & Logistics

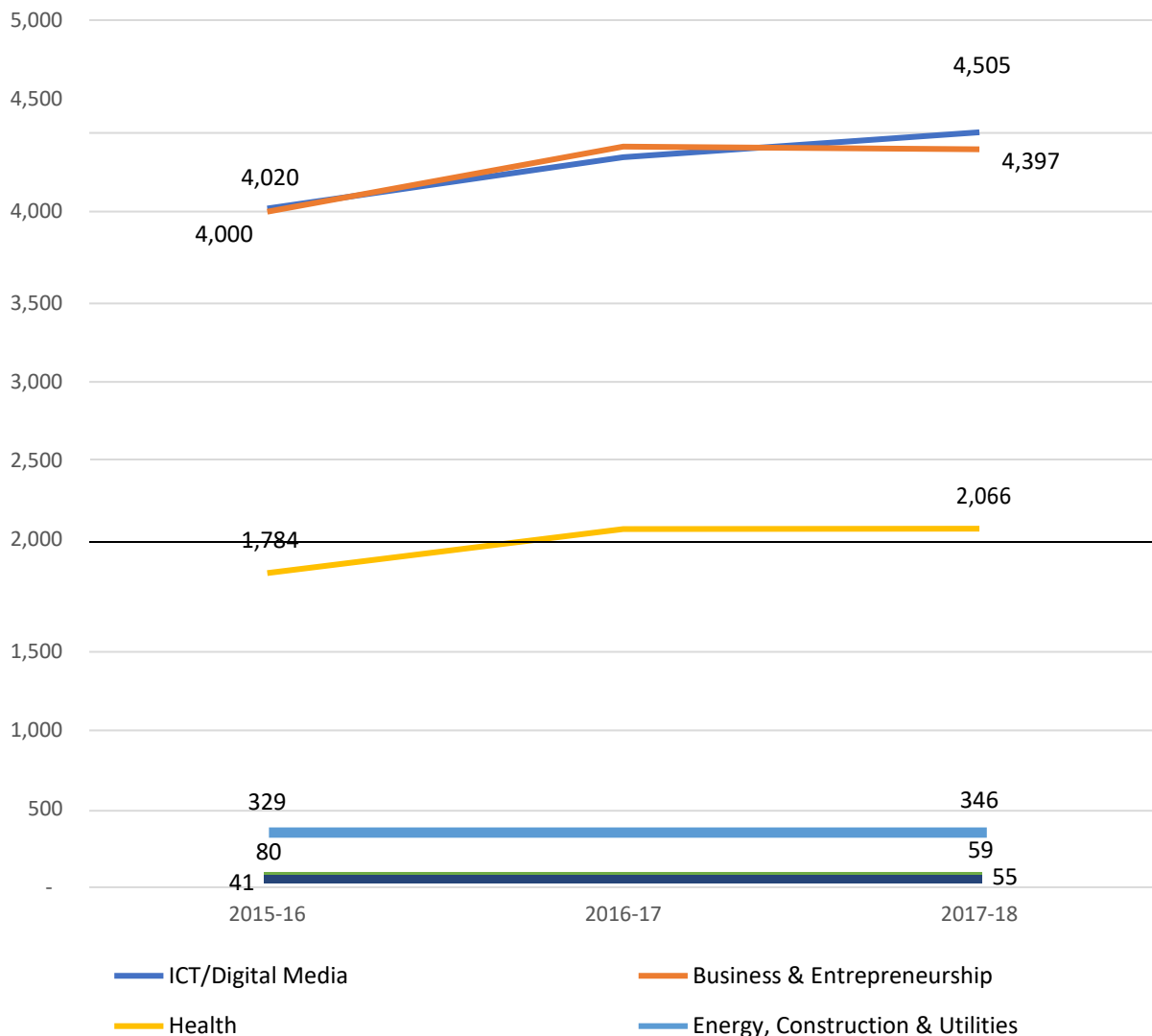
Transfers

As with awards and noncredit milestones, transfers have followed a similar trend, increasing from 10,254 in 2015-16 to 11,428 in 2017-18 (Exhibits 31 and 32). Sectors with the largest number of transfers include ICT/digital media, business and entrepreneurship, and health. Transfers declined for advanced transportation and logistics.


Exhibit 31. Transfers for the six CCCCCO sectors, 2015-16 to 2018-19 academic years

CCCCO Sector	2015-16	2016-17	2017-18
ICT/Digital Media	4,020	4,346	4,505
Business & Entrepreneurship	4,000	4,414	4,397
Health	1,784	2,064	2,066
Energy, Construction & Utilities	329	358	346
Advanced Transportation & Logistics	80	66	59
Global Trade	41	44	55
TOTAL	10,254	11,292	11,428

Exhibit 32. Transfers for the CCCCCO sectors with data for 2015-16 to 2017-18 academic years



 Advanced Transportation & Logistics

 Global Trade & Logistics

2021-2024 Regional Priorities

Based on data analysis, stakeholder input, and economic forecasts, the following regional priorities were vetted by the 19 Los Angeles regional colleges for 2021-2024. Regional priorities were drafted by the Los Angeles Regional Plan Work Group, reviewed by the Los Angeles members of the College Resource Leadership Council (CRLC), and vetted in December 2020 for subsequent recommendation to the LAOCRC Governance Council.

In selecting 2021-2024 Los Angeles regional priorities, stakeholders first affirmed diversity, equity, and inclusion as the framework within which the region would operate. The first regional priority addresses this framework. Next, stakeholders took into account labor market analyses, impacts of COVID-19 and the subsequent economic downturn, progress made during the first four rounds of SWP, and stakeholder input received at regional sessions described in this plan. As discussed in the next section, the same factors informed selection of regional priority sectors.

In addition to the 2021-2024 regional priorities, the Los Angeles collaborative group set corresponding goals aligned with performance accountability measures of the federal Workforce Innovation and Opportunity Act.⁴⁸ Exhibit 33 shows the 2021-2024 Los Angeles regional priorities and their corresponding goals.

Exhibit 33. Los Angeles 2021-2024 regional priorities and goals

2021-2024 LA Regional Priorities	Goals to Support Regional Priorities
1. Consciously and intentionally infuse diversity, equity, and inclusion in all strategies and activities.	<ul style="list-style-type: none"> ▪ Vision for Success goal to “reduce equity gaps across all of the above measures through faster improvements among traditionally underrepresented student groups, with the goal of cutting achievement gaps by 40 percent within 5 years and fully closing those achievement gaps within 10 years.”⁴⁹ ▪ CCCCCO call to action in June 2020 to “actively strategize and take action against structural racism.”⁵⁰
2. Maximize sustained industry engagement.	<ul style="list-style-type: none"> ▪ Participate in industry councils and collaborative efforts. ▪ Create and nurture participation in regional industry advisory boards. ▪ Promote a cohesive, communicative, and effective key talent network.

⁴⁸ California Education Code Title 3, Division 7, Part 54.5 Strong Workforce Program, 88823(c)(5).

⁴⁹ CCCCCO Vision for Success. Retrieved at <https://www.cccco.edu/-/media/CCCCO-Website/About-Us/Reports/Files/vision-for-success.ashx>.

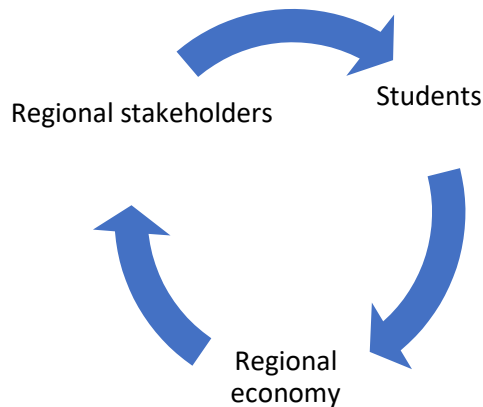
⁵⁰ “Letter to California Community College Family,” California Community Colleges Chancellor’s Office, June 5, 2020, accessed November 5, 2020, <https://www.cccco.edu/-/media/CCCCO-Website/Files/Communications/dear-california-community-colleges-family>.

2021-2024 LA Regional Priorities	Goals to Support Regional Priorities
3. Strengthen CE career pathways and programs of study.	<ul style="list-style-type: none"> ▪ Partner with K-12 school districts, adult education providers and labor/registered apprenticeships. ▪ Link students with necessary support services.
4. Implement strategies and activities to help students complete the CE pipeline (in, through, out, and into the workforce).	<ul style="list-style-type: none"> ▪ Increase enrollment. ▪ Support student success and completion. ▪ Use the four pillars of Guided Pathways: clarify the path, enter the path, stay on the path, and ensure learning. ▪ Increase opportunities for work-based learning along the continuum.
5. Address the needs of business and industry in identified priority and emerging sectors.	<ul style="list-style-type: none"> ▪ Provide incumbent worker training. ▪ Strengthen short-term, noncredit, not-for-credit, and contract education offerings. ▪ Consider and implement different delivery vehicles for education and training. ▪ Adapt to the marketplace and respond to industry needs that are mutually beneficial, and ultimately, beneficial to students.
6. Demonstrate the regional impact of SWP investments.	<ul style="list-style-type: none"> ▪ Improve the regional capacity to report outcomes. ▪ Meet or exceed outcome goals for all SWP metrics.
7. Support CE faculty professional development.	<ul style="list-style-type: none"> ▪ Support professional development and externships for current faculty to ensure alignment with dynamic industry skills and knowledge. ▪ Attend to the need for new CE faculty recruitment. ▪ Provide faculty professional development in pedagogy and andragogy.
8. Explore and implement effective strategies for serving students in a COVID-19 environment.	<ul style="list-style-type: none"> ▪ Provide instruction responsive to student needs in all environments. ▪ Strengthen online instruction and services. ▪ Upskill and reskill students and incumbent workers.
9. Build and nurture relationships with internal and external stakeholders.	<ul style="list-style-type: none"> ▪ Relationship building occurs across all strategies and activities.

2021-2024 Priority and Emerging Sectors

Analysis of regional labor market data indicated addition of two priority sectors (advanced manufacturing and life sciences/biotech) and one emerging sector (retail, hospitality, and tourism) for the Los Angeles region. As discussed throughout the plan, priority and emerging sectors were selected primarily for their benefit to students, and secondarily, for their benefit to the Los Angeles regional economy. Consideration of student needs reaffirmed the starting point of a universally beneficial system, as illustrated in Exhibit 34.

Exhibit 34. The relationship among students, the regional economy, and regional stakeholders



Each priority and emerging sector was scrutinized for number of jobs, entry-level earnings, median earnings, and postsecondary supply. Impacts of COVID-19 were taken into account as available; for example, the number of layoffs during the pandemic and the speed of economic recovery in each sector were considered. Evidence used to justify inclusion of each priority and emerging sector is given in Exhibit 35.

Sector profiles will be produced by the LA/OC COE in 2021 and will add depth and currency to information about the health of and projected workforce demand from regional priority and emerging sectors. Sector profiles will be especially useful in informing the 2021 update to the Los Angeles Regional Plan. The Los Angeles Regional Plan Work Group discussed and recommended the adoption of the advanced manufacturing sector as a priority sector because of stakeholder input and because the Los Angeles Basin Regional Planning Unit (RPU) included it in its regional plan. Although the sector has a projected decline in jobs through 2024, earnings are strong, the sector will still offer a large number of jobs compared to other sectors, and the sector fared well in the LA/OC COE's *Resilient Jobs* report.⁵¹

The life sciences/biotech sector was added as a priority sector based on stakeholder input. During the regional convenings, stakeholders working in this field expressed optimism that the pandemic was fueling transformations in this field and that life sciences/biotech was more

⁵¹ "Resilient Jobs: Top Jobs During the Great Depression and COVID-19 Pandemic," Los Angeles/Orange County Center of Excellence, October 2020, accessed December 1, 2020, http://coeccc.net/reports/Resilient_Jobs_1.

relevant than ever to the regional economy. Crossover with the advanced manufacturing sector was also stressed. This sector was highlighted as an area of opportunity in the 2017 regional plan and SWP projects related to the sector have been consistently funded over the past four years. In the latest round of SWP funding, approximately \$1.5 million was invested in the Bioscience Training Project to increase the availability of trained biological technicians, chemical technicians, and process technicians through programs offered by 16 community colleges in Los Angeles County to meet workforce demand. In addition, the Verdugo WDB and the City of Los Angeles WDB have selected biotech as a priority industry.

Additionally, the work group discussed the retail, hospitality, and tourism sector because of its historically high number of job openings in the region. However, retail, hospitality, and tourism was the hardest hit sector in terms of job losses during the pandemic, and economists are predicting a slow recovery to reach employment levels seen before the pandemic. While tourism is a major economic driver for California and the Los Angeles area, the contraction within the retail, hospitality, and tourism sector could pose challenges for students planning to enter this field, particularly in the short term.

According to LAEDC findings presented during the convenings in August 2020, food and drinking places; retail; “other” services (including personal care services); arts, entertainment, and recreation accommodation, accounted for the bulk of job loss between February and June 2020. Of the 533,000 jobs lost during this period, jobs in these industry sectors accounted for nearly half of the total (47%) in Los Angeles County. Nationally, the leisure and hospitality industry has suffered 40% of all the nation’s job losses.⁵² Although hiring resumed from July through September 2020, job recovery plateaued in September 2020, and temporary job losses were being categorized as permanent, a trend that continues to affect the leisure and hospitality industry.⁵³ This means that students graduating from retail, hospitality, and tourism programs over the next few years will likely be competing with displaced, experienced workers who are also vying for entry-level, low-paid positions.

Still, the retail, hospitality, and tourism sector has historically accounted for a large share of employment in the Los Angeles region, and the sector is poised to quickly rebound post-COVID-19. Three WDBs in the Los Angeles area, the Los Angeles Regional Planning Unit, and the LAEDC have selected this sector as a priority sector. Los Angeles is a national and international tourist destination as well as the epicenter of the nation’s culinary arts scene. It also has a strong retail base. Iconic tourist attractions such as the Hollywood Bowl, Universal Studios, the Santa Monica Pier, Walt Disney Concert Hall, and Los Angeles’ many world-class museums will once again draw crowds. Los Angeles is also home to several major sports teams. In addition to the STAPLES Center and Banc of California Stadium, SoFi stadium opened in 2020 and a stadium for the Clippers is scheduled to open in 2024. Moreover, Los Angeles is expected to have an influx of tourists in 2028 when it hosts the Olympic Games.

⁵² Johanna Jainchill, “The election and travel’s big ask,” Travel Weekly, November 2, 2020, <https://www.travelweekly.com/Travel-News/Government/The-election-and-travels-big-ask>.

⁵³ Amelia Thomson-DeVeaux, Neil Paine, and Julia Wolfe, “The easy part of the economic recovery might be over,” FiveThirtyEight, September 4, 2020, <https://fivethirtyeight.com/features/the-easy-part-of-the-economic-recovery-might-be-over/>.

There is no question that the retail, hospitality, and tourism sector will be transformed by the pandemic, but this is expected to create new types of jobs and spur evolution in the kinds of skills sought by employers. As the economy recovers, there will likely be increased demand to retrain and upskill displaced workers to successfully return to this sector. For these reasons, the retail, hospitality, and tourism sector was added as an emerging sector to the 2021-2024 regional plan.

Exhibit 35. Los Angeles 2021-2024 priority and emerging sectors

Priority Sector	Evidence
Advanced Manufacturing	<ul style="list-style-type: none"> Identified as priority sector by all seven LA WDBs, the Los Angeles Basin RPU, and LAEDC Stakeholder input at the 2020 LA retreat Projected decline in occupational demand by 12% (41,605 jobs) from 2019-2024* Average Wages: \$20.56 entry level to \$27.07 median
Advanced Transportation & Logistics	<ul style="list-style-type: none"> Employment up by 52% 2010-2019 228,585 jobs in 2019 Identified as priority sector by the Los Angeles Basin RPU and LAEDC Projected growth in occupational demand by 12% (10,981 jobs) from 2019-2024* Increased noncredit milestones, 2015-16 through 2018-19 Average Wages: \$23.42 entry level to \$31.21 median
Business & Entrepreneurship	<ul style="list-style-type: none"> Employment up 19% 2010-2019 387,700 jobs in 2019 Projected growth in occupational demand by 2% (72,739 jobs) from 2019-2024* Highest number of completions from 2015-16 through 2018-19 academic years Increased noncredit milestones, 2015-16 through 2018-19 Average Wages: \$18.46 entry level to \$26.02 median
Energy, Construction & Utilities	<ul style="list-style-type: none"> Employment up 28% from 2010-2019 234,272 jobs in 2019 Identified as priority sector by the Los Angeles Basin RPU and LAEDC Stakeholder input at the 2020 LA retreat Projected growth in occupational demand by 7% (15,278 jobs) from 2019-2024* Average Wages: \$22.59 entry level to \$30.35 median
Global Trade	<ul style="list-style-type: none"> Employment up 28% 2010-2019 65,122 jobs in 2019 Identified as priority sector by LAEDC

Priority Sector	Evidence
	<ul style="list-style-type: none"> Stakeholder input at the 2020 LA retreat Projected growth in occupational demand by 9% (11,438 jobs) from 2019-2024* Increased headcount and transfers, 2015-16 through 2018-19 Average Wages: \$25.42 entry-level to \$37.06 median
Health	<ul style="list-style-type: none"> Employment up 68% 2010-2019 778,307 jobs in 2019 Stakeholder input at the 2020 LA retreat Projected growth in occupational demand by 16% (94,250 jobs) from 2019-2024* Increased headcount, noncredit milestones, and transfers, 2015-16 through 2018-19 Average Wages: \$18.21 entry level to \$22.87 median
ICT/Digital Media	<ul style="list-style-type: none"> Employment up 6% 2010-2019 268,606 jobs in 2019 Identified as priority sector by the Los Angeles Basin RPU and LAEDC Stakeholder input at the 2020 LA retreat Projected growth in occupational demand by 2% (16,572 jobs) from 2019-2024* Increased number of completions, noncredit milestones, and transfers, 2015-16 through 2018-19 Average Wages: \$21.83 entry level to \$30.69 median
Life Sciences/Biotech	<ul style="list-style-type: none"> Stakeholder input at the 2020 LA retreat Projected decline in occupational demand by 0% (271 jobs) from 2019-2024* Increased transfers, 2015-16 through 2018-19 Average Wages: \$16.98 entry level to \$22.59 median
Emerging Sector	Evidence
Retail, Hospitality & Tourism	<ul style="list-style-type: none"> Stakeholder input at the 2020 LA retreat Historically a large employer with 923,898 jobs in Los Angeles County in 2019 Identified as priority sector by the Los Angeles Basin RPU and LAEDC Not selected as priority sector due to large numbers of job loss during COVID-19 pandemic (see p. 56 of this plan) Average Wages: \$18.24 entry level to \$24.32 median

*NOTE. Projected growth/decline from 2019-2024 pre-COVID data. See Exhibit 19 and accompanying discussion in this plan.

Conclusions and Recommendations

The first four rounds of Strong Workforce Program funding made an impact in the Los Angeles region. In addition to the performance metrics shown in the *SWP Regional Outcomes* section, regional SWP funding had other tangible and intangible benefits. These include stronger regional collaboration, updated and enhanced CE programs, strengthening of the regional key talent network, increased community awareness, and alignment with Vision for Success goals. As the region looks forward to the next four years, these strengths provide a base from which to grow.

Stronger Regional Collaboration. Regional SWP funding strengthened collaboration among the 19 Los Angeles colleges. Although the colleges had previously worked together on CE program recommendations and some grants, regional SWP investment brought collaboration to the forefront. Colleges found themselves working together on various regional projects every round, and frequent meetings were the norm. With frequent meetings came more familiarity with and understanding of each other, and strong relationships developed. Moreover, relationship-building happened broadly as well as deeply; projects brought in existing and new faculty, staff, project administrators, and partners. Los Angeles became smaller in the sense of being more connected as a region and chipping away at silo approaches.

Updated and Enhanced CTE Programs. During the initial rounds, SWP allowed chronically underfunded CE programs to modernize their equipment and facilities, improving quality of instruction with state-of-the-art equipment and facilities to keep up with industry standards. With updated facilities and equipment came faculty professional development, which was included in SWP projects that added or updated curriculum and programs. The strong economy during the first three years of SWP (2016-2019) was accompanied by a slight decline in enrollment systemwide; however, total CE awards, noncredit milestones, and transfers increased in the Los Angeles region.

Key finding: *Despite a slight decline in student headcounts over the last four years, total CE awards, noncredit milestones, and transfers all increased, indicating that SWP projects implemented since 2017 are having an impact in the region.*

Regional Key Talent Network. The key talent network grew in scope and impact in the region, with the Los Angeles / Orange County Center of Excellence (COE) and Regional Directors for Employer Engagement (RDEEs) becoming integral to CE progress. RDEEs built employer networks within and across their sectors. They provided faculty professional development, created and participated in industry advisories, facilitated work-based learning opportunities, and worked with K-12 partners to support CE pathways from high school through community college. RDEEs' industry expertise gave them access to employers, and the result is the continual addition of employer partners to the regional ecosystem.

The COE solidified its role as the regional source of labor market information. In 2019 the COE provided 403 labor market information reports for the Los Angeles region, and plays a central role in SWP project planning.

Community College and CTE Awareness. The Los Angeles Regional Strategy, Innovation, and Marketing (LA-SIM) project increased visibility of Los Angeles colleges during the first four rounds of SWP. Led by Santa Monica College and serving all 19 Los Angeles colleges, the project used a brand management strategy to develop and implement marketing tailored to target populations in the Los Angeles region. In October 2019 the project launched the California Community Colleges of Los Angeles (CCLA) website (www.CCLA.com), which was the first student-facing site to represent all 19 community colleges under one brand. The site has exceeded projected metrics for clicks, inquiries, and names and contact information of interested students. Student leads are forwarded to the 19 colleges according to student interest. A priority for the 2020-21 academic year is to nurture these leads from inquiry through enrollment. Preliminary results from colleges active in lead nurturing show up to 30% enrollment of CCLA leads.⁵⁴

In addition to the direct impact of regional marketing, SWP work increased community college and CE awareness among collaborative partners. College representatives and key talent increased their presence with workforce development boards, community-based organizations, economic and workforce development partners, K-12, adult and contract education, and industry stakeholders. The regional consortium structure facilitated frequent contact with colleagues from all stakeholder groups.

Alignment with Vision for Success Goals. In 2017, the Chancellor's Office released its strategic plan entitled *Vision for Success*. The broad goals of the plan were to close achievement gaps; increase completion of degrees, certificates, and transfers; reduce excess accumulation of units; and help students into gainful employment. Vision for Success goals were intentionally aligned with the Strong Workforce Program, and Los Angeles SWP work aligns with both. In addition, the equity focus of Vision for Success aligns with current and future directions in Los Angeles.

Future directions: 2021-2024

Los Angeles regional priorities and priority sectors are guided by supply-and-demand data provided in this plan and appendices. In addition, several other key factors were considered in this plan and must be considered in regional work for the next four years. First, as the implementation of the 2021-2024 regional plan begins, the world grapples with COVID-19 and the economic recession caused by the pandemic. Second, in the United States, the importance of racial justice and the history and role of law enforcement have sparked conversations about equity, and the Chancellor's Office has mandated action by the California Community Colleges.

⁵⁴ Verbal update, *Handling Lead Transfers*, LA-SIM project meeting, November 6, 2020.

Finally, SWP has finished four years and is under increased pressure to provide outcomes data in an increasingly uncertain state budget environment.

COVID-19 and Economic Impacts. The COVID-19 pandemic caused sudden, drastic changes to industry and education. As discussed in the *2020 Economic Overview and COVID-19 Impacts* section, Los Angeles suffered unemployment rates as high as 20.4% in the early months of the pandemic, far outpacing the state unemployment rate of 16.2% at its highest. Industry sectors were differentially affected during the initial months of the pandemic and as the region started economic recovery. Similarly, colleges and K-12 schools abruptly changed educational modalities in Spring 2020, and in-person instruction is still the exception rather than the rule in Los Angeles for the 2020-21 academic year. The regional priorities in this 2021-2024 regional plan reflect the region’s intent to serve students and respond to labor market demands in a COVID-19 environment and beyond.

Equity. In June 2020, the Chancellor’s Office hosted a webinar⁵⁵ and released a letter with a call to action for all California Community Colleges to “actively strategize and take action against structural racism.”⁵⁶ The Chancellor highlighted six areas for action and accountability:

- 1) A systemwide review of law enforcement officers and first responder training and curriculum.
- 2) Campus leaders must host open dialogue and address campus climate.
- 3) Campuses must audit classroom climate and create an action plan to create inclusive classrooms and anti-racism curriculum.
- 4) District boards must review and update equity plans with urgency.
- 5) Shorten the time frame for the full implementation of the Diversity, Equity, and Inclusion Integration Plan.
- 6) Join and engage in the Vision Resource Center “Community Colleges for Change.”⁵⁷

The call to action by the Chancellor’s Office is consistent with the mission, vision, and values of the 19 Los Angeles community colleges and is reflected in the regional priorities for 2021-2024. Moreover, local and regional efforts to achieve the six areas for action and accountability were already underway at the time the 2021-2024 Los Angeles Regional Plan was approved.

SWP Outcomes Data. For fiscal year 2020-21, the California State Legislature left SWP allocations untouched, arguing that community college CE was vital to economic recovery. To prepare for budget discussions for 2021-22 and succeeding fiscal years, the Los Angeles community colleges must be able to show the impact of SWP investments. There is a one to two-year lag for outcomes data on LaunchBoard, the statewide platform for tracking outcomes data, and the system is not set up to capture all data. For example, employment data in LaunchBoard is based on Unemployment Insurance (UI) wage files, which leave out groups such

⁵⁵ “Call to Action Webinar,” California Community Colleges Chancellor’s Office, June 3, 2020, accessed November 6, 2020, <https://www.youtube.com/watch?v=hkht6TAGgUE>.

⁵⁶ “Letter to California Community College Family,” California Community Colleges Chancellor’s Office, June 5, 2020, accessed November 5, 2020, <https://www.cccco.edu/-/media/CCCCO-Website/Files/Communications/dear-california-community-colleges-family>.

⁵⁷ The Chancellor’s Office created a virtual community in the Vision Resource Center where content, dialogue and modules would be uploaded: <https://visionresourcecenter.cccco.edu/>.

as federal employees, the military, out-of-state workers, and the self-employed. Los Angeles is not alone in looking for ways to collect more robust data, sooner. Regional priorities reflect the need for faster and more comprehensive tracking of SWP performance outcomes.



Appendix A. Los Angeles K-12 SWP Project Investments

Round 1 K-12 SWP investments are available at www.laocrc.org.

Exhibit A1. 2019-20 (Round 2) K-12 SWP investments. Performance period is 7/1/20-12/31/22.

Pathway Improvement Title	Lead Agency	Lead Agency Type	Award Amount
ROP/CTE: Every Student, Every Pathway	East San Gabriel Valley ROP	ROC/P*	\$1,800,000
ROP/CTE Information Technology Career Readiness Continuum	East San Gabriel Valley ROP	ROC/P	\$1,799,992
Increasing Equitable Access to Educational and Occupational Opportunities	Long Beach Unified	Unified School District	\$1,796,358
Building and Construction Trades Expansion and Enhancement	Tri-Cities ROP	ROC/P	\$1,795,500
Student Centered Post-secondary Transitions and Career Preparation	Long Beach Unified	Unified School District	\$1,693,672
Enhancing Career Pathways/Exploration and Improving Dual Enrollment and Local Industry Partnerships	New Designs Charter	Charter	\$900,000
Creating Optimum Post-Secondary Opportunities for Success to Industry	Glendale Unified	Unified School District	\$900,000
NLM Pathways to Success 2.0	Norwalk-La Mirada Unified	Unified School District	\$900,000
Foothill Consortium Regional Post Secondary & WBL System Development	Azusa Unified	Unified School District	\$900,000
Increasing Access to Health Sciences & STEM for 21st century Health Careers	Lynwood Unified	Unified School District	\$900,000
Comprehensive Pathway Improvements for CTE Success	Centinela Valley Union High	High School District	\$900,000
Pathway Transitions and Student Supports	Pasadena Unified	Unified School District	\$897,336
ABC Stronger Workforce	ABC Unified	Unified School District	\$894,328
Pathways for All	Bellflower Unified	Unified School District	\$894,052
ABC Equal Access to Patient Care - Sports Medicine	ABC Unified	Unified School District	\$889,183
Strengthening Engineering Tech, Manufacturing, Computer Science through Collaborative Partnerships	Lynwood Unified	Unified School District	\$868,950
Increasing Transition to Community College Pathways by Strengthening Understanding of K-12 CTE	Los Angeles Unified	Unified School District	\$852,390
Elevating Career Pathways for All Students	Rowland Unified	Unified School District	\$720,000
Connecting College to Careers (C3)	Opportunities for Learning - Baldwin Park	Charter	\$690,209
Targeted Career Pathway Exploration	Alhambra Unified	Unified School District	\$420,180

Pathway Improvement Title	Lead Agency	Lead Agency Type	Award Amount
Work Based Learning (WBL) Enhancements	South Pasadena Unified	Unified School District	\$390,119
Arts Media and Entertainment and Public Services	Covina-Valley Unified	Unified School District	\$315,225
SIATech Academy South: Health, ICT, Transportation Pathway Improvements	SIATech Academy South	Charter	\$300,796
CTE pathways for Adult Students Released from LA County Jail High School	Five Keys Independence HS (SF Sheriff's)	Charter	\$247,699
Strengthening Creative Economy Pathways	Los Angeles Academy of Arts & Enterprise Charter	Charter	\$243,000
CTE Academy Expansion and CTE Pathway Development	Burbank Unified	Unified School District	\$237,327
Arts, Media, and Entertainment	CHAMPS - Charter HS of Arts-Multimedia & Performing	Charter	\$184,275
Digital Media & CTE Pathway Development	Burbank Unified	Unified School District	\$180,397
Manufacturing	El Monte Union High	High School District	\$178,282
Port of Los Angeles High School CTE Pathway Improvement	Port of Los Angeles High	Charter	\$175,500
Patient Care	El Monte Union High	High School District	\$169,943
Health Services and Agriculture	Covina-Valley Unified	Unified School District	\$146,503
Creative Arts Pathways	Culver City Unified	Unified School District	\$146,475
Bioengineering and Information, Communications and Technology	Birmingham Community Charter High	Charter	\$135,000
Culinary and Business	Covina-Valley Unified	Unified School District	\$129,600
Take Flight With Drone Technology	Montebello Unified	Unified School District	\$51,505
TOTAL			\$24,643,796

*ROC/P denotes Regional Occupation Center/Program

Exhibit A2. 2020-21 (Round 3) K-12 SWP investments. Performance period is 1/1/21-6/30/23.

Pathway Improvement Title	Lead Agency	Lead Agency Type	Award Amount
ABCUSD Stronger Workforce 2.0: Diversity, Equity and Access for Post-Secondary Success	ABC Unified	Unified School District	\$885,000
Arts, Media, and Entertainment, Business and Finance, Information and Communications Technology	City Charter High	Charter	\$499,400
Build a Bridge to Industry	California Advancing Pathways for Students in Los Angeles County	ROC/P	\$581,148
Building and Construction Trades	El Monte Union High	High School District	\$360,795
Business and Entrepreneurship @DowneyMADE	Downey Unified	Unified School District	\$1,728,373
Combs' Overhaulin' Auto	Bellflower Unified	Unified School District	\$664,018
Comprehensive improvement of Inglewood Unified School District Pathways	Inglewood Unified	Unified School District	\$358,425
CTE Enrichment Opportunities for Students	Los Angeles Unified	Unified School District	\$1,742,477
CTE Pathway Excellence through Equity and Access	Centinela Valley Union High	High School District	\$824,795
Developing Industry/Near Peer Mentoring and Early College Credit from K-16	Los Angeles Unified	Unified School District	\$1,765,363
Downey Career Ecosystems	Downey Unified	Unified School District	\$1,730,462
Engineering & Architecture, Information & Communication Technologies, Math and Science Connection	Tri-Cities ROP	ROC/P	\$662,423
Engineering/Architecture Pathways	Culver City Unified	Unified School District	\$177,885
Enhancing Career Pathways for All Students	Rowland Unified	Unified School District	\$885,000
Expand and enhance career pathways and dual enrollment certification programs	New Designs Charter	Charter	\$885,000
Expanding and Enhancing K-14 Culinary Arts Pathways	Lynwood Unified	Unified School District	\$350,663
Expanding CTE workforce and creating foundational pathways to success	Los Angeles Academy of Arts & Enterprise Charter	Charter	\$500,000
Expanding Equality in Entrepreneurship (E3) Project	Da Vinci Design	Charter	\$314,406
Expanding Fashion and Merchandising Pathway	Beverly Hills Unified	Unified School District	\$57,948
FIVE KEYS - Dual Enrollment Graphics / Web Design with LA Mission College	Five Keys Independence HS (SF Sheriff's)	Charter	\$183,744
Foothill Consortium College and Career Exploration	Azusa Unified	Unified School District	\$885,000
Glendale Unified School District Online College & Career Academies	Glendale Unified	Unified School District	\$1,749,477
Health Science Pathway Enhancement & Expansion	Tri-Cities ROP	ROC/P	\$1,311,061
ICT: Cloud Computing Pathway Development	Alhambra Unified	Unified School District	\$804,715

Improvement of Patient Care Pathways	East San Gabriel Valley ROP	ROC/P	\$536,669
Improvement of Public Safety Pathways	East San Gabriel Valley ROP	ROC/P	\$133,522
Improving Access to Technology	Pasadena Unified	Unified School District	\$538,399
Increasing Industry Relevant Instruction through Teacher Externships	Long Beach Unified	Unified School District	\$183,099
Information and Communication Technologies	El Monte Union High	High School District	\$380,375
LA-21 BURBANK USD: CTE ACADEMY EXPANSION AND CTE PATHWAY DEVELOPMENT	Burbank Unified	Unified School District	\$177,000
LA-21 BURBANK USD: DIGITAL MEDIA PATHWAY	Burbank Unified	Unified School District	\$165,460
Launching a Sustainable and Transferable Model for Industry-Linked Education (LAST MILE) Project	Da Vinci Science	Charter	\$604,438
Open Source - Downey	Downey Unified	Unified School District	\$1,757,094
Port of Los Angeles High School	Port of Los Angeles High	Charter	\$253,641
SIATech Academy South: Community Health Worker Pathway	SIATech Academy South	Charter	\$300,814
Targeted Engagement and Data Driven Systems to Enhance CTE Pathways	Birmingham Community Charter High	Charter	\$199,125
Trade Tech Academy	Covina-Valley Unified	Unified School District	\$202,665
TOTAL			\$25,339,879

Appendix B. Summary of Los Angeles Regional SWP Projects, 2019-20

For the 2019-20 SWP round of funding, \$15.3 million was allocated across 10 regional projects (Exhibit B1). A large percentage of the funding, 63%, about \$9.7 million, went toward projects that address outcomes for all CCCCCO sectors.

Exhibit B1. Percentage allocation of SWP funds, 2019-20 academic year

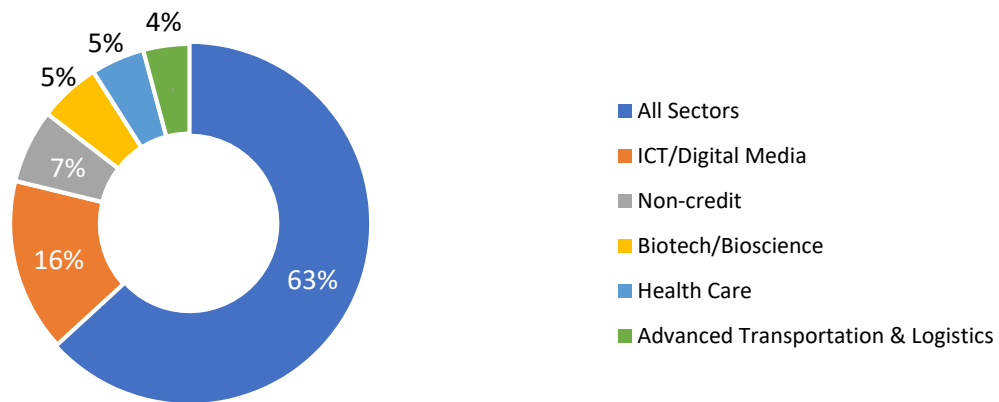


Exhibit B2. Summary of Los Angeles regional SWP projects, 2019-20⁵⁸

Project	Description	2019-20 Investment
<i>Business Engagement Job Placement</i>	This project aimed to establish a consistent process for how employers work with the Los Angeles regional colleges and how students access job/internship placement services. With Los Angeles Harbor College as the lead, the project hinged upon a collaboration among 17 regional community colleges.	\$1,993,250
<i>California Cloud Computing</i>	The California Cloud Workforce regional SWP project began in the 2017-18 funding year. Amazon Web Services partnered with Santa Monica College to establish an industry aligned 15-unit certificate in cloud computing with planning and stakeholder engagement to establish a regional program and presence. For 2019-20, the regional project built out job preparedness and career pathways with high schools. The project expanded work-based learning for cloud technologies and job preparedness, such as work-based learning and certification preparation as colleges take their initial certificate to a full associate degree.	\$1,105,000
<i>Career Pathways Specialist</i>	This ongoing program provides funding and support for the 19 community colleges to develop and revise career pathways leading to	\$3,123,750

⁵⁸ Summaries of LA SWP Projects for 2016-2017, 2017-2018, and 2018-2019 are available at www.laocrc.org.

Project	Description	2019-20 Investment
	entry-level employment. In addition to facilitating K-12 alignment for career pathways, the Career Pathways Specialist Program has incorporated work-based learning strategies into identified career pathways. A website with a CE matrix that maps programs offered by community colleges also has been created. Functioning as a clearinghouse of programs, the Career Technical Education Matrix has 15 sectors that can be searched by college or career pathway (program).	
<i>Center for a Competitive Workforce (CCW)</i>	A strategic partnership among the 19 Los Angeles regional colleges, LA/OC COE, and numerous workforce and industry stakeholders, CCW produces cutting-edge economic and labor market intelligence reports and convenes industry advisory workforce development councils. Created as an extension of conversations initiated in 2017 during the regional planning process, CCW addresses a need for more cross-collaboration between industry and education and actionable intelligence to close gaps in workforce training. Since 2017, the center has conducted extensive data analysis and research into critical industries driving economic growth in the region and released numerous in-depth reports, handouts, and presentations that provide insights into the labor market, where it is headed, and what programs and training are needed to meet future workforce demand. The center engages employers individually and collectively, and convenes advisory councils to support stronger—and more aligned and integrated—regional business engagement strategies.	\$1,530,000
<i>Improving Regional Outcomes through Noncredit Supports</i>	This collaborative project with the Los Angeles regional colleges integrated noncredit support for completions and transitions to CE credit pathways and/or employment that align with state and federal metrics. Beginning in 2016-17, the consortium allocated funding for this project which has focused on developing and integrating noncredit supports into guided pathways across all partner colleges. These supports included career exploration, mirrored courses, preparation for CE disciplines, noncredit pathways and on-ramps to credit CE programs, and collaboration with workforce agencies. Another facet of the project was mapping noncredit pathways from high schools and/or adult schools to community colleges and employment.	\$1,020,000
<i>LA Bioscience Collaborative</i>	The collaborative was formed to increase the supply of students entering middle-skill jobs in biosciences, chemical technology, or biomanufacturing to meet industry workforce demand. Launched in 2016-17, the collaborative increased the training capacity of 16 partner colleges through stackable certificate programs, creating work-based learning and/or dual enrollment opportunities for high school students and basic skills learners, and marketing the opportunities that biomanufacturing and biotechnology education offers to students.	\$850,000
<i>LA Regional Nursing Curriculum Consortium</i>	The LA Regional Nursing Curriculum Consortium was formed to ensure that graduates with Associate Degrees in Nursing (ADNs) are preferred employees for regional health care employers by enabling students to complete an ADN and a Bachelor of Science Degree in Nursing (BSN)	\$742,050

Project	Description	2019-20 Investment
	concurrently. The consortium included Los Angeles Region Community College Associate Degree Nursing program leaders and faculty to develop a universal ADN curriculum, integrated with BSN curriculum to enable students to complete an ADN and BSN concurrently. This pathway to a Baccalaureate Nursing degree was designed to promote equity and be accessible to students from disadvantaged backgrounds.	
LA Regional Strategy Innovation, and Marketing	In recent years, for-profit schools and market-driven non-profits and educational institutions have grown their market share, contributing to community college declines. This project allocated resources, activities, and objectives to counteract this trend and used an innovative brand management approach to marketing. Brand management has three essential pillars: strategy, innovation, and marketing. The project's strategy piece involved convening with Los Angeles workforce stakeholders (industry, CCW, LAEDC), community college partners, and contracted consultants to conduct focus groups and research, and gather and integrate insights into areas affecting regional innovation and marketing. The innovation piece involved engaging industry-recognized market research firms to conduct in-depth market research. The marketing campaign integrated analysis and research from the strategy and innovation pillars. In October 2019, the LA-SIM project brought the release of the website www.CCLA.com , which features the 19 Los Angeles community colleges and facilitates connection to points of contact at each campus.	\$3,038,301
Regional NetLab Hub and Cybersecurity	This project addressed employment gaps in information technology and cybersecurity to meet the need for personnel with hands-on experience in a variety of computer operating systems, networking equipment, and application software. What began as a consortium composed of Los Angeles and Orange County community colleges grew to encompass several initiatives—engaging industry partners about in-demand skills, knowledge, and abilities, and internships/work experience opportunities; designing certificates and degrees that meet industry needs; building the capacity and infrastructure of a remote, virtual NetLab Hub for colleges; and developing an information technology and cybersecurity pipeline between K-12 and higher education providers.	\$1,286,023
Regional Transportation Workforce Collaborative	Changing workforce needs prompted the creation of the collaborative which focused on increasing student completions and employment outcomes, addressing industry needs, strengthening related pathways and programs, curriculum alignment, and increasing the success and representation of underrepresented student populations, including women.	\$637,479
Total		\$15,325,853

Appendix C. TOP Codes by CCCCCO Priority and Emerging Sector for Programs Offered in the Region

Exhibit C1. Advanced manufacturing TOP codes

0924.00* Engineering Technology, General (requires Trigonometry)
 0934.00* Electronics and Electric Technology
 0934.10* Computer Electronics
 0934.20* Industrial Electronics
 0934.80* Laser and Optical Technology
 0936.00* Printing and Lithography
 0943.00* Instrumentation Technology
 0945.00* Industrial Systems Technology and Maintenance
 0950.00* Aeronautical and Aviation Technology
 0953.30* Electrical, Electronic, and Electro-Mechanical Drafting
 0953.40* Mechanical Drafting
 0954.20* Plastics and Composites
 0956.00* Manufacturing and Industrial Technology
 0956.30* Machining and Machine Tools
 0956.50* Welding Technology
 0957.30* Surveying

Exhibit C2. Advanced transportation and logistics TOP codes

0510.00* Logistics and Materials Transportation
 0947.00* Diesel Technology
 0947.20* Heavy Equipment Maintenance
 0947.30* Heavy Equipment Operation
 0947.40* Railroad and Light Rail Operations
 0948.00* Automotive Technology
 0948.30* Motorcycle, Outboard and Small Engine Repair
 0948.40* Alternative Fuels and Advanced Transportation Technology
 0949.00* Automotive Collision Repair
 0950.10* Aviation Airframe Mechanics
 0950.20* Aviation Powerplant Mechanics
 3020.10* Aviation and Airport Management
 3020.20* Piloting
 3020.30* Air Traffic Control

Exhibit C3. Business and entrepreneurship TOP codes

0501.00* Business and Commerce, General
 0502.00* Accounting
 0502.10* Tax Studies
 0505.00* Business Administration
 0506.00* Business Management
 0506.30* Management Development and Supervision
 0506.40* Small Business and Entrepreneurship
 0509.00* Marketing and Distribution
 0509.10* Advertising
 0509.40* Sales and Salesmanship
 0511.00* Real Estate
 0512.00* Insurance
 0514.10* Legal Office Technology
 0518.00* Customer Service
 3007.00* Cosmetology and Barbering

Exhibit C4. Energy, construction, and utilities TOP codes

0201.00* Architecture and Architectural Technology
 0934.40* Electrical Systems and Power Transmission
 0946.00* Environmental Control Technology
 0946.10* Energy Systems Technology
 0952.00* Construction Crafts Technology
 0952.10* Carpentry
 0952.20* Electrical
 0952.50* Mill and Cabinet Work
 0953.00* Drafting Technology
 0953.10* Architectural Drafting
 0953.20* Civil Drafting
 0956.40* Sheet Metal and Structural Metal
 0957.00* Civil and Construction Management Technology
 0957.20* Construction Inspection
 0958.00* Water and Wastewater Technology
 2102.10* Public Works

Exhibit C5. Global trade TOP codes

0508.00* International Business and Trade

Exhibit C6. Health TOP codes

0514.20* Medical Office Technology
 1205.00* Medical Laboratory Technology
 1205.10* Phlebotomy
 1208.00* Medical Assisting
 1208.10* Clinical Medical Assisting
 1208.20* Administrative Medical Assisting
 1210.00* Respiratory Care/Therapy
 1214.00* Orthopedic Assistant
 1215.00* Electrocardiography
 1217.00* Surgical Technician
 1220.00* Speech/Language Pathology and Audiology
 1221.00* Pharmacy Technology
 1222.00* Physical Therapist Assistant
 1223.00* Health Information Technology
 1223.10* Health Information Coding
 1225.00* Radiologic Technology
 1228.00* Athletic Training and Sports Medicine
 1230.00* Nursing
 1230.10* Registered Nursing
 1230.20* Licensed Vocational Nursing
 1230.30* Certified Nurse Assistant
 1230.80* Home Health Aide
 1239.00* Psychiatric Technician
 1240.10* Dental Assistant
 1240.20* Dental Hygienist
 1250.00* Emergency Medical Services
 1251.00* Paramedic
 1261.00* Community Health Care Worker
 1306.00* Nutrition, Foods, and Culinary Arts
 1306.20* Dietetic Services and Management
 1306.60* Dietetic Technology
 1309.00* Gerontology
 2104.40* Alcohol and Controlled Substances

Exhibit C7. ICT/Digital Media TOP codes

0514.00* Office Technology/Office Computer Applications

0602.00* Journalism

0604.00* Radio and Television

0604.10* Radio

0604.20* Television (including combined TV/Film/Video)

0604.30* Broadcast Journalism

0610.00* Mass Communications

0612.20* Film Production

0614.00* Digital Media

0614.10* Multimedia

0614.20* Electronic Game Design

0614.30* Website Design and Development

0614.40* Animation

0614.50* Desktop Publishing

0614.60* Computer Graphics and Digital Imagery

0701.00* Information Technology, General

0702.00* Computer Information Systems

0702.10* Software Applications

0707.00* Computer Software Development

0707.10* Computer Programming

0707.30* Computer Systems Analysis

0708.00* Computer Infrastructure and Support

0708.10* Computer Networking

0708.20* Computer Support

0709.00* World Wide Web Administration

0709.10* E-Commerce (Technology emphasis)

0799.00* Other Information Technology

0934.30* Telecommunications Technology

1005.00* Commercial Music

1012.00* Applied Photography

1013.00* Commercial Art

1030.00* Graphic Art and Design

2206.10* Geographic Information Systems

Exhibit C8. Life Sciences/biotech TOP codes

0430.00* Biotechnology and Biomedical Technology
0934.60* Biomedical Instrumentation
0954.00* Chemical Technology
0955.00* Laboratory Science Technology

Exhibit C9. Retail, hospitality, and tourism TOP codes

0506.50* Retail Store Operations and Management
0514.40* Office Management
0835.70* Aquatics and Lifesaving
1301.00* Family and Consumer Sciences, General
1301.10* Consumer Services
1303.00* Fashion
1303.10* Fashion Design
1306.30* Culinary Arts
1307.00* Hospitality
1307.10* Restaurant and Food Services and Management
1307.20* Lodging Management
3020.40* Flight Attendant

Appendix D. Top 10 Occupations for Each Priority and Emerging Sector with Wages

Exhibit D1. Advanced manufacturing top occupations

Occupation	Annual Openings	Entry-Level Hourly Wage
First-Line Supervisors of Production and Operating Workers	1,431	\$20.53
Machinists	1,104	\$15.84
Aircraft Mechanics and Service Technicians	608	\$25.96
Industrial Machinery Mechanics	575	\$19.27
Electrical and Electronics Engineering Technicians	346	\$21.46
Civil Engineering Technicians	218	\$27.26
Engineering Technicians, Except Drafters, All Other	189	\$24.42
Electrical and Electronics Repairers, Commercial and Industrial Equipment	124	\$20.11
Mechanical Drafters	121	\$20.94
Surveying and Mapping Technicians	110	\$24.82

Exhibit D2. Advanced transportation and logistics top occupations

Occupation	Annual Openings	Entry-Level Hourly Wage
Production, Planning, and Expediting Clerks	2,084	\$17.41
First-line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	1,546	\$18.68
Cargo and Freight Agents	799	\$16.74
Logisticians	717	\$30.57
Aircraft Mechanics and Service Technicians	608	\$25.96
Bus and Truck Mechanics and Diesel Engine Specialists	542	\$20.36
Transportation, Storage, and Distribution Managers	519	\$33.54
Industrial Production Managers	396	\$34.98
Mobile Heavy Equipment Mechanics, Except Engines	327	\$22.55
Commercial Pilots	196	\$32.33

Exhibit D3. Business and entrepreneurship top occupations

Occupation	Annual Openings	Entry-Level Hourly Wage
Bookkeeping, Accounting, and Auditing Clerks	6,870	\$17.14
First-Line Supervisors of Office and Administrative Support Workers	5,223	\$22.25
Sales Representatives, Services, All Other	5,106	\$17.14
Business Operations Specialists, All Other	5,057	\$25.23
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	4,974	\$17.54
Insurance Sales Agents	2,370	\$17.71
Real Estate Sales Agents	1,807	\$15.91
Graphic Designers	1,448	\$17.38
Buyers and Purchasing Agents	1,407	\$23.31
First-Line Supervisors of Non-Retail Sales Workers	1,204	\$16.56

Exhibit D4. Energy, construction, and utilities top occupations

Occupation	Annual Openings	Entry-Level Hourly Wage
Electricians	2,023	\$22.17
First-Line Supervisors of Construction Trades and Extraction Workers	1,914	\$24.96
Plumbers, Pipefitters, and Steamfitters	1,579	\$16.20
Construction Managers	1,012	\$21.31
First-Line Supervisors of Mechanics, Installers, and Repairers	960	\$29.49
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	799	\$17.69
Cost Estimators	644	\$23.77
Construction and Building Inspectors	397	\$33.86
Architectural and Civil Drafters	352	\$24.44
Electrical and Electronics Engineering Technicians	346	\$21.46

Exhibit D5. Global trade top occupations

Occupation	Annual Openings	Entry-Level Hourly Wage
Business Operations Specialists, All Other	5,057	\$25.23
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	4,974	\$17.54
Buyers and Purchasing Agents	1,407	\$23.31

Exhibit D6. Health top occupations

Occupation	Annual Openings	Entry-Level Hourly Wage
Registered Nurses	6,470	\$38.82
Medical Secretaries	2,916	\$15.62
Social and Human Service Assistants	2,693	\$16.05
Fitness Trainers and Aerobics Instructors	2,344	\$16.49
Licensed Practical and Licensed Vocational Nurses	2,125	\$21.26
Pharmacy Technicians	1,010	\$15.69
Clinical Laboratory Technologists and Technicians	742	\$17.79
Health Technologists and Technicians, All Other	724	\$17.87
Medical Records and Health Information Technicians	504	\$16.00
Dental Hygienists	442	\$39.91

Exhibit D7. ICT/digital media top occupations

Occupation	Annual Openings	Entry-Level Hourly Wage
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	9,030	\$15.91
First-Line Supervisors of Office and Administrative Support Workers	5,223	\$22.25
Producers and Directors	2,319	\$28.43
Executive Secretaries and Executive Administrative Assistants	2,233	\$27.69
Computer User Support Specialists	1,884	\$21.25
Graphic Designers	1,448	\$17.38
Computer Occupations, All Other	1,301	\$27.23
Film and Video Editors	1,279	\$23.47
Administrative Services Managers	1,056	\$38.29
Audio and Video Equipment Technicians	1,035	\$16.46

Exhibit D8. Life sciences/biotech top occupations

Occupation	Annual Openings	Entry-Level Hourly Wage
Clinical Laboratory Technologists and Technicians	742	\$17.79
Life, Physical, and Social Science Technicians, All Other	235	\$17.39
Medical Equipment Repairers	157	\$19.64
Chemical Equipment Operators and Tenders	79	\$16.34
Chemical Plant and System Operators	45	\$16.09

Exhibit D9. Retail, hospitality, and tourism top occupations

Occupation	Annual Openings	Entry-Level Hourly Wage
First-Line Supervisors of Office and Administrative Support Workers	5,223	\$22.25
Business Operations Specialists, All Other	5,057	\$25.23
Social and Human Service Assistants	2,693	\$16.05
Flight Attendants	1,722	\$21.70
Buyers and Purchasing Agents	1,407	\$23.31
Administrative Services Managers	1,056	\$38.29
Travel Agents	554	\$17.06
Fashion Designers	459	\$23.10
Lodging Managers	122	\$16.22
Cooks, Private Household	11	\$17.28

Appendix E. LaunchBoard Metrics for Each Priority and Emerging Sector

E1. Advanced manufacturing metrics

ADVANCED MANUFACTURING	2015-16	2016-17	2017-18	2018-19
Strong Workforce Program Students	8,612	8,667	8,211	8,182
SWP Students Who Earned 9 or More Career Education Units in the District in a Single Year	28%	26%	25%	25%
SWP Students Who Earned a Degree or Certificate or Attained Apprenticeship Journey Status	600	693	686	765
Students Who Attained a Noncredit Workforce Milestone in a Single Year	67%	75%	74%	28%
SWP Students Who Transferred to a Four-Year Postsecondary Institution	136	183	142	
Median Annual Earnings for SWP Exiting Students	\$34,461	\$36,658	\$37,168	
Median Change in Earnings for SWP Exiting Students	33%	35%	34%	
SWP Exiting Students Who Attained the Living Wage	55%	58%	59%	
SWP Students with a Job Closely Related to Their Field of Study	68%	72%		

E2. Advanced transportation and logistics metrics

ADVANCED TRANSPORTATION & LOGISTICS	2015-16	2016-17	2017-18	2018-19
Strong Workforce Program Students	6,402	6,255	6,039	6,376
SWP Students Who Earned 9 or More Career Education Units in the District in a Single Year	39%	39%	39%	39%
SWP Students Who Earned a Degree or Certificate or Attained Apprenticeship Journey Status	637	628	740	725
Students Who Attained a Noncredit Workforce Milestone in a Single Year			10%	15%
SWP Students Who Transferred to a Four-Year Postsecondary Institution	80	66	59	
Median Annual Earnings for SWP Exiting Students	\$26,865.73	\$29,106.89	\$31,086.00	
Median Change in Earnings for SWP Exiting Students	45%	41%	40%	
SWP Exiting Students Who Attained the Living Wage	40%	43%	48%	
SWP Students with a Job Closely Related to Their Field of Study	66%	69%		

E3. Business and entrepreneurship metrics

BUSINESS & ENTREPRENEURSHIP	2015-16	2016-17	2017-18	2018-19
Strong Workforce Program Students	56,907	56,533	55,196	55,827
SWP Students Who Earned 9 or More Career Education Units in the District in a Single Year	25%	26%	26%	26%
SWP Students Who Earned a Degree or Certificate or Attained Apprenticeship Journey Status	3,436	4,191	4,579	5,062
Students Who Attained a Noncredit Workforce Milestone in a Single Year	565	681	589	871
SWP Students Who Transferred to a Four-Year Postsecondary Institution	4,000	4,414	4,397	
Median Annual Earnings for SWP Exiting Students	\$32,524.04	\$33,012.63	\$34,852.00	
Median Change in Earnings for SWP Exiting Students	28%	26%	27%	
SWP Exiting Students Who Attained the Living Wage	51%	52%	55%	
SWP Students with a Job Closely Related to Their Field of Study	72%	73%		

E4. Energy, construction, and utilities metrics

ENERGY, CONSTRUCTION & UTILITIES	2015-16	2016-17	2017-18	2018-19
Strong Workforce Program Students	14,567	14,888	13,702	13,948
SWP Students Who Earned 9 or More Career Education Units in the District in a Single Year	24%	23%	22%	24%
SWP Students Who Earned a Degree or Certificate or Attained Apprenticeship Journey Status	847	851	934	879
Students Who Attained a Noncredit Workforce Milestone in a Single Year	630	912	912	543
SWP Students Who Transferred to a Four-Year Postsecondary Institution	329	358	346	
Median Annual Earnings for SWP Exiting Students	\$41,461.47	\$41,908.13	\$44,352.00	
Median Change in Earnings for SWP Exiting Students	32%	35%	42%	
SWP Exiting Students Who Attained the Living Wage	62%	64%	67%	
SWP Students with a Job Closely Related to Their Field of Study	72%	76%		

E5. Global trade metrics

GLOBAL TRADE	2015-16	2016-17	2017-18	2018-19
Strong Workforce Program Students	1,044	1,039	1,123	1,181
SWP Students Who Earned 9 or More Career Education Units in the District in a Single Year	41%	45%	46%	49%
SWP Students Who Earned a Degree or Certificate or Attained Apprenticeship Journey Status	46	38	30	29
Students Who Attained a Noncredit Workforce Milestone in a Single Year				
SWP Students Who Transferred to a Four-Year Postsecondary Institution	41	44	55	
Median Annual Earnings for SWP Exiting Students	\$31,624.10	\$34,555.90	\$32,864.00	
Median Change in Earnings for SWP Exiting Students	45%	34%	49%	
SWP Exiting Students Who Attained the Living Wage	49%	54%	53%	
SWP Students with a Job Closely Related to Their Field of Study	76%	63%		

E6. Health metrics

HEALTH	2015-16	2016-17	2017-18	2018-19
Strong Workforce Program Students	30,398	31,348	30,972	32,745
SWP Students Who Earned 9 or More Career Education Units in the District in a Single Year	27%	26%	26%	25%
SWP Students Who Earned a Degree or Certificate or Attained Apprenticeship Journey Status	2,452	2,289	2,304	2,435
Students Who Attained a Noncredit Workforce Milestone in a Single Year	1,068	1,142	1,217	1,803
SWP Students Who Transferred to a Four-Year Postsecondary Institution	1,784	2,064	2,066	
Median Annual Earnings for SWP Exiting Students	\$28,533.09	\$29,851.63	\$30,228.00	
Median Change in Earnings for SWP Exiting Students	39%	39%	42%	
SWP Exiting Students Who Attained the Living Wage	44%	46%	47%	
SWP Students with a Job Closely Related to Their Field of Study	82%	80%		

E7. ICT/digital media metrics

ICT/DIGITAL MEDIA	2015-16	2016-17	2017-18	2018-19
Strong Workforce Program Students	66,680	64,525	61,876	61,819
SWP Students Who Earned 9 or More Career Education Units in the District in a Single Year	21%	22%	23%	23%
SWP Students Who Earned a Degree or Certificate or Attained Apprenticeship Journey Status	1,143	1,189	1,307	1,523
Students Who Attained a Noncredit Workforce Milestone in a Single Year	2,209	2,306	2,337	2,837
SWP Students Who Transferred to a Four-Year Postsecondary Institution	4,020	4,346	4,505	
Median Annual Earnings for SWP Exiting Students	\$26,143.21	\$27,542.9	\$28,188.00	
Median Change in Earnings for SWP Exiting Students	29%	29%	29%	
SWP Exiting Students Who Attained the Living Wage	40%	43%	43%	
SWP Students with a Job Closely Related to Their Field of Study	59%	62%		

E8. Life sciences/biotech metrics

LIFE SCIENCES/BIOTECH	2015-16	2016-17	2017-18	2018-19
Strong Workforce Program Students	279	188	214	247
SWP Students Who Earned 9 or More Career Education Units in the District in a Single Year	52%	33%	25%	24%
SWP Students Who Earned a Degree or Certificate or Attained Apprenticeship Journey Status	46	56	63	60
Students Who Attained a Noncredit Workforce Milestone in a Single Year				12
SWP Students Who Transferred to a Four-Year Postsecondary Institution		11	12	
Median Annual Earnings for SWP Exiting Students	\$38,776.61	\$34,686.23	\$52,016.00	
Median Change in Earnings for SWP Exiting Students	17%	37%	36%	
SWP Exiting Students Who Attained the Living Wage	66%	53%	79%	
SWP Students with a Job Closely Related to Their Field of Study	82%			

E9. Retail, hospitality, and tourism metrics

RETAIL, HOSPITALITY & TOURISM	2015-16	2016-17	2017-18	2018-19
Strong Workforce Program Students	11,093	10,391	10,015	9,975
SWP Students Who Earned 9 or More Career Education Units in the District in a Single Year	30%	29%	29%	30%
SWP Students Who Earned a Degree or Certificate or Attained Apprenticeship Journey Status	666	751	672	652
Students Who Attained a Noncredit Workforce Milestone in a Single Year	434	526	662	730
SWP Students Who Transferred to a Four-Year Postsecondary Institution	288	305	288	
Median Annual Earnings for SWP Exiting Students	\$25,493.38	\$27,013.35	\$27,930.00	
Median Change in Earnings for SWP Exiting Students	22%	28%	25%	
SWP Exiting Students Who Attained the Living Wage	38%	42%	43%	
SWP Students with a Job Closely Related to Their Field of Study	67%	73%		

Appendix F. References Cited

American Community Survey. U.S. Census Bureau. <https://www.census.gov/programs-surveys/acs>.

CCCCO Vision for Success. California Community Colleges Chancellor's Office. <https://www.cccco.edu/-/media/CCCCO-Website/About-Us/Reports/Files/vision-for-success.ashx>.

California Community Colleges Chancellor's Office, Management Information Systems Data Mart. https://datamart.cccco.edu/Students/Student_Term_Annual_Count.aspx.

"California Exports Falter in Latest Numbers." Beacon Economics. October 2020. <https://beaconecon.com/publications/california-trade-report/>.

California Education Code, Title 3, Division 7, Part 54.5, Section 88827. https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=EDC§ionNum=88827.

"Call to Action Webinar." California Community Colleges Chancellor's Office. June 3, 2020. <https://www.youtube.com/watch?v=hkht6TAGgUE>.

Cornfield, Greg. "Logistics firm signs 132K SF warehouse lease in LA County." Commercial Observer. September 23, 2020. <https://commercialobserver.com/2020/09/logistics-firm-signs-132k-sf-warehouse-lease-in-los-angeles-county-industrial/>.

DiMartino, Mediha. "Port of LA sees cargo gains for July." Los Angeles Business Journal. August 13, 2020. <https://labusinessjournal.com/news/2020/aug/13/port-la-sees-cargo-gains-july/>.

"Employment Impact of COVID-19: Southern California." LAEDC. April 21, 2020. https://ewddlacity.com/images/reports/ap21/APpy21_03EconForecast.pdf.

Eyler, Robert. "Ask an Economist (COVID-19) – September 21, 2020." Chabin Concepts. <https://www.chabinconcepts.com/video>.

"Foothill Workforce Development Board Draft Local Plan." Foothill Workforce Development Board. February 13, 2019. <https://fwdbworks.org/documents/FWDB%20Local%20Plan%20Draft%20Final.pdf>.

"Foreign Direct Investment in California, 2020." World Trade Center Los Angeles. May 25, 2020. <https://laedc.org/wp-content/uploads/2020/05/WTCLA-2020-FDI-Report-FINAL-c.pdf>.

“Health Care Services in the LA Basin: A High-growth Industry.” Center for a Competitive Workforce. May 2018. <https://competitiveworkforce.la/health-care-services>.

“Industry Sector Crosswalk.” California Community Colleges Chancellor’s Office. 2020 <https://www.cccco.edu/About-Us/Chancellors-Office/Divisions/Workforce-and-Economic-Development/Strong-Workforce-Program/Events/K12-SWP-Industry-Sector-Crosswalk>.

Jainchill, Johanna. “The election and travel’s big ask.” Travel Weekly. November 2, 2020. <https://www.travelweekly.com/Travel-News/Government/The-election-and-travels-big-ask>.

“Labor Insight Real-Time Labor Market Information Tool.” Burning Glass Technologies. 2020. <https://www.burning-glass.com/products/labor-insight/>.

“Letter to California Community College Family.” California Community Colleges Chancellor’s Office. June 5, 2020. <https://www.cccco.edu/-/media/CCCCO-Website/Files/Communications/dear-california-community-colleges-family>.

Littlejohn, Donna. “Long Beach Port cargo marks record August,” The Press-Telegram. September 11, 2020. <https://www.presstelegram.com/2020/09/11/long-beach-port-cargo-marks-record-month-in-august>.

“Local Workforce Development Plan 2017-2020.” Verdugo Workforce Development Board. March 2017. <https://oal.ca.gov/wp-content/uploads/sites/43/2017/04/Verdugo-Exec-Summary-and-Local-Plan.pdf>.

“Los Angeles County Workforce Development Board 2017-2020 Local Area Plan.” Los Angeles County Workforce Development Board. March 2017. <https://workforce.lacounty.gov/wp-content/uploads/2017/03/Revised-Los-Angeles-County-Local-Plan3-9-17.pdf>.

“Los Angeles County’s Economic Base and COVID-19.” Presentation made by Shannon Sedgwick, director of the LAEDC Institute for Applied Economics, during the LA Regional Stakeholder Convening. August 17, 2020.

“Los Angeles County Emergency Operations Center Covid-19 Update.” County of Los Angeles, September 1, 2020. https://content.govdelivery.com/attachments/CALACOUNTY/2020/09/01/file_attachments/1532034/9.1.20_COVID-19_Update.pdf.

“Monthly Data Release.” California Employment Development Department. 2020. <https://www.labormarketinfo.edd.ca.gov/data/monthly-data-release.html>.

“Pacific Gateway Workforce Innovation Network Local Plan 2017-2020.” Pacific Gateway Workforce Innovation Network. 2017. <https://www.pacific-gateway.org/localplan2017/local%20plan%202017-2020.pdf>.

Pietsch, Bryan. “20.5 million people lost their jobs in April. Here are the 10 jobs that were hit the hardest.” Business Insider. May 12, 2020. <https://www.businessinsider.com/jobs-industries-careers-hit-hardest-by-coronavirus-unemployment-data-2020-5>.

Popken, Ben. “August jobs report may appear rosy, but most job cuts have yet to hit, economists warn.” NBC News. September 4, 2020. <https://www.nbcnews.com/business/economy/august-jobs-report-may-appear-rosy-most-job-cuts-have-n1239323>.

“Postsecondary to Prosperity Dashboard: Los Angeles,” California Competes. 2020. <https://californiacompetes.org/p2p/regions?region=los-angeles>.

“Regional Plan 2017-2020.” Los Angeles Basin Regional Planning Unit. February 1, 2017. https://workforce.lacounty.gov/wp-content/uploads/2017/02/LA-RPU-Draft-Regional-Plan_for-PublicComment.pdf.

“Resilient Jobs: Top Jobs During the Great Depression and COVID-19 Pandemic.” Los Angeles/Orange County Center of Excellence. October 2020. http://coeccc.net/reports/Resilient_Jobs_1.

“Roadmap to Recovery.” Los Angeles County. 2020. <https://covid19.lacounty.gov/recovery/>.
Roosevelt, Margot. “California’s economic recovery will be like a slow ‘Nike swoosh.’” The Los Angeles Times. June 24, 2020. <https://www.latimes.com/business/story/2020-06-24/la-fi-california-economic-forecast-coronavirus-2020>.

“SELACO WDB Local Plan PY 17-21.” Southeast Los Angeles County (SELACO) Workforce Development Board. March 11, 2019. <https://www.selacowdb.com/wp-content/uploads/2018/10/SELACO-WDB-Local-Plan-Modification-PY-17-21.pdf>.

Silver-Greenberg, Jessica, David Enrich, Jesse Drucker and Stacy Cowley. “Large, Troubled Companies Got Bailout Money in Small-Business Loan Program.” April 26, 2020. <https://www.nytimes.com/2020/04/26/business/coronavirus-small-business-loans-large-companies.html>.

“South Bay Workforce Investment Board Local Workforce Development Plan 2017-2020.” South Bay Workforce Investment Board. No publishing date available. https://12fb482c-642a-18a0-d2e6-789a72c3925c.filesusr.com/ugd/b8c0dc_402db88f5c18477ea1981da5400310a5.pdf.

“Supplemental data measuring the effects of the coronavirus (COVID-19) pandemic on the labor market.” Labor Force Statistics from the Current Population Survey, Bureau of Labor Statistics. October 2, 2020. <https://www.bls.gov/cps/effects-of-the-coronavirus-covid-19-pandemic.htm>.

Smith, Kevin. “Logistics, e-commerce firms hiring 2,600 Inland Empire workers.” Inland Daily Bulletin. September 30, 2020. <https://www.dailybulletin.com/2020/09/30/logistics-e-commerce-firms-hiring-2600-inland-empire-workers/>.

“Technology and the Post COVID Economy.” UCLA Anderson Forecast, UCLA Anderson School of Management. September 30, 2020. <https://www.anderson.ucla.edu/centers/ucla-anderson-forecast/september-2020-economic-outlook>.

Thompson, Derek. “The Workforce Is about to Change Dramatically.” The Atlantic. August 6, 2020. <https://www.theatlantic.com/ideas/archive/2020/08/just-small-shift-remote-work-could-change-everything/614980/>.

Thomson-DeVeaux, Amelia, Neil Paine, and Julia Wolfe. “The easy part of the economic recovery might be over.” FiveThirtyEight. September 4, 2020. <https://fivethirtyeight.com/features/the-easy-part-of-the-economic-recovery-might-be-over/>.

“US motion picture, sound recording workers hit hard by job losses in April.” S&P Global Market Intelligence. May 11, 2020. <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/us-motion-picture-sound-recording-workers-hit-hard-by-job-losses-in-april-58565221>.

“WDB Plans and Reports.” City of Los Angeles Workforce Development Board. 2020. <https://www.wiblacity.org/index.php/about-the-wdb/wdb-reports>.

“Which Workers Have Been Most Affected by the COVID-19 Pandemic?” On the Economy Blog, Federal Reserve Bank of St. Louis. July 30, 2020. <https://www.stlouisfed.org/on-the-economy/2020/july/workers-affected-covid19-pandemic>.

“Worker Adjustment and Retraining Notification (WARN) Information for Employers.” California Employment Development Department. 2020. https://edd.ca.gov/Jobs_and_Training/Layoff_Services_WARN.htm.

“Yelp: Local Economic Report.” Yelp. September 2020. <https://www.yelpeconomicaverage.com/business-closures-update-sep-2020>.

“Vision Resource Center.” California Community Colleges Chancellor’s Office. 2020. <https://visionresourcecenter.cccco.edu/>.

“2017-2020 Workforce and Opportunity Act Regional Plan.” Los Angeles Basin Regional Planning Unit. February 2017. https://workforce.lacounty.gov/wp-content/uploads/2017/02/LA-RPU-Draft-Regional-Plan_for-PublicComment.pdf.