PRIORITY SECTORS IN SAN DIEGO



SAN DIEGO & IMPERIAL CENTER OF EXCELLENCE



About the COE

The Centers of Excellence for Labor Market Research (COE) are the number one source of labor market information for the California Community Colleges.



SAN DIEGO & IMPERIAL CENTER OF EXCELLENCE (COE)



SOME OF OUR SOURCES



U.S. DEPARTMENT OF COMMERCE

Bureau of Economic Analysis

State Personal Income and Employment (SPI) Local Area Personal Income and Employment (LPI) National Income and Product Accounts (NIPA) Annual Input-Output (I-O) Accounts

Benchmark Input-Output (I-O) Accounts GDP by State

U.S. Census Bureau

American Community Survey (ACS) County Business Patterns (CBP) ZIP Code Business Patterns (ZBP) Nonemployer Statistics (NES) Quarterly Workforce Indicators (QWI) OnTheMap (OTM) TIGER/Line File (with additions by DM Solutions



Group)



U.S. DEPARTMENT OF LABOR

Bureau of Labor Statistics

Quarterly Census of Employment and Wages (QCEW)

Current Employment Statistics (CES)

Local Area Unemployment Statistics (LAUS)

National Industry-Occupation Employment Matrix (NIOEM, 10-year, current/projected)

Occupational Employment Statistics (OES)

Occupational Education and Training Projections

Employment and Training Administration (ETA)

Characteristics of the Insured Unemployed (CIU) National O*NET Consortium, O*NET Production Database

Wage and Hour Division

Minimum Wage Laws in the States



U.S. RAILROAD RETIREMENT BOARD

Annual Railroad Retirement Act and Railroad Unemployment Insurance Act Statistical Tables



U.S. POSTAL SERVICE

Address Information Systems (AIS) Products, Delivery Statistics USPS Delivery Statistics USPS City State Product

PRIVATE SOURCES



AGENDA

ECONOMIC OVERVIEW

INDUSTRIES

SECTORS

HOUSING CHALLENGES IN SAN DIEGO COUNTY

Median Home Price	SAN DIEGO COUNTY \$1.040M	UNITED STATES \$419K
Median Monthly Rent	\$3,135	\$1,813

Sources: Data USA, US Census Bureau, US Department of Housing and Urban Development, Forbes

What else do people spend 1/3 of their income on?

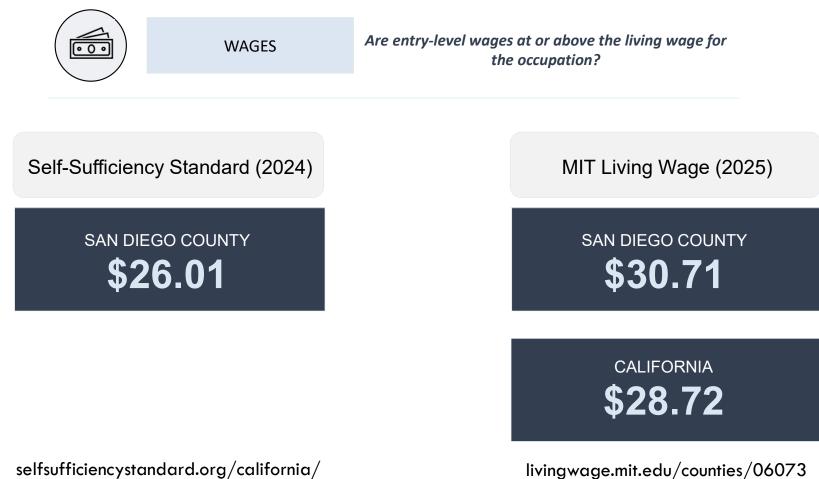
LICENSED CHILDCARE LOST DURING COVID-19 PANDEMIC

Childcare Centers

Family Childcare Homes (FCC)



LIVING WAGE ANALYSIS



selfsufficiencystandard.org/california/

AGENDA

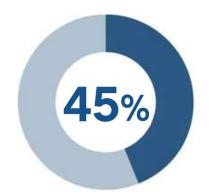
ECONOMIC OVERVIEW

INDUSTRIES

SECTORS

NORTH REGION

Zip Code	Area	Zip Code	Zip Code	Zip Code
91916	Descanso	92027	92059	92084
91962	Pine Valley	92028	92061	92085
92003	Bonsall	92029	92064	92086
92004	Borrego Springs	92030	92065	92088
92007	Cardiff By The Sea	92033	92066	92091
92008	Carlsbad	92036	92067	92096
92009	Carlsbad	92040	92068	92121
92010	Carlsbad	92046	92069	92126
92011	Carlsbad	92049	92070	92127
92013	Carlsbad	92051	92071	92128
92014	Del Mar	92052	92075	92129
92018	Carlsbad	92054	92078	92130
92023	Encinitas	92055	92079	92131
92024	Encinitas	92056	92081	
92025	Escondido	92057	92082	
92026	Escondido	92058	92083	

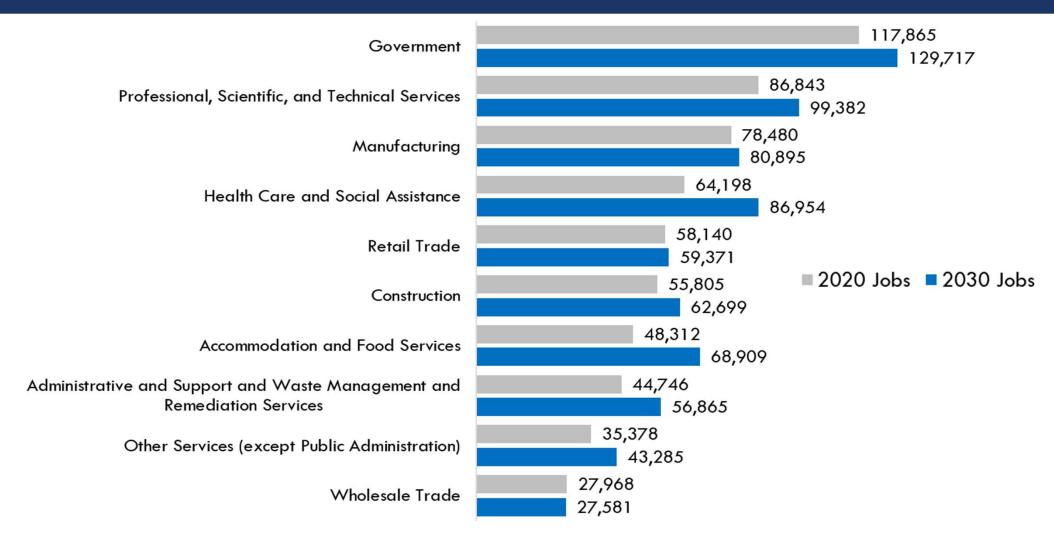


Of all new San Diego jobs are from North Region

North Region's largest industry for total jobs. Government



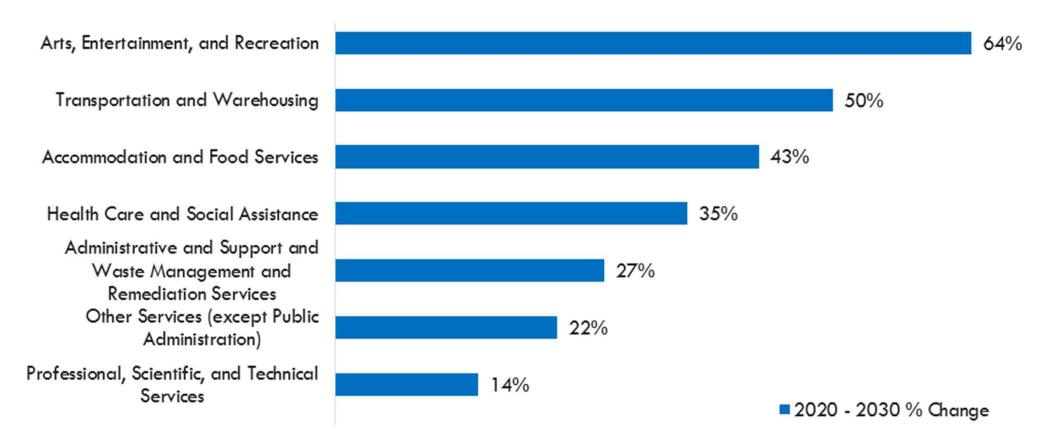
NUMBER OF JOBS BY INDUSTRY IN THE NORTH REGION, 2020-2030



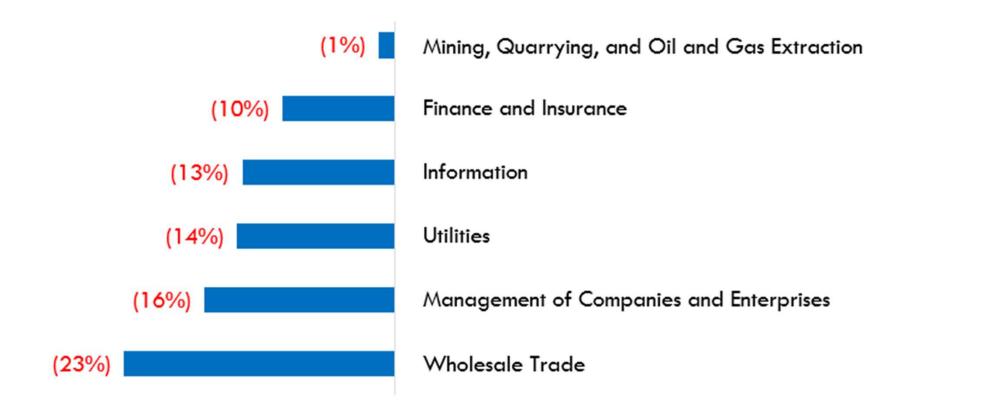
NUMBER OF JOBS BY INDUSTRY IN THE NORTH REGION, 2020-2030

Finance and Insurance	26,360 22,046	
Real Estate and Rental and Leasing	16,120 16,903	
Information	15,169 13,114	
Educational Services	13,953 14,566	
Management of Companies and Enterprises	12,492 11,287	■ 2020 Jobs ■ 2030 Jobs
Arts, Entertainment, and Recreation	11,102 18,217	
Transportation and Warehousing	10,507 15,771	
Agriculture, Forestry, Fishing and Hunting	9,651 10,149	
Utilities	1,344 1,167	
Mining, Quarrying, and Oil and Gas Extraction	193 148	

PROJECTED PERCENTAGE CHANGE OF JOBS BY INDUSTRY IN THE NORTH REGION, 2020-2030



PROJECTED PERCENTAGE CHANGE OF JOBS BY INDUSTRY IN THE NORTH REGION, 2020-2030



2020 - 2030 % Change

TOP JOBS IN NORTH COUNTY



NORTH REGION SAN DIEGO COUNTY

Subregional Profile

October 2023

AGENDA

ECONOMIC OVERVIEW

INDUSTRIES

SECTORS

CAREER EDUCATION GUIDE GROUPS OCCUPATIONS BY SECTOR

IN-DEMAND SECTORS

- Advanced Manufacturing
- Advanced Transportation & Logistics
- Agriculture, Water & Environmental Technologies
- Business & Entrepreneurship
- Education & Human Development
- Energy, Construction & Utilities
- Retail, Hospitality & Tourism
- Health
- Information & Communication Technologies (ICT) and Digital Media
- Life Sciences & Biotechnology
- Public Safety & Government

EACH SECTOR HAS A SUMMARY AND OCCUPATIONS LIST BY EDUCATION

ADVANCED MANUFACTURING

Thanks to advancements in automation and Industry 4.0 technologies, modern manufacturing has evolved into a high-tech, clean, and safe environment. To meet today's needs and tomorrow's challenges, high-tech manufacturing (or Advanced Manufacturing) jobs continue to grow, especially in the areas of additive manufacturing, lean manufacturing, robotics and automation, industrial internet of things, digital transformation, predictive maintenance, precision machining and engineering.



Additionally, the Advanced Manufacturing sector values diversity and is determined to

create an environment where individuals from all backgrounds can thrive. Women, in particular, perform an integral role to the industry's future success, bringing unique perspectives and skills that contribute to its ongoing transformation and competitiveness in the global market. Opportunities for advancement in Advanced Manufacturing are plentiful in product design, process engineering, operations, maintenance, and lab work. Professionals who are adaptable, innovative, and capable of applying scientific and technical principles are well-positioned for rewarding and dynamic careers.

Sample Employers:

Cymer Incorporated Dexcom, Inc. General Atomics GKN Aerospace Hunter Industries Northrop Grumman Innovation Systems Quality Controlled Manufacturing, Inc. SeaSpine, Inc. Solar Turbines, Inc. Tavlor Guitars

CAREER EDUCATION GUIDE



SAN DIEGO FAST FACTS*



\$99,872 average earnings per job



93.372

people employed



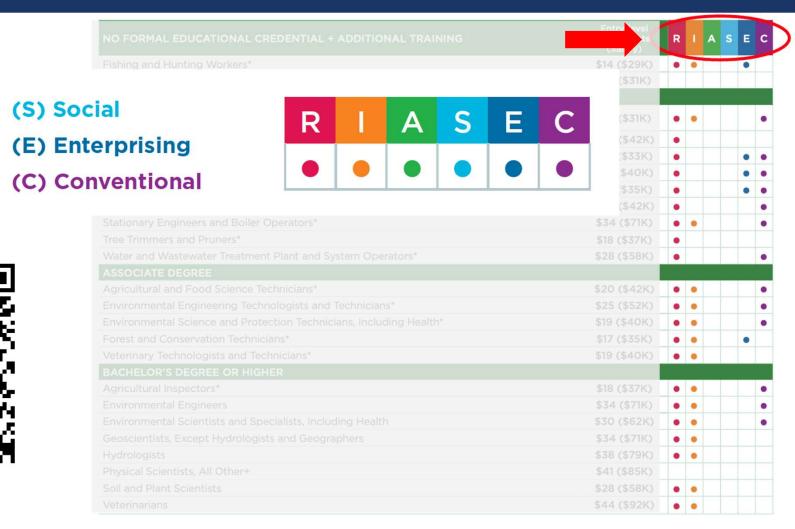
of California's Advanced Manufacturing employment is in San Diego

ADVANCED MANUFACTURING | JOBS & WAGES

The following table lists the **minimum** educational attainment that an individual needs to have in order to be qualified for the occupation. Wages listed for each occupation are based on 25th percentile wages, which represent wages for entry-level workers. Only occupations with entry annual salaries of at least \$37,440 (i.e., living wage) and a labor market demand of at least 50 annual job openings are included in this list. Any job with "All Other" in the title is an occupation with highly specialized subsets; put differently, the title is written broadly to capture various emerging occupations.

HIGH SCHOOL DIPLOMA OR EQUIVALENT + ADDITIONAL TRAINING	Entry-level Hourly Rate (Salary)	R		A		Е	с
Aircraft Structure, Surfaces, Rigging, and Systems Assemblers*	\$24 (\$50K)	٠			-		•
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders*	\$18 (\$37K)	•	•				•
Computer Numerically Controlled Tool Operators*	\$18 (\$37K)	•					•
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic*	\$18 (\$37K)	•					•
Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers* +	\$18 (\$37K)						
First-Line Supervisors of Production and Operating Workers*	\$25 (\$52K)	٠				•	•
Industrial Machinery Mechanics*	\$24 (\$50K)	٠	٠				•
Machinists*	\$20 (\$42K)	٠					•
Maintenance and Repair Workers, General*	\$18 (\$37K)		•				•
Mixing and Blending Machine Setters, Operators, and Tenders*	\$19 (\$40K)						•
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Ten-ders*	\$18 (\$37K)	•	•				•
Sheet Metal Workers	\$24 (\$50K)	•					
Structural Iron and Steel Workers*	\$23 (\$48K)	•					
Structural Metal Fabricators and Fitters*	\$23 (\$48K)						•
Welders, Cutters, Solderers, and Brazers*	\$22 (\$46K)	•					
SOME COLLEGE OR POSTSECONDARY NON-DEGREE AWARD							
Aircraft Mechanics and Service Technicians*	\$30 (\$62K)	•					
Computer, Automated Teller, and Office Machine Repairers*	\$18 (\$37K)	•	•				•
Electrical and Electronics Repairers, Commercial and Industrial Equipment*	\$27 (\$56K)	•	•				
ASSOCIATE DEGREE							
Aerospace Engineering and Operations Technologists and Technicians*	\$27 (\$56K)	•					
Civil Engineering Technologists and Technicians	\$31 (\$64K)						•
Electrical and Electronic Engineering Technologists and Technicians*	\$29 (\$60K)	•	•				
Engineering Technologists and Technicians, Except Drafters, All Other* +	\$29 (\$60K)						
Industrial Engineering Technologists and Technicians*	\$24 (\$50K)	•					
Mechanical Engineering Technologists and Technicians*	\$23 (\$48K)	•					
BACHELOR'S DEGREE OR HIGHER							
Aerospace Engineers*	\$43 (\$89K)	٠					
Civil Engineers*	\$38 (\$79K)	•					
Computer Hardware Engineers	\$64 (\$133K)	•	•				•
Electrical Engineers*	\$42 (\$87K)						
Electronics Engineers, Except Computer	\$48 (\$100K)		•				
Engineers, All Other +	\$44 (\$92K)						
Industrial Engineers	\$40 (\$83K)		•			•	•
Industrial Production Managers	\$45 (\$94K)					•	•
Mechanical Engineers*	\$37 (\$77K)	•	٠				•
Purchasing Managers*	\$51 (\$106K)					•	

RIASEC CODES ARE PROVIDED WHEREVER AVAILABLE



(R) Realistic

(A) Artistic

(I) Investigative

RIASEC DEFINITIONS

REALISTIC

ARTISTIC

SOCIAL

INVESTIGATIVE

ENTERPRISING

CONVENTIONAL

Practical, hands-on activities, working with tools and machines, solving concrete problems.

Research, analysis, problem-solving, scientific inquiry, working independently.

Creativity, self-expression, imagination, working with visual or performing arts, emotionality.

Helping others, working with people, communication, collaboration, building relationships.

Leadership, persuasion, taking risks, starting businesses, being competitive, making money.

Orderliness, accuracy, attention to detail, following rules, working in structured environments.

ADVANCED TRANSPORTATION AND LOGISTICS



Entry-level Hourly HIGH SCHOOL DIPLOMA OR EQUIVALENT + ADDITIONAL TRAINING RI ASEC Rate (Salary) Automotive Body and Related Repairers* \$20 (\$42K) . Bus and Truck Mechanics and Diesel Engine Specialists* \$24 (\$50K) . . Bus Drivers, Transit and Intercity* \$20 (\$42K) ۲ 0 Cargo and Freight Agents + \$18 (\$37K) Commercial Pilots* \$38 (\$79K) • • First-Line Supervisors of Mechanics, Installers, and Repairers* \$30 (\$62K) First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo \$21 (\$44K) Handling Supervisors* + Flight Attendants* \$27 (\$56K) Mobile Heavy Equipment Mechanics, Except Engines* \$26 (\$54K) Production, Planning, and Expediting Clerks \$22 (\$46K) Transportation, Storage, and Distribution Managers* \$34 (\$71K) ۲ SOME COLLEGE OR POSTSECONDARY NON-DEGREE AWARD Captains, Mates, and Pilots of Water Vessels* \$28 (\$58K) . 0 Heavy and Tractor-Trailer Truck Drivers* \$20 (\$42K) ASSOCIATE DEGREE Air Traffic Controllers* \$64 (\$133K) 0 Avionics Technicians* \$38 (\$79K) . . **BACHELOR'S DEGREE OR HIGHER** Airline Pilots, Copilots, and Flight Engineers* \$67 (\$139K) • • . Buyers and Purchasing Agents* + \$29 (\$60K) Logisticians \$34 (\$71K)

The INFRASTRUCTURE INVESTMENT and JOBS ACT

AGRICULTURE, WATER & ENVIRONMENTAL TECHNOLOGIES



The INFRASTRUCTURE INVESTMENT and JOBS ACT

HIGH SCHOOL DIPLOMA OR EQUIVALENT + ADDITIONAL TRAINING	Entry-level Hourly Rate (Salary)	R	T	A	s	E	с
Earth Drillers, Except Oil and Gas*	\$21 (\$44K)	٠	•				•
Excavating and Loading Machine and Dragline Operators, Surface Mining*	\$25 (\$52K)	٠					
Explosives Workers, Ordnance Handling Experts, and Blasters*	\$26 (\$54K)						•
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers*	\$18 (\$37K)	•				٠	•
Logging Equipment Operators*	\$19 (\$40K)	٠	٠				•
Pest Control Workers	\$18 (\$37K)	٠					
Pesticide Handlers, Sprayers, and Applicators, Vegetation	\$19 (\$40K)	•					•
Stationary Engineers and Boiler Operators*	\$19 (\$40K)	•					•
Tree Trimmers and Pruners*	\$22 (\$46K)	•					
Water and Wastewater Treatment Plant and System Operators*	\$26 (\$54K)	٠					•
ASSOCIATE DEGREE							
Agricultural Technicians*	\$18 (\$37K)	٠					•
Environmental Engineering Technologists and Technicians	\$27 (\$56K)	•	•				•
Environmental Science and Protection Technicians, Including Health*	\$19 (\$40K)	•	•				•
Food Science Technicians*	\$19 (\$40K)		•				•
Geological Technicians, Except Hydrologic Technicians*	\$21 (\$44K)	٠	•				•
Veterinary Technologists and Technicians*	\$19 (\$40K)		٠				
BACHELOR'S DEGREE OR HIGHER							
Agricultural Inspectors*	\$18 (\$37K)	٠	٠				•
Environmental Engineers	\$40 (\$83K)	٠	٠				•
Environmental Scientists and Specialists, Including Health	\$34 (\$71K)	٠	٠				
Farm and Home Management Educators*	\$29 (\$60K)	٠			•		•
Food Scientists and Technologists	\$34 (\$71K)	•					•
Foresters	\$24 (\$50K)	•				•	
Geoscientists, Except Hydrologists and Geographers	\$30 (\$62K)	٠	•				
Hydrologists	\$36 (\$75K)	٠	٠				
Physical Scientists, All Other +	\$46 (\$96K)						
Soil and Plant Scientists*	\$26 (\$54K)	•	•				
Veterinarians*	\$36 (\$75K)	•	•				

ENERGY, CONSTRUCTION, & UTILITIES



The INFRASTRUCTURE INVESTMENT and JOBS ACT

NO FORMAL EDUCATIONAL CREDENTIAL + ADDITIONAL TRAINING	Entry-level Hourly Rate (Salary)	R		A	s	E	с
Cement Masons and Concrete Finishers*	\$23 (\$48K)	٠				•	
Drywall and Ceiling Tile Installers*	\$24 (\$50K)	٠					•
Floor Layers, Except Carpet, Wood, and Hard Tiles*	\$18 (\$37K)	٠					•
Painters, Construction and Maintenance* +	\$19 (\$40K)						
Pipelayers	\$24 (\$50K)	٠					
Plasterers and Stucco Masons* +	\$24 (\$50K)						
Roofers*	\$22 (\$46K)	•					•
Tile and Stone Setters* +	\$20 (\$42K)						
HIGH SCHOOL DIPLOMA OR EQUIVALENT + ADDITIONAL TRAINING							
Carpenters*	\$21 (\$44K)	٠	٠				•
Construction and Building Inspectors*	\$27 (\$56K)	•	٠				•
Control and Valve Installers and Repairers, Except Mechanical Door*	\$30 (\$62K)	•	•				•
Electricians	\$23 (\$48K)	•	•				
First-Line Supervisors of Construction Trades and Extraction Workers	\$32 (\$67K)	٠				•	•
Glaziers	\$22 (\$46K)	•					•
Hazardous Materials Removal Workers	\$19 (\$40K)	•					•
Installation, Maintenance, and Repair Workers, All Other* +	\$18 (\$37K)						
Operating Engineers and Other Construction Equipment Operators	\$30 (\$62K)	•	•				
Plumbers, Pipefitters, and Steamfitters	\$23 (\$48K)	•	•				•
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel +	\$23 (\$48K)						
Security and Fire Alarm Systems Installers*	\$22 (\$46K)	•					
Septic Tank Servicers and Sewer Pipe Cleaners*	\$18 (\$37K)	•					
Solar Photovoltaic Installers	\$22 (\$46K)	•					•
SOME COLLEGE OR POSTSECONDARY NON-DEGREE AWARD							
Heating, Air Conditioning, and Refrigeration Mechanics and Installers*	\$22 (\$46K)	•	•				•
ASSOCIATE DEGREE							
Architectural and Civil Drafters*	\$27 (\$56K)	٠		٠			•
Electrical and Electronic Engineering Technologists and Technicians*	\$29 (\$60K)	•	٠				•
BACHELOR'S DEGREE OR HIGHER							
Architects, Except Landscape and Naval	\$34 (\$71K)		•	•			
Architectural and Engineering Managers	\$68 (\$141K)	•	•			•	
Construction Managers*	\$24 (\$50K)					•	

ICT & DIGITAL MEDIA



HIGH SCHOOL DIPLOMA OR EQUIVALENT + ADDITIONAL TRAINING	Entry-level Hourly Rate (Salary)	R	Ĩ	A	S	E	с
Electrical Power-Line Installers and Repairers*	\$33 (\$69K)	٠	٠				٠
Media and Communication Workers, All Other*+	\$27 (\$56K)						
Surveying and Mapping Technicians*	\$26 (\$54K)	٠	٠				٠
Telecommunications Line Installers and Repairers*	\$29 (\$60K)	٠				•	
SOME COLLEGE OR POSTSECONDARY NON-DEGREE AWARD							
Audio and Video Technicians*	\$20 (\$42K)	٠	٠				•
Computer User Support Specialists	\$23 (\$48K)	٠	•				•
Telecommunications Equipment Installers and Repairers, Except Line Installers*	\$27 (\$56K)	٠	٠				•
ASSOCIATE DEGREE							
Computer Network Support Specialists	\$27 (\$56K)	٠				٠	٠
BACHELOR'S DEGREE OR HIGHER							
Computer and Information Research Scientists	\$53 (\$110K)	٠	٠	٠			٠
Computer and Information Systems Managers	\$65 (\$135K)		٠			•	•
Computer Network Architects	\$40 (\$83K)		٠			•	•
Computer Occupations, All Other*+	\$35 (\$73K)						
Computer Programmers	\$50 (\$104K)		٠				٠
Computer Systems Analysts	\$40 (\$83K)	٠	•				•
Data Scientists+	\$44 (\$92K)						
Database Administrators	\$37 (\$77K)		٠				•
Editors*	\$24 (\$50K)			٠		٠	٠
Film and Video Editors*	\$21 (\$44K)		٠	٠		٠	
Graphic Designers*	\$20 (\$42K)	٠		٠		٠	
Information Security Analysts	\$41 (\$85K)	٠	٠				•
Network and Computer Systems Administrators	\$39 (\$81K)	٠	•				•
Operations Research Analysts*	\$32 (\$67K)		•			•	•
Producers and Directors*	\$26 (\$54K)			٠	•	•	•
Public Relations Specialists*	\$24 (\$50K)			٠	•	•	
Software Developers+	\$52 (\$108K)						
Software Quality Assurance Analysts and Testers*	\$40 (\$83K)	٠	٠				٠
Special Effects Artists and Animators*	\$21 (\$44K)		٠	٠			
Statisticians	\$42 (\$87K)		٠				٠
Technical Writers*	\$36 (\$75K)		٠	٠			٠
Web and Digital Interface Designers*+	\$26 (\$54K)						
Web Developers*	\$25 (\$52K)	٠	•				٠



CYBER DEFENSE AND ANALYSIS

BACHELOR'S DEGREE

PROGRAM



EDUCATION & HUMAN DEVELOPMENT



BACHELOR'S DEGREE OR HIGHER	Entry-level Hourly Rate (Salary)	R		A	s	Е	с
Adult Basic Education, Adult Secondary Education, and English as a Second Language In-structors*	\$30 (\$62K)			•	•	•	
Child, Family, and School Social Workers*	\$23 (\$48K)					٠	٠
Clinical and Counseling Psychologists	\$36 (\$75K)		٠	٠	•		
Community and Social Service Specialists, All Other* +	\$19 (\$40K)						
Counselors, All Other* +	\$18 (\$37K)						
Education Administrators, All Other* +	\$33 (\$69K)						
Education Administrators, Kindergarten through Secondary*	\$51 (\$106K)				•	•	•
Education Administrators, Postsecondary*	\$47 (\$98K)				•	•	•
Education and Childcare Administrators, Preschool and Daycare*	\$23 (\$48K)				•	•	•
Educational, Guidance, and Career Counselors and Advisors*	\$27 (\$56K)				•		
Elementary School Teachers, Except Special Education*	\$30 (\$62K)			٠	•		•
Health Education Specialists*	\$22 (\$46K)				•	٠	
Instructional Coordinators*	\$28 (\$58K)		٠	٠	٠	٠	
Librarians and Media Collections Specialists*	\$25 (\$52K)	٠			•		٠
Middle School Teachers, Except Special and Career/Technical Education*	\$34 (\$71K)			•	•		
Postsecondary Teachers* +	\$40 (\$83K)						
School Psychologists	\$39 (\$81K)		•		•		
Secondary School Teachers, Except Special and Career/Technical Education*	\$36 (\$75K)			•	•	•	
Special Education Teachers, Kindergarten and Elementary School* +	\$37 (\$77K)						
Special Education Teachers, Secondary School*	\$36 (\$75K)		٠		•		
Substitute Teachers, Short-Term* +	\$18 (\$37K)						
Teachers and Instructors, All Other* +	\$28 (\$58K)						
Teaching Assistants, Postsecondary*	\$22 (\$46K)				•		•

HEALTH



HIGH SCHOOL DIPLOMA OR EQUIVALENT + ADDITIONAL TRAINING	Entry-level Hourly Rate (Salary)	R	ï	A	s	E	с
Community Health Workers*	\$19 (\$40K)		٠		•	•	
Hearing Aid Specialists*	\$20 (\$42K)	•	•		•		
Opticians, Dispensing*	\$21 (\$44K)	٠			•	٠	٠
Pharmacy Technicians*	\$19 (\$40K)	٠					٠
SOME COLLEGE OR POSTSECONDARY NON-DEGREE AWARD							
Dental Assistants*	\$19 (\$40K)	٠			•		٠
Licensed Practical and Licensed Vocational Nurses*	\$29 (\$60K)	٠			•		
Medical Assistants*	\$18 (\$37K)	٠			•		•
Medical Records Specialists*+	\$18 (\$37K)						
Nursing Assistants*	\$18 (\$37K)	٠			•		٠
Paramedics*+	\$24 (\$50K)						
Phlebotomists*	\$19 (\$40K)	٠	٠		•		•
Psychiatric Technicians*	\$20 (\$42K)	٠			•	•	
Surgical Assistants*	\$22 (\$46K)	٠			•		٠
Surgical Technologists*	\$29 (\$60K)	٠			•		٠
ASSOCIATE DEGREE							
Dental Hygienists*	\$50 (\$104K)	٠			•		٠
Diagnostic Medical Sonographers*	\$47 (\$98K)	•	٠		•		
Occupational Therapy Assistants*	\$38 (\$79K)	٠			•		
Physical Therapist Assistants*	\$33 (\$69K)	٠	•		•		
Radiologic Technologists and Technicians*	\$38 (\$79K)	٠			٠		•
Respiratory Therapists*	\$36 (\$75K)	٠	٠		•		
BACHELOR'S DEGREE OR HIGHER							
Clinical Laboratory Technologists and Technicians*+	\$22 (\$46K)						
Dentists, General*	\$44 (\$92K)	٠	•		•		
Dietitians and Nutritionists*	\$33 (\$69K)		•		•		
Family Medicine Physicians*	\$69 (\$144K)		•		•		
Healthcare Social Workers*	\$28 (\$58K)		٠		•		
Medical and Health Services Managers	\$38 (\$79K)				•	٠	٠
Mental Health and Substance Abuse Social Workers*	\$23 (\$48K)		•	•	•		
Nurse Practitioners*	\$61 (\$127K)	٠	٠		•		
Occupational Health and Safety Specialists*	\$35 (\$73K)		•				•
Occupational Therapists*	\$46 (\$96K)		•		•		
Pharmacists*	\$65 (\$135K)		•		•		٠
Physical Therapists*	\$45 (\$94K)	•	٠		•		
Physician Assistants*	\$60 (\$125K)	٠	٠		•		
Registered Nurses*	\$47 (\$98K)		•		•		•

SAN DIEGO MESACOLLEGE

HEALTH INFORMATION MANAGEMENT

BACHELOR'S DEGREE PROGRAM

LIFE SCIENCES & BIOTECHNOLOGY



HIGH SCHOOL DIPLOMA OR EQUIVALENT + ADDITIONAL TRAINING	Entry-level Hourly Rate (Salary)	R		A		Е	с
Chemical Equipment Operators and Tenders*	\$19 (\$40K)	٠					
Inspectors, Testers, Sorters, Samplers, and Weighers*	\$18 (\$37K)	٠					•
Medical Appliance Technicians*	\$18 (\$37K)	٠	٠		•		
Ophthalmic Laboratory Technicians*	\$18 (\$37K)	٠					•
ASSOCIATE DEGREE							
Chemical Technicians*	\$20 (\$42K)	٠	٠				٠
Life, Physical, and Social Science Technicians, All Other*+	\$22 (\$46K)						
Medical Equipment Repairers*	\$21 (\$44K)	٠	•				٠
BACHELOR'S DEGREE OR HIGHER							
Anthropologists and Archeologists*	\$28 (\$58K)	٠	•	٠			
Astronomers	\$57 (\$119K)		•	•			
Atmospheric and Space Scientists*	\$41 (\$85K)	•	•				
Biochemists and Biophysicists*	\$44 (\$92K)	•	•	٠			
Bioengineers and Biomedical Engineers	\$39 (\$81K)	٠	•				
Biological Scientists, All Other*+	\$37 (\$77K)						
Biological Technicians*	\$22 (\$46K)	٠	•				•
Chemical Engineers	\$40 (\$83K)	٠	•				
Chemists*	\$31 (\$64K)	•	•				•
Clinical Laboratory Technologists and Technicians*+	\$22 (\$46K)						
Conservation Scientists*	\$28 (\$58K)	•	•			•	
Epidemiologists	\$38 (\$79K)		•		•		
Life Scientists, All Other+	\$32 (\$67K)						
Materials Scientists	\$25 (\$52K)	٠	•				
Microbiologists*	\$38 (\$79K)	٠	٠				
Natural Sciences Managers	\$75 (\$156K)		•			٠	
Physicists	\$56 (\$116K)	٠	•	•			
Social Science Research Assistants	\$23 (\$48K)		•				•
Social Scientists and Related Workers, All Other*+	\$39 (\$81K)						
Sociologists	\$44 (\$92K)		•	•	•		
Urban and Regional Planners	\$37 (\$77K)		•	•		•	
Zoologists and Wildlife Biologists*	\$36 (\$75K)	•	•				



BIO-MANUFACTURING

BACHELOR'S DEGREE PROGRAM

PUBLIC SAFETY & GOVERNMENT



HIGH SCHOOL DIPLOMA OR EQUIVALENT + ADDITIONAL TRAINING	Entry-level Hourly Rate (Salary)	R		A	s	Е	•
Animal Control Workers*	\$21 (\$44K)	٠			•		
Bailiffs*	\$29 (\$60K)	٠				•	
Correctional Officers and Jailers*	\$29 (\$60K)	•				•	-
Court, Municipal, and License Clerks	\$22 (\$46K)				٠	•	
Detectives and Criminal Investigators*	\$49 (\$102K)	٠	٠			٠	
Dispatchers, Except Police, Fire, and Ambulance	\$18 (\$37K)	٠				•	
Eligibility Interviewers, Government Programs	\$20 (\$42K)				•	•	
First-Line Supervisors of Correctional Officers*	\$52 (\$108K)	٠				•	
First-Line Supervisors of Police and Detectives*	\$59 (\$123K)				•	•	
First-Line Supervisors of Security Workers*+	\$20 (\$42K)						
Parking Enforcement Workers*	\$22 (\$46K)	٠					
Police and Sheriff's Patrol Officers*	\$36 (\$75K)	٠			•	٠	
Postal Service Clerks	\$25 (\$52K)	٠					
Postal Service Mail Carriers*	\$21 (\$44K)	٠					
Postal Service Mail Sorters, Processors, and Processing Machine Operators	\$19 (\$40K)	٠					
Public Safety Telecommunicators	\$25 (\$52K)	٠				•	
Transportation Security Screeners*	\$24 (\$50K)	٠				•	
SOME COLLEGE OR POSTSECONDARY NON-DEGREE AWARD							
Fire Inspectors and Investigators*	\$21 (\$44K)	٠	٠				[
Firefighters*	\$24 (\$50K)	٠			•	•	
First-Line Supervisors of Firefighting and Prevention Workers*	\$39 (\$81K)	٠			•	٠	
Library Technicians*	\$18 (\$37K)				•	•	
BACHELOR'S DEGREE OR HIGHER							
Arbitrators, Mediators, and Conciliators*	\$34 (\$71K)				•	•	
Archivists*	\$21 (\$44K)		•				
Cartographers and Photogrammetrists*	\$36 (\$75K)	٠	•				
Economists	\$36 (\$75K)		•			•	
Judges, Magistrate Judges, and Magistrates*	\$108 (\$225K)				•	•	
Judicial Law Clerks*	\$37 (\$77K)		•			•	
Legislators	\$21 (\$44K)				•	•	
Political Scientists*	\$41 (\$85K)		•	٠	•		
Probation Officers and Correctional Treatment Specialists*	\$29 (\$60K)				•	•	
Survey Researchers	\$19 (\$40K)		٠			٠	
Surveyors*	\$33 (\$69K)	•	•				



PUBLIC SAFETY MANAGEMENT

BACHELOR'S DEGREE PROGRAM

RETAIL, HOSPITALITY & TOURISM



HIGH SCHOOL DIPLOMA OR EQUIVALENT + ADDITIONAL TRAINING	Entry-level Hourly Rate (Salary)	R	Т	A	s	E	с
Chefs and Head Cooks*	\$22 (\$46K)	٠		٠		٠	
Coin, Vending, and Amusement Machine Servicers and Repairers*	\$18 (\$37K)	٠					•
First-Line Supervisors of Non-Retail Sales Workers	\$22 (\$46K)				٠	٠	•
First-Line Supervisors of Retail Sales Workers	\$18 (\$37K)				٠	٠	•
Food Service Managers*	\$21 (\$44K)	٠			٠	٠	٠
Lodging Managers	\$25 (\$52K)				•	•	•
SOME COLLEGE OR POSTSECONDARY NON-DEGREE AWARD							
Actors*	\$18 (\$37K)			•		•	
BACHELOR'S DEGREE OR HIGHER							
Entertainment and Recreation Managers, Except Gambling+	\$23 (\$48K)						
General and Operations Managers	\$39 (\$81K)				•	٠	•
Interior Designers*	\$23 (\$48K)			•		•	
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	\$38 (\$79K)					•	•

THANK YOU!



QUESTIONS?



Potential Labor Market Impacts of Artificial Intelligence: An Empirical Analysis

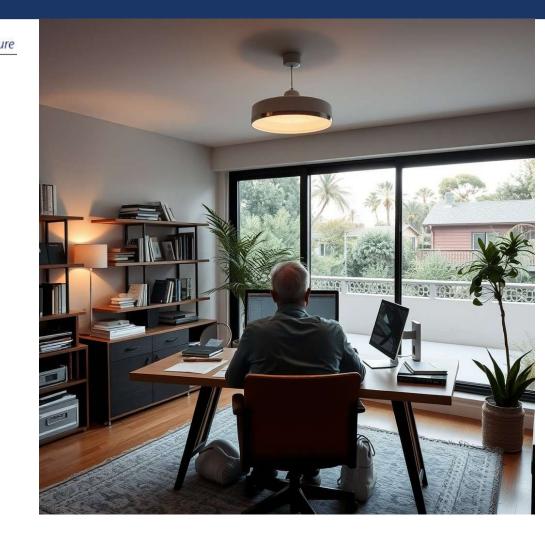
- Based on new analyses, CEA finds sufficient evidence to classify a subset of highly AI-exposed occupations as "potentially AI-vulnerable." These occupations correspond to roughly 10 percent of overall employment in the economy. And, these occupations are already showing some signs of decreasing demand, such as slower employment growth and fewer incoming workers.
 - Older workers are more likely to be potentially AI-vulnerable.
 - Al-exposed workers are less likely to be unionized than the overall workforce.
 - CEA continues to find little evidence that AI will negatively impact overall employment



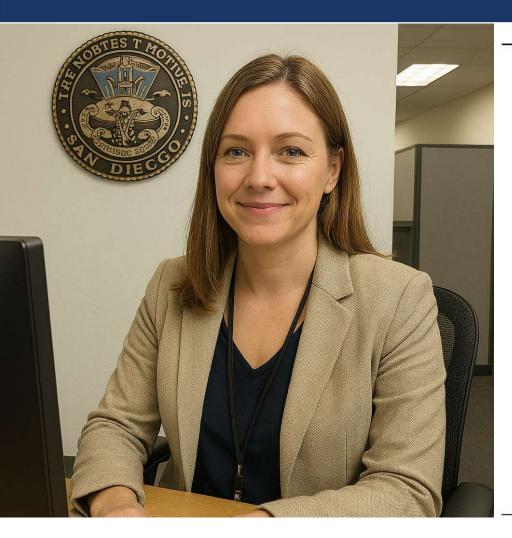
Council of Economic Advisers Report 7/2024

AI EXPOSURE BY OCCUPATIONAL GROUPS

Rank	Occupational group	Avg. Al exposur
1	Architecture and engineering	0.44
2	Legal	0.39
3	Computer and mathematical	0.33
4	Office and administrative support	0.32
5	Transportation	0.27
6	Life, physical, and social science	0.25
7	Business and financial operations	0.17
8	Installation, maintenance, and repair	0.07
9	Production	0.07
10	Farming, fishing, and forestry	0.06
11	Protective service	0.05
12	Arts, design, entertainment, sports and media	0.01
13	Healthcare practitioners and technical	-0.05
14	Healthcare support	-0.08
15	Management	-0.11
16	Construction and extraction	-0.16
17	Education instruction and library	-0.18
18	Sales and related	-0.23
19	Community and social services	-0.23
20	Personal care and service	-0.27
21	Material moving	-0.29
22	Food preparation and serving related	-0.30
23	Building, grounds cleaning, and maintenance	-0.31



TOP 25 MOST AI-EXPOSED OCCUPATIONS



Rank	Occupation	Al exposure score
1	Eligibility Interviewers, Government Programs	0.92
2	Title Examiners, Abstractors, and Searchers	0.82
3	Medical Transcriptionists	0.81
4	Cartographers and Photogrammetrists	0.81
5	Judicial Law Clerks	0.80
6	Tax Preparers	0.78
7	Biological Technicians	0.77
8	Electrical Engineers	0.75
9	Compliance Officers	0.74
10	Proofreaders and Copy Markers	0.73
11	Architectural and Civil Drafters	0.73
12	Private Detectives and Investigators	0.73
13	Billing and Posting Clerks	0.71
14	Commercial and Industrial Designers	0.71
15	Production, Planning, and Expediting Clerks	0.69
16	Drilling and Boring Machine Tool Setters, Operators, and Tenders,	0.69
17	Airline Pilots, Copilots, and Flight Engineers	0.68
18	Payroll and Timekeeping Clerks	0.63
19	Nuclear Power Reactor Operators	0.63
20	Court, Municipal, and License Clerks	0.63
21	Paralegals and Legal Assistants	0.63
22	Switchboard Operators, Including Answering Service	0.63
23	Bookkeeping, Accounting, and Auditing Clerks	0.62
24	Loan Interviewers and Clerks	0.61
25	Surveying and Mapping Technicians	0.58

TOP 25 LEAST AI-EXPOSED OCCUPATIONS

Rank	Occupation	AI exposure score	N.S.
1	Human Resources Managers	-0.67	
2	Bicycle Repairers	-0.66	
3	Laundry and Dry-Cleaning Workers	-0.64	
4	Clergy	-0.62	
5	Demonstrators and Product Promoters	-0.60	
6	Sales Managers	-0.55	
7	Exercise Trainers and Group Fitness Instructors	-0.53	
8	Marketing Managers	-0.53	6-15
9	Food Preparation Workers	-0.53	
10	Dancers	-0.51	
11	Manicurists and Pedicurists	-0.50	
12	Passenger Attendants	-0.50	and a
13	Bartenders	-0.50	3
14	Training and Development Managers	-0.50	
15	Writers and Authors	-0.50	F
16	Laborers and Freight, Stock, and Material Movers, Hand	-0.49	K
17	First-Line Supervisors of Retail Sales Workers	-0.48	1
18	Education and Childcare Administrators, Preschool and Daycare	-0.48	
19	Cutters and Trimmers, Hand	-0.47	
20	Door-to-Door Sales Workers, News and Street Vendors, and Related Workers	-0.46	
21	Directors, Religious Activities and Education	-0.46	2
22	Dishwashers	-0.45	1
23	Cashiers	-0.45	Con a
24	Dining Room and Cafeteria Attendants and Bartender Helpers	-0.45	X
25	Orderlies	-0.44	

