

ABOUT THE CENTER FOR A COMPETITIVE WORKFORCE

Center for a Competitive Workforce links education and workforce partners to establish high-performing regional talent development systems in California for the rapidly changing industries that will dominate our economic future. The center's work addresses the talent gaps employers face and the supply of skilled graduates to meet projected workforce demand. CCW was founded as a Strong Workforce Program within the 19 Los **Angeles County community** colleges in the L.A.|O.C. Regional Consortium. Learn more: www.ccworkforce.org.

Professional Services Industry Outlook

A high-growth industry transcending disruption

The professional services industry is a major economic driver in the regional economy. With human creativity, problem solving and critical thinking as their backbone, many jobs in this industry have been largely insulated from disruption by technological advances and automation. Overall, 50,680 total job openings will be created in the industry in the Los Angeles Basin (Los Angeles and Orange counties) over the next five years, with employers seeking to fill many of those openings with middle-skill workers.

There is some urgency for the creation and expansion of community college programs targeting the professional services industry. A looming workforce shortage appears to be on the horizon. Based on regional community college completions, there could be an undersupply of 2,000 workers each year to fill job openings in the region through 2021. More than 6,300 annual openings are projected for middle-skill occupations in the industry. Yet, community college completions only totaled about 4,300 awards in the 2016-17 academic year.

To achieve the Strong Workforce Program co-equal goals the Center for a Competitive Workforce was established to structure, deploy and structurally integrate the following five-part program model:



ACQUIRE: Conduct economic research and applied analysis to better understand the region's targeted industries, their associated labor markets, growth occupations and five-year forecasts.

ENGAGE: Validate and amplify the quantitative research and analysis with primary research, including survey instruments and firm-level intelligence gathered through the Los Angeles County Economic Development Corporation (LAEDC) and Los Angeles Area Chamber of Commerce industry cluster councils.

DISTILL: Collect and refine data elicited through the above processes into translatable, useable information for consumption by the community colleges.

TRANSLATE: Connect quantitative research/analysis, primary research and firm-level intelligence to curriculum developers and other relevant decision makers at the community colleges.

DEVELOP: Customize new programs and courses through collaboration with industry professionals that correct, modernize or enhance critical competencies and/or skills training gaps.

Jobs With a Bright Future

15 Professional Services Occupations with Potential

Within professional services, occupations were identified that are fast growing, offer rewarding career paths and are well paid. All 15 occupations are middle-skill, requiring some education or training beyond a high school diploma, but less than a bachelor's degree.



GRAPHIC DESIGNERS

What they do: Design or create graphics for specific commercial or promotional needs.



PARALEGALS & LEGAL ASSISTANTS

What they do: Assist lawyers by investigating facts, preparing legal documents or researching legal precedent.



SECRETARIES & ADMINISTRATIVE ASSISTANTS, EXCEPT LEGAL, MEDICAL, AND EXECUTIVE

What they do: Perform administrative functions such as correspondence, appointments and maintaining files.



WEB DEVELOPERS

What they do: Design, create and modify websites.



NETWORK & COMPUTER SYSTEMS ADMINISTRATORS

What they do: Install, configure and support an organization's local area network (LAN), wide area network (WAN) and internet systems.



PREPARERS

What they do: Prepare tax returns for individuals or small businesses.



BILL & ACCOUNT COLLECTORS

What they do: Locate and notify customers of delinquent accounts to solicit payments.



VETERINARY TECHNOLOGISTS & TECHNICIANS

What they do: Perform medical tests for the diagnosis and treatment of diseases in animals.



COMPUTER USER SUPPORT SPECIALISTS

What they do: Provide technical assistance to computer users..



ARCHITECTURAL & CIVIL DRAFTERS

What they do: Prepare drawings of architectural and structural features for civil engineering projects.



INTERPRETERS & TRANSLATORS

What they do: Interpret oral or sign language, or translate written text from one language into another.



PAYROLL & TIMEKEEPING CLERKS

What they do: Compile and record employee time and payroll data.



CONSTRUCTION & BUILDING INSPECTORS

What they do: Inspect structures to determine structural soundness and compliance with specifications and regulations.



ENVIRONMENTAL SCIENCE & PROTECTION TECHNICIANS, INCLUDING HEALTH

What they do: Perform laboratory and field tests to monitor the environment and investigate sources of pollution.



CIVIL ENGINEERING TECHNICIANS

What they do: Apply principles of civil engineering to the construction and maintenance of structures and facilities.



Regional Talent Development Network

Colleges Leading the Region in Professional Services Training

The 28 community colleges in the Los Angeles Basin offer 30 programs related to professional services. Programs with the highest enrollments include accounting, paralegal and office technology/office computer applications.

| | COLLEGE | 2016-2017 DEGREES & CERTIFICATES |
|----|-----------------------------|----------------------------------|
| 1 | Cerritos College | 177 |
| 2 | Citrus College | 77 |
| 3 | Coastline Community College | 281 |
| 4 | Compton College | 16 |
| 5 | Cypress College | 91 |
| 6 | East Los Angeles College | 279 |
| 7 | El Camino College | 105 |
| 8 | Fullerton College | 118 |
| 9 | Glendale Community College | 128 |
| 10 | Golden West College | 115 |
| 11 | Irvine Valley College | 311 |
| 12 | Los Angeles City College | 137 |
| 13 | Los Angeles Harbor College | 45 |
| 14 | Los Angeles Mission College | 90 |

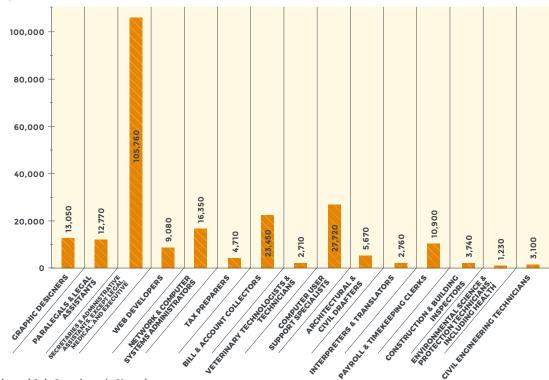
| | COLLEGE | 2016-2017 DEGREES & CERTIFICATES |
|----|--------------------------------|----------------------------------|
| 15 | Los Angeles Pierce College | 219 |
| 16 | Los Angeles Southwest College | 11 |
| 17 | Los Angeles Trade-Tech College | 145 |
| 18 | Los Angeles Valley College | 238 |
| 19 | Long Beach City College | 128 |
| 20 | Mt. San Antonio College | 470 |
| 21 | Orange Coast College | 130 |
| 22 | Pasadena City College | 269 |
| 23 | Rio Hondo College | 57 |
| 24 | Saddleback College | 157 |
| 25 | Santa Ana College | 200 |
| 26 | Santa Monica College | 141 |
| 27 | Santiago Canyon College | 25 |
| 28 | West Los Angeles College | 123 |

Where Will the Jobs Be?

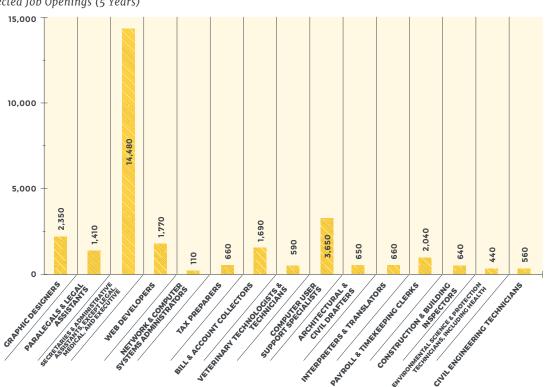
Middle-skill Occupations on the Upswing

Automation and artificial intelligence have disrupted the professional services industry, giving rise to new fields and causing some jobs to become obsolete. In-demand middle-skill occupations to take note of include: network and computer systems administrators, secretaries and administrative assistants, veterinary technologists and technicians, and environmental science and protection technicians.

Total Jobs (2016)



Projected Job Openings (5 Years)





Consulting Services Dominate

Management and technical consulting services accounts for

76,210 JOBS ALONE

Gig Economy

The number of contingent workers,

MORE THAN 300,000,

is almost equivalent to the number of payroll employees in the industry in the region.

Well Paid, in High Demand

How Professional Services Wages Stack Up

These professional services jobs pay solid wages and have a bright future for community college students in the region. They can support a family and improve standards of living. Professional services employees typically earn higher-than-average wages compared to the regional economy. Professional services employees earn, on average, \$65,030, more than the regional average across all industries.



Trends to Watch

The Future of the Professional Services Workforce

As the industry undergoes further technological transformation, occupations based on non-automatable, knowledge-heavy competencies are primed to take off. Opportunities are expected to flourish in the technology-based subsectors.



Sectors Vulnerable to Automation

Digitization, artificial intelligence and other forms of automation are disruptive forces. Architectural and engineering services is a susceptible subsector, projected to contract by nearly 10 percent by 2021. Advertising and PR also is expected to be affected by advances in digital media, with a 2.4 percent decline in employment projected.



STEM Rising

Within the industry, significant opportunities will exist for middle-skill jobs in science, math, technology and engineering (STEM) fields.



Technical Training Wanted

Professional services employers highly value technical training involving work-based learning, such as internships and job readiness skills.



Sectors Insulated from Automation

Occupations in management. scientific and technical consulting services represent a bright spot. Not only is employment expected to grow, but this field is relatively safe from automation. The same goes for computer systems design, specialized design, and other types of professional and technical consulting services.

