

Introduction

The COVID-19 pandemic has disrupted the workforce and the way we conduct business unlike any modern economic event. The Inland Empire/Desert Region Community Colleges are focused on creating training opportunities for students that lead to in-demand jobs with self-sustainable wages that are able to meet the employer's needs now and in the future. The Public Policy Institute of California (PPIC) developed a list of industry sectors that are essential to the continuity of functions critical to protecting communities. This list was further refined the occupations that staff these essential industries. This classification **critical workforce** occupations is vital in supporting the region's basic health, safety, and economic needs or may have the ability to social distance (PPIC).

For this study, **in-demand** occupations are projected to have **100 annual job openings or greater** over the next five years. The Family Needs Calculator estimates that a **self-sustainable wage** for a single adult with one school-age child is **\$21.78 per hour** or \$45,992 annually in Riverside County, \$21.24 per hour or \$44,867 annually in San Bernardino County. The higher hourly rate in Riverside County is used for the self-sustainability standard in this study. Occupations are categorized by education-level (secondary, community college, or four-year degree-level) and community college priority & emerging sector.

Community College-Level Critical Workforce Occupations

The following table displays community college-level (middle-skill) critical workforce occupations that are in-demand and offer a self-sustainable wage. This classification of occupations are in-demand, offer a self-sustainable wage, and are expected to continue working despite the on-going pandemic.

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#	Community College-Level Critical Workforce Occupations	Priority & Emerging Sectors	Annual Job Openings	Median Hourly Earnings
1	Heavy and Tractor-Trailer Truck Drivers	Advanced Transportation & Logistics	4,366	\$22.56
2	Carpenters	Energy, Construction & Utilities	2,497	\$22.54
3	Registered Nurses	Health	2,367	\$49.75
4	Electricians	Energy, Construction & Utilities	1,330	\$23.16
5	First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	Advanced Transportation & Logistics	1,216	\$27.06
6	First-Line Supervisors of Construction Trades and Extraction Workers	Energy, Construction & Utilities	1,042	\$29.59
7	Plumbers, Pipefitters, and Steamfitters	Energy, Construction & Utilities	817	\$25.71
8	Licensed Practical and Licensed Vocational Nurses	Health	774	\$26.94
9	Food Service Managers	Retail/Hospitality/Tourism	697	\$22.97
10	Production, Planning, and Expediting Clerks	Advanced Transportation & Logistics	619	\$22.31
11	Operating Engineers and Other Construction Equipment Operators	Energy, Construction & Utilities	571	\$39.50
12	Police and Sheriffs Patrol Officers	Public Services	553	\$48.95
13	Correctional Officers and Jailers	Public Services	497	\$39.35
14	First-Line Supervisors of Mechanics, Installers, and Repairers	Energy, Construction & Utilities	487	\$35.62
15	Bus and Truck Mechanics and Diesel Engine Specialists	Advanced Transportation & Logistics	448	\$23.55
16	Computer User Support Specialists	Information and Communication Technologies/Digital Media	374	\$27.81
17	Telecommunications Equipment Installers and Repairers, Except Line Installers	Energy, Construction & Utilities	350	\$26.60
18	Industrial Machinery Mechanics	Advanced Manufacturing	316	\$29.93
19	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	Agriculture, Water & Environmental Technology	284	\$22.18
20	Transportation, Storage, and Distribution Managers	Advanced Transportation & Logistics	269	\$40.98
21	Firefighters	Public Services	262	\$31.11
22	Farmers, Ranchers, and Other Agricultural Managers	Agriculture, Water & Environmental Technology	231	\$37.45
23	Payroll and Timekeeping Clerks	Business & Entrepreneurship	224	\$22.65
24	Mobile Heavy Equipment Mechanics, Except Engines	Advanced Transportation & Logistics	224	\$30.16
25	Structural Iron and Steel Workers	Energy, Construction & Utilities	222	\$32.01
26	Chefs and Head Cooks	Retail/Hospitality/Tourism	209	\$25.36
27	Sheet Metal Workers	Energy, Construction & Utilities	200	\$27.57
28	Construction and Building Inspectors	Energy, Construction & Utilities	199	\$40.62

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#	Community College-Level Critical Workforce Occupations	Priority & Emerging Sectors	Annual Job Openings	Median Hourly Earnings
29	Healthcare Support Workers, All Other	Health	179	\$22.40
30	Telecommunications Line Installers and Repairers	Energy, Construction & Utilities	159	\$25.59
31	Clinical Laboratory Technologists and Technicians	Health	156	\$25.60
32	Aircraft Mechanics and Service Technicians	Advanced Transportation & Logistics	154	\$34.89
33	Psychiatric Technicians	Health	154	\$33.61
34	Network and Computer Systems Administrators	Information and Communication Technologies/Digital Media	146	\$41.00
35	Respiratory Therapists	Health	145	\$35.33
36	Miscellaneous First-Line Supervisors, Protective Service Workers	Public Services	140	\$23.27
37	Web Developers and Digital Interface Designers	Information and Communication Technologies/Digital Media	138	\$24.08
38	Water and astewater Treatment Plant and System Operators	Energy, Construction & Utilities	137	\$33.59
39	Radiologic Technologists and Technicians	Health	131	\$38.16
40	Claims Adjusters, Examiners, and Investigators	Business & Entrepreneurship	131	\$37.51
41	Architectural and Civil Drafters	Agriculture, Water & Environmental Technology	125	\$27.05
42	Electrical and Electronic Engineering Technologists and Technicians	Advanced Manufacturing	111	\$29.63
43	Maintenance Workers, Machinery	Advanced Manufacturing	109	\$24.16
44	Computer Network Support Specialists	Information and Communication Technologies/Digital Media	107	\$28.68
45	Physical Therapist Assistants	Health	106	\$35.05
46	Surgical Technologists	Health	105	\$27.39
47	Electrical Power-Line Installers and Repairers	Energy, Construction & Utilities	100	\$42.43



Additional community college-level critical workforce occupations are available to students in the local economy. The occupations below represent jobs that do not meet the strict in-demand (100 or greater annual job openings) and/or self-sustainable wage (\$21.78 or greater per hour) criteria established in this study, but that are expected to have at least 50 annual job openings.

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#	Community College-Level Critical Workforce Occupations (criteria not met is underlined)	Priority & Emerging Sectors	Annual Job Openings	Median Hourly Earnings
1	Home Health and Personal Care Aides	Health	13,634	<u>\$12.85</u>
2	Bookkeeping, Accounting, and Auditing Clerks	Business & Entrepreneurship	1,928	\$20.31
3	Customer Service Representatives	Business & Entrepreneurship	2,716	<u>\$17.70</u>
4	Childcare Workers	Education	2,012	<u>\$13.01</u>
5	First-Line Supervisors of Retail Sales Workers	Business & Entrepreneurship	1,950	\$19.84
6	First-Line Supervisors of Food Preparation and Serving Workers	Retail/Hospitality/Tourism	1,896	<u>\$16.25</u>
7	Maintenance and Repair Workers, General	Energy, Construction & Utilities	1,690	\$19.68
8	Medical Assistants	Health	1,326	<u>\$16.01</u>
9	Automotive Service Technicians and Mechanics	Advanced Transportation & Logistics	1,319	\$19.32
10	Nursing Assistants	Health	1,155	\$16.23
11	Medical Secretaries and Administrative Assistants	Health	1,128	<u>\$17.76</u>
12	Dental Assistants	Health	831	<u>\$17.46</u>
13	Social and Human Service Assistants	Education	745	\$18.67
14	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	Energy, Construction & Utilities	578	\$20.30
15	Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other	Health	449	<u>\$20.95</u>
16	Tellers	Business & Entrepreneurship	399	<u>\$16.13</u>
17	Pharmacy Technicians	Health	391	<u>\$18.71</u>
18	Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers	Advanced Manufacturing	283	<u>\$15.90</u>
19	Emergency Medical Technicians and Paramedics	Public Services	274	<u>\$18.35</u>
20	First-Line Supervisors of Housekeeping and Janitorial Workers	Retail/Hospitality/Tourism	268	<u>\$21.00</u>
21	Bus Drivers, Transit and Intercity	Advanced Transportation & Logistics	200	\$20.20
22	Phlebotomists	Health	194	\$20.97
23	Automotive Body and Related Repairers	Advanced Transportation & Logistics	184	\$18.24
24	Cargo and Freight Agents	Advanced Transportation & Logistics	160	\$20.23
25	Solar Photovoltaic Installers	Energy, Construction & Utilities	113	\$19.11
26	Brickmasons and Blockmasons	Energy, Construction & Utilities	98	\$23.97
27	Loan Interviewers and Clerks	Business & Entrepreneurship	98	\$19.97
28	Computer, Automated Teller, and Office Machine Repairers	Information and Communication Technologies/Digital Media	<u>97</u>	\$18.32
29	Audio and Video Technicians	Information and Communication Technologies/Digital Media	92	\$23.00
30	Glaziers	Energy, Construction & Utilities	<u>89</u>	\$26.94

#	Community College-Level Critical Workforce Occupations (criteria not met is underlined)	Priority & Emerging Sectors	Annual Job Openings	Median Hourly Earnings
31	Life, Physical, and Social Science Technicians, All Other	Other	<u>87</u>	\$27.52
32	Medical Equipment Preparers	Health	86	\$22.74
33	First-Line Supervisors of Farming, Fishing, and Forestry Workers	Agriculture, Water & Environmental Technology	84	\$25.46
34	Opticians, Dispensing	Health	<u>82</u>	<u>\$18.04</u>
35	Detectives and Criminal Investigators	Public Services	<u>82</u>	\$49.06
36	Civil Engineering Technologists and Technicians	Energy, Construction & Utilities	<u>77</u>	\$29.03
37	Paving, Surfacing, and Tamping Equipment Operators	Energy, Construction & Utilities	<u>76</u>	\$23.78
38	Veterinary Technologists and Technicians	Agriculture, Water & Environmental Technology	<u>71</u>	<u>\$15.44</u>
39	Calibration Technologists and Technicians and Engineering Technologists and Technicians, Except Drafters, All Other	Agriculture, Water & Environmental Technology	<u>71</u>	\$36.71
40	Reinforcing Iron and Rebar Workers	Energy, Construction & Utilities	<u>71</u>	<u>\$15.86</u>
41	Medical Transcriptionists	Health	<u>68</u>	<u>\$16.47</u>
42	Community Health Workers	Education	<u>67</u>	\$23.09
43	Procurement Clerks	Business & Entrepreneurship	<u>65</u>	\$22.52
44	Medical Equipment Repairers	Health	<u>63</u>	\$23.17
45	Occupational Therapy Assistants	Health	<u>62</u>	\$35.16
46	Locksmiths and Safe Repairers	Other	<u>61</u>	<u>\$21.32</u>
47	Electrical and Electronics Repairers, Commercial and Industrial Equipment	Advanced Manufacturing	<u>60</u>	\$31.84
48	Locomotive Engineers	Advanced Transportation & Logistics	<u>58</u>	\$39.91
49	Diagnostic Medical Sonographers	Health	<u>55</u>	\$41.38
50	Recreational Vehicle Service Technicians	Advanced Transportation & Logistics	<u>53</u>	<u>\$17.45</u>
51	Health Information Technologists, Medical Registrars, Surgical Assistants, and Healthcare Practitioners and Technical Workers,	Health	<u>50</u>	\$23.70
52	Mechanical Drafters	Agriculture, Water & Environmental Technology	<u>50</u>	\$26.23
53	Commercial Pilots	Advanced Transportation & Logistics	<u>50</u>	\$36.05

Secondary-Level Critical Workforce Occupations

Secondary-level (lower-skill) critical workforce occupations typically require a high school diploma. The occupations listed below also meet the in-demand (100 or greater annual job openings) and the self-sustainable wage criteria (\$21.78 per hour or greater).

#	Secondary-Level Critical Workforce Occupations	Related Priority & Emerging Sectors	Annual Job Openings	Median Hourly Earnings
1	Eligibility Interviewers, Government Programs	Public Services	293	\$23.62
2	Information and Record Clerks, All Other	Public Services	279	\$21.78
3	Postal Service Mail Carriers	Public Services	223	\$30.33
4	Pest Control Workers	Agriculture, Water & Environmental Technology	187	\$22.24
5	Court, Municipal, and License Clerks	Public Services	160	\$23.56
6	Public Safety Telecommunicators	Public Services	101	\$29.96

Additional secondary-level critical workforce occupations are available to students in the region. The occupations below represent jobs that do not meet the strict in-demand (100 or greater annual job openings) and/or self-sustainable wage (\$21.78 or greater per hour) criteria established in this study, but that are expected to have at least 50 annual job openings.

#	Secondary-Level Critical Workforce Occupations (criteria not met is underlined)	Related Priority & Emerging Sectors	Annual Job Openings	Median Hourly Earnings
1	Security Guards	Public Services	2,926	\$14.62
2	Light Truck Drivers	Advanced Transportation & Logistics	2,079	\$18.90
3	Shipping, Receiving, and Inventory Clerks	Advanced Transportation & Logistics	1,366	<u>\$16.53</u>
4	Miscellaneous Assemblers and Fabricators	Advanced Manufacturing	1,321	<u>\$14.34</u>
5	School Bus Monitors and Protective Service Workers, All Other	Public Services	796	<u>\$14.65</u>
6	Driver/Sales Workers	Business & Entrepreneurship	770	<u>\$16.35</u>
7	Animal Caretakers	Agriculture, Water & Environmental Technology	650	<u>\$13.81</u>
8	Packaging and Filling Machine Operators and Tenders	Advanced Manufacturing	633	<u>\$14.52</u>
9	Installation, Maintenance, and Repair Workers, All Other	Energy, Construction & Utilities	357	<u>\$17.97</u>
10	Interviewers, Except Eligibility and Loan	Public Services	334	<u>\$18.40</u>
11	Dispatchers, Except Police, Fire, and Ambulance	Advanced Transportation & Logistics	257	<u>\$17.95</u>
12	Insurance Claims and Policy Processing Clerks	Business & Entrepreneurship	253	\$20.04
13	Weighers, Measurers, Checkers, and Samplers, Recordkeeping	Advanced Manufacturing	248	<u>\$15.79</u>
14	Helpers—Electricians	Energy, Construction & Utilities	215	<u>\$17.08</u>
15	Veterinary Assistants and Laboratory Animal Caretakers	Agriculture, Water & Environmental Technology	209	\$15.54
16	Food Batchmakers	Advanced Manufacturing	206	\$14.27
17	Tire Repairers and Changers	Advanced Transportation & Logistics	200	<u>\$14.43</u>
18	Tree Trimmers and Pruners	Agriculture, Water & Environmental Technology	165	<u>\$13.89</u>

continued

#	Secondary-Level Critical Workforce Occupations (criteria not met is underlined)	Related Priority & Emerging Sectors	Annual Job Openings	Median Hourly Earnings
19	Helpers—Installation, Maintenance, and Repair Workers	Energy, Construction & Utilities	163	<u>\$14.67</u>
20	Couriers and Messengers	Advanced Transportation & Logistics	161	\$14.48
21	Security and Fire Alarm Systems Installers	Energy, Construction & Utilities	133	<u>\$21.35</u>
22	Pharmacy Aides	Health	121	<u>\$13.11</u>
23	Paper Goods Machine Setters, Operators, and Tenders	Advanced Manufacturing	<u>95</u>	<u>\$15.40</u>
24	Switchboard Operators, Including Answering Service	Other	<u>89</u>	<u>\$14.78</u>
25	Physical Therapist Aides	Health	<u>89</u>	\$14.33
26	Hazardous Materials Removal Workers	Energy, Construction & Utilities	<u>78</u>	\$19.64
27	Earth Drillers, Except Oil and Gas; and Explosives Workers, Ordnance Handling Experts, and Blasters	Agriculture, Water & Environmental Technology	<u>73</u>	\$23.72
28	Railroad Conductors and Yardmasters	Advanced Transportation & Logistics	<u>73</u>	\$37.52
29	Miscellaneous Construction and Related Workers	Energy, Construction & Utilities	<u>70</u>	<u>\$15.65</u>
30	Automotive Glass Installers and Repairers	Advanced Transportation & Logistics	<u>69</u>	<u>\$14.37</u>
31	Orderlies	Health	<u>66</u>	\$22.80
32	Highway Maintenance Workers	Energy, Construction & Utilities	<u>66</u>	\$21.97
33	Postal Service Mail Sorters, Processors, and Processing Machine Operators	Public Services	<u>65</u>	\$28.09
34	Food Cooking Machine Operators and Tenders	Retail/Hospitality/Tourism	<u>52</u>	<u>\$14.51</u>



Four-Year Degree-Level Critical Workforce Occupations

Four-year degree-level (higher-skill) critical workforce occupations typically require a Bachelor's degree to enter employment. This classification of jobs represents opportunities for students transferring to a four-year postsecondary institution to further their education. These occupations are considered in-demand and offer a self-sustainable wage in the Inland Empire/Desert Region.

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#	Four-Year Degree-Level Critical Workforce Occupations	Related Priority & Emerging Sectors	Annual Job Openings	Median Hourly Earnings
1	Accountants and Auditors	Business & Entrepreneurship	912	\$34.14
2	Tutors and Teachers and Instructors, All Other	Education	591	\$23.36
3	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	Health	557	\$23.32
4	Construction Managers	Energy, Construction & Utilities	478	\$31.59
5	Software Developers and Software Quality Assurance Analysts and Testers	Information and Communication Technologies/Digital Media	460	\$46.27
6	Medical and Health Services Managers	Health	420	\$57.63
7	Computer Occupations, All Other	Information and Communication Technologies/Digital Media	297	\$36.48
8	Civil Engineers	Other	292	\$51.31
9	Social Workers, All Other	Education	262	\$34.99
10	Social and Community Service Managers	Education	235	\$33.45
11	Child, Family, and School Social Workers	Education	233	\$26.13
12	Financial and Investment Analysts, Financial Risk Specialists, and Financial Specialists, All Other	Business & Entrepreneurship	228	\$32.67
13	Community and Social Service Specialists, All Other	Education	224	\$23.39
14	Computer Systems Analysts	Information and Communication Technologies/Digital Media	189	\$41.22
15	Computer and Information Systems Managers	Information and Communication Technologies/Digital Media	179	\$63.16
16	Industrial Production Managers	Advanced Manufacturing	131	\$46.61
17	Industrial Engineers	Agriculture, Water & Environmental Technology	111	\$39.75
18	Mechanical Engineers	Agriculture, Water & Environmental Technology	111	\$41.87
19	Architectural and Engineering Managers	Other	100	\$73.52

Additional four-year degree-level critical workforce occupations are available to students in the local economy. The occupations below represent jobs that do not meet the strict in-demand (100 or greater annual job openings) and/or self-sustainable wage (\$21.78 or greater per hour) criteria established in this study, but that are expected to have at least 50 annual job openings.

#	Secondary-Level Critical Workforce Occupations (criteria not met is underlined)	Related Priority & Emerging Sectors	Annual Job Openings	Median Hourly Earnings
1	Environmental Scientists and Specialists, Including Health	Agriculture, Water & Environmental Technology	<u>91</u>	\$40.95
2	Dietitians and Nutritionists	Retail/Hospitality/Tourism	83	\$34.83
3	Health Education Specialists	Health	<u>74</u>	\$29.49
4	Engineers, All Other	Other	<u>72</u>	\$45.53
5	Airline Pilots, Copilots, and Flight Engineers	Advanced Transportation & Logistics	<u>71</u>	\$81.74
6	Computer Programmers	Information and Communication Technologies/Digital Media	<u>69</u>	\$41.42
7	Electronics Engineers, Except Computer	Agriculture, Water & Environmental Technology	<u>55</u>	\$55.41
8	Computer Network Architects	Information and Communication Technologies/Digital Media	<u>55</u>	\$52.82
9	Database Administrators and Architects	Information and Communication Technologies/Digital Media	<u>52</u>	\$46.69

Data Sources:

California Community College Chancellor's Office Priority and Emerging Sectors, Centers of Excellence for Labor Market Research, EMSI 20.4, University of Washington Self-Sufficiency Standard 2020, Public Policy Institute of California

Data Definitions:

The Inland Empire/Desert Region is the Riverside-San Bernardino-Ontario MSA. Riverside and San Bernardino counties combined.

An **occupation** is a set of activities or tasks that employees are paid to perform. Employees that perform essentially the same tasks are in the same occupation, whether or not they work in the same industry. Some occupations are concentrated in particular industries and others are found in many industries. For example, jobs for registered nurses are concentrated in the health care industry sector, but these jobs may also exist in educational industries. Inversely, payroll and timekeeping clerks jobs have representation in every industry. The Standard Occupational Classification (SOC) System classifies each occupations according to the tasks and duties of each job. Definitions for occupations and sample job titles are available at **Onet**. The Center of Excellence can provide assistance in identifying occupations.

Education Level Categories

- **Secondary-level** (formerly lower-skill): Occupations that typically require a high school diploma to enter employment. These occupations represent opportunities available to students who are ready to work after obtaining a high school diploma.
- **Community College-level** (formerly middle-skill): Occupations that mostly require some college, a postsecondary certificate, or an associate degree. These are occupations relevant to community college training.
- Four-year Degree-level (formerly higher-skill): Occupations that mostly require a bachelor's degree or higher. These occupations are mostly trained by four-year colleges and universities.

Annual Job Openings are calculated by the sum of projected growth and replacement jobs (Growth + Replacements = Openings). Growth captures the change in the total number of workers employed in an occupation, while replacement jobs are estimates of workers permanently leaving an occupation and needing to be replaced by new hires. A combination of both numbers indicates total openings for the time frame divided by the number of projection years.

Median Hourly Earnings are the 50th percentile hourly earnings for each occupation.

MORE ABOUT THE CENTERS OF EXCELLENCE

The Centers of Excellence (COE) for Labor Market Research deliver regional workforce research and technical expertise to California Community Colleges for program decision making and resource development. This information has proven valuable to colleges in beginning, revising, or updating economic development and Career Education (CE) programs, strengthening grant applications, assisting in the accreditation process, and in supporting strategic planning efforts.

The Centers of Excellence Initiative is funded in part by the Chancellor's Office, California Community Colleges, Economic and Workforce Development Program. The Centers aspire to be the leading source of regional workforce information and insight for California Community Colleges. More information about the Centers of Excellence is available at **coecc.net**.

For more information on this study, contact:

Michael Goss: michael.goss@chaffey.edu
Paul Vaccher: paul.vaccher@chaffey.edu

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