Appendix B

Occupations by Type of Change

Type 1. SOC-level Occupations Removed in 2018 SOC

O*NET-SOC	
2010 Code	O*NET-SOC 2010 Title
11-2031.00	Public Relations and Fundraising Managers
13-2051.00	Financial Analysts
15-1132.00	Software Developers, Applications
15-1133.00	Software Developers, Systems Software
15-2091.00	Mathematical Technicians
19-3031.00	Clinical, Counseling, and School Psychologists
19-4011.00	Agricultural and Food Science Technicians
25-2052.00	Special Education Teachers, Kindergarten and Elementary School
25-4021.00	Librarians
25-9011.00	Audio-Visual and Multimedia Collections Specialists
25-9041.00	Teacher Assistants
27-3012.00	Public Address System and Other Announcers
27-3021.00	Broadcast News Analysts
27-3022.00	Reporters and Correspondents
27-4013.00	Radio Operators
29-1067.00	Surgeons
29-2034.00	Radiologic Technologists
29-2041.00	Emergency Medical Technicians and Paramedics
29-2054.00	Respiratory Therapy Technicians
29-2071.00	Medical Records and Health Information Technicians
35-3021.00	Combined Food Preparation and Serving Workers, Including Fast Food
35-3022.00	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop
39-1011.00	Gaming Supervisors
39-1012.00	Slot Supervisors
41-3099.00	Sales Representatives, Services, All Other
43-9011.00	Computer Operators
45-3011.00	Fishers and Related Fishing Workers
45-3021.00	Hunters and Trappers
47-5042.00	Mine Cutting and Channeling Machine Operators

O*NET-SOC	
2010 Code	O*NET-SOC 2010 Title
49-9093.00	Fabric Menders, Except Garment
51-9122.00	Painters, Transportation Equipment
53-3022.00	Bus Drivers, School or Special Client
53-3041.00	Taxi Drivers and Chauffeurs
53-4012.00	Locomotive Firers
53-4021.00	Railroad Brake, Signal, and Switch Operators
53-7111.00	Mine Shuttle Car Operators
55-3017.00	Radar and Sonar Technicians

Type 2. Detailed 2010 O*NET-SOC Occupations Removed

O*NET-SOC	OWNER GO C 4040 TVI
2010 Code	O*NET-SOC 2010 Title
11-2011.01	Green Marketers
11-3031.02	Financial Managers, Branch or Department
11-3051.05	Methane/Landfill Gas Collection System Operators
11-3071.01	Transportation Managers
11-3071.02	Storage and Distribution Managers
11-3071.03	Logistics Managers
11-9013.01	Nursery and Greenhouse Managers
11-9013.02	Farm and Ranch Managers
11-9013.03	Aquacultural Managers
11-9039.01	Distance Learning Coordinators
11-9199.07	Security Managers
13-1031.01	Claims Examiners, Property and Casualty Insurance
13-1031.02	Insurance Adjusters, Examiners, and Investigators
13-1041.02	Licensing Examiners and Inspectors
13-1199.02	Security Management Specialists
13-2011.01	Accountants
13-2011.02	Auditors
13-2021.01	Assessors
13-2021.02	Appraisers, Real Estate
13-2071.01	Loan Counselors
13-2099.02	Risk Management Specialists
13-2099.03	Investment Underwriters

O*NET-SOC	
2010 Code	O*NET-SOC 2010 Title
15-1199.04	Geospatial Information Scientists and Technologists
15-1199.05	Geographic Information Systems Technicians
17-2111.01	Industrial Safety and Health Engineers
17-2111.03	Product Safety Engineers
17-2121.01	Marine Engineers
17-2121.02	Marine Architects
17-2199.01	Biochemical Engineers
17-3011.01	Architectural Drafters
17-3011.02	Civil Drafters
17-3012.01	Electronic Drafters
17-3012.02	Electrical Drafters
17-3023.01	Electronics Engineering Technicians
17-3023.03	Electrical Engineering Technicians
17-3029.02	Electrical Engineering Technologists
17-3029.03	Electromechanical Engineering Technologists
17-3029.04	Electronics Engineering Technologists
17-3029.05	Industrial Engineering Technologists
17-3029.06	Manufacturing Engineering Technologists
17-3029.07	Mechanical Engineering Technologists
17-3029.09	Manufacturing Production Technicians
17-3029.10	Fuel Cell Technicians
17-3029.11	Nanotechnology Engineering Technologists
17-3029.12	Nanotechnology Engineering Technicians
17-3031.01	Surveying Technicians
17-3031.02	Mapping Technicians
19-1031.01	Soil and Water Conservationists
19-3031.02	Clinical Psychologists
19-3031.03	Counseling Psychologists
19-3039.01	Neuropsychologists and Clinical Neuropsychologists
19-3091.01	Anthropologists
19-3091.02	Archeologists
19-4041.01	Geophysical Data Technicians
19-4041.02	Geological Sample Test Technicians
19-4051.01	Nuclear Equipment Operation Technicians
19-4061.01	City and Regional Planning Aides
25-9031.01	Instructional Designers and Technologists
27-2012.01	Producers

O*NET-SOC	
2010 Code	O*NET-SOC 2010 Title
27-2012.02	Directors- Stage, Motion Pictures, Television, and Radio
27-2041.01	Music Directors
27-2041.04	Music Composers and Arrangers
27-2042.01	Singers
27-2042.02	Musicians, Instrumental
27-3043.04	Copy Writers
29-1069.05	Nuclear Medicine Physicians
29-2011.03	Histotechnologists and Histologic Technicians
29-2099.06	Radiologic Technicians
33-1021.01	Municipal Fire Fighting and Prevention Supervisors
33-1021.02	Forest Fire Fighting and Prevention Supervisors
33-2011.01	Municipal Firefighters
33-2011.02	Forest Firefighters
33-2021.01	Fire Inspectors
33-2021.02	Fire Investigators
33-3021.01	Police Detectives
33-3021.03	Criminal Investigators and Special Agents
33-3051.01	Police Patrol Officers
33-3051.03	Sheriffs and Deputy Sheriffs
41-3031.01	Sales Agents, Securities and Commodities
41-3031.02	Sales Agents, Financial Services
41-3031.03	Securities and Commodities Traders
41-3099.01	Energy Brokers
43-3021.01	Statement Clerks
43-3021.02	Billing, Cost, and Rate Clerks
43-4031.01	Court Clerks
43-4031.02	Municipal Clerks
43-4031.03	License Clerks
43-4041.01	Credit Authorizers
43-4041.02	Credit Checkers
43-5081.01	Stock Clerks, Sales Floor
43-5081.02	Marking Clerks
43-5081.03	Stock Clerks- Stockroom, Warehouse, or Storage Yard
43-5081.04	Order Fillers, Wholesale and Retail Sales
43-9041.01	Insurance Claims Clerks

O*NET-SOC	
2010 Code	O*NET-SOC 2010 Title
43-9041.02	Insurance Policy Processing Clerks
45-1011.05	First-Line Supervisors of Logging Workers
45-1011.06	First-Line Supervisors of Aquacultural Workers
45-1011.07	First-Line Supervisors of Agricultural Crop and Horticultural Workers
45-1011.08	First-Line Supervisors of Animal Husbandry and Animal Care Workers
45-2092.01	Nursery Workers
45-2092.02	Farmworkers and Laborers, Crop
47-2031.01	Construction Carpenters
47-2031.02	Rough Carpenters
47-2152.01	Pipe Fitters and Steamfitters
47-2152.02	Plumbers
49-2021.01	Radio Mechanics
49-3023.01	Automotive Master Mechanics
49-3023.02	Automotive Specialty Technicians
49-9021.01	Heating and Air Conditioning Mechanics and Installers
49-9021.02	Refrigeration Mechanics and Installers
51-4121.06	Welders, Cutters, and Welder Fitters
51-4121.07	Solderers and Brazers
51-8099.02	Methane/Landfill Gas Generation System Technicians
51-9071.01	Jewelers
51-9071.07	Precious Metal Workers
51-9195.07	Molding and Casting Workers
53-5021.01	Ship and Boat Captains
53-5021.02	Mates- Ship, Boat, and Barge
53-5021.03	Pilots, Ship
53-6051.08	Freight and Cargo Inspectors

Type 3. 2018 SOC-level Occupations Added

O*NET-SOC	
2019 Code	O*NET-SOC 2019 Title
11-2032.00	Public Relations Managers
11-2033.00	Fundraising Managers
11-3013.00	Facilities Managers
11-9072.00	Entertainment and Recreation Managers, Except Gambling
11-9179.00	Personal Service Managers, All Other
13-1082.00	Project Management Specialists
13-2022.00	Appraisers of Personal and Business Property
13-2051.00	Financial and Investment Analysts
13-2054.00	Financial Risk Specialists
15-1252.00	Software Developers
15-1255.00	Web and Digital Interface Designers
15-2051.00	Data Scientists
17-3028.00	Calibration Technologists and Technicians
19-3033.00	Clinical and Counseling Psychologists
19-4044.00	Hydrologic Technicians
25-2055.00	Special Education Teachers, Kindergarten
25-2056.00	Special Education Teachers, Elementary School
25-3031.00	Substitute Teachers, Short-Term
25-4022.00	Librarians and Media Collections Specialists
25-9042.00	Teaching Assistants, Preschool, Elementary, Middle, and Secondary School, Except Special Education
25-9043.00	Teaching Assistants, Special Education
25-9049.00	Teaching Assistants, All Other
27-2091.00	Disc Jockeys, Except Radio
27-3023.00	News Analysts, Reporters, and Journalists
27-4015.00	Lighting Technicians
29-1212.00	Cardiologists
29-1214.00	Emergency Medicine Physicians
29-1242.00	Orthopedic Surgeons, Except Pediatric
29-1243.00	Pediatric Surgeons
29-1249.00	Surgeons, All Other
29-2034.00	Radiologic Technologists and Technicians
29-2036.00	Medical Dosimetrists
29-2042.00	Emergency Medical Technicians

O*NET-SOC	
2019 Code	O*NET-SOC 2019 Title
29-2043.00	Paramedics
29-2072.00	Medical Records Specialists
29-9021.00	Health Information Technologists and Medical Registrars
33-1091.00	First-Line Supervisors of Security Workers
33-9094.00	School Bus Monitors
35-3023.00	Fast Food and Counter Workers
39-1013.00	First-Line Supervisors of Gambling Services Workers
39-1014.00	First-Line Supervisors of Entertainment and Recreation Workers, Except Gambling Services
39-4012.00	Crematory Operators
41-3091.00	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel
45-3031.00	Fishing and Hunting Workers
53-1044.00	First-Line Supervisors of Passenger Attendants
53-1049.00	First-Line Supervisors of Transportation Workers, All Other
53-3051.00	Bus Drivers, School
53-3053.00	Shuttle Drivers and Chauffeurs
53-3054.00	Taxi Drivers
53-4022.00	Railroad Brake, Signal, and Switch Operators and Locomotive Firers
53-6032.00	Aircraft Service Attendants

Type 4. Detailed O*NET-SOC Occupations Added

O*NET-SOC	
2019 Code	O*NET-SOC 2019 Title
11-3013.01	Security Managers
13-1199.07	Security Management Specialists
15-1299.02	Geographic Information Systems Technologists and Technicians
15-1299.04	Penetration Testers
15-1299.05	Information Security Engineers
15-1299.06	Digital Forensics Analysts
15-1299.07	Blockchain Engineers
17-3026.01	Nanotechnology Engineering Technologists and Technicians
19-3039.02	Neuropsychologists
19-3039.03	Clinical Neuropsychologists
29-2011.04	Histotechnologists
29-2012.01	Histology Technicians

Type 5. Detailed 2010 O*NET-SOC Occupations Moved to 2018 SOC-level Occupations

O*NET-SOC	
2019 Code	O*NET-SOC 2019 Title
15-1243.00	Database Architects
15-1253.00	Software Quality Assurance Analysts and Testers
19-3034.00	School Psychologists
19-4012.00	Agricultural Technicians
19-4013.00	Food Science Technicians
25-3041.00	Tutors
29-1213.00	Dermatologists
29-1217.00	Neurologists
29-1222.00	Physicians, Pathologists
29-1224.00	Radiologists
29-1241.00	Ophthalmologists, Except Pediatric
29-1291.00	Acupuncturists
29-9093.00	Surgical Assistants

Type 6. Occupations with Code Changes

O*NET-SOC	
2019 Code	O*NET-SOC 2019 Title
11-3012.00	Administrative Services Managers
11-3031.03	Investment Fund Managers
11-3071.04	Supply Chain Managers
11-9171.00	Funeral Home Managers
11-9179.01	Fitness and Wellness Coordinators
11-9179.02	Spa Managers
13-1041.08	Customs Brokers
13-1161.01	Search Marketing Strategists
13-2023.00	Appraisers and Assessors of Real Estate
15-1211.00	Computer Systems Analysts
15-1211.01	Health Informatics Specialists
15-1212.00	Information Security Analysts
15-1221.00	Computer and Information Research Scientists
15-1231.00	Computer Network Support Specialists
15-1232.00	Computer User Support Specialists
15-1241.00	Computer Network Architects
15-1241.01	Telecommunications Engineering Specialists
15-1242.00	Database Administrators
15-1243.00	Database Architects
15-1243.01	Data Warehousing Specialists
15-1244.00	Network and Computer Systems Administrators
15-1251.00	Computer Programmers
15-1253.00	Software Quality Assurance Analysts and Testers
15-1254.00	Web Developers
15-1255.01	Video Game Designers
15-1299.00	Computer Occupations, All Other
15-1299.01	Web Administrators
15-1299.03	Document Management Specialists
15-1299.08	Computer Systems Engineers/Architects
15-1299.09	Information Technology Project Managers
15-2051.01	Business Intelligence Analysts
15-2051.02	Clinical Data Managers
15-2099.01	Bioinformatics Technicians
17-2051.02	Water/Wastewater Engineers
17-2112.02	Validation Engineers

O*NET-SOC	
2019 Code	O*NET-SOC 2019 Title
17-2112.03	Manufacturing Engineers
19-1029.04	Biologists
19-3034.00	School Psychologists
19-4012.00	Agricultural Technicians
19-4012.01	Precision Agriculture Technicians
19-4013.00	Food Science Technicians
19-4042.00	Environmental Science and Protection Technicians, Including Health
19-4043.00	Geological Technicians, Except Hydrologic Technicians
19-4071.00	Forest and Conservation Technicians
19-5011.00	Occupational Health and Safety Specialists
19-5012.00	Occupational Health and Safety Technicians
25-2057.00	Special Education Teachers, Middle School
25-2058.00	Special Education Teachers, Secondary School
25-3041.00	Tutors
25-9044.00	Teaching Assistants, Postsecondary
27-3092.00	Court Reporters and Simultaneous Captioners
29-1129.01	Art Therapists
29-1129.02	Music Therapists
29-1211.00	Anesthesiologists
29-1213.00	Dermatologists
29-1215.00	Family Medicine Physicians
29-1216.00	General Internal Medicine Physicians
29-1217.00	Neurologists
29-1218.00	Obstetricians and Gynecologists
29-1221.00	Pediatricians, General
29-1222.00	Physicians, Pathologists
29-1223.00	Psychiatrists
29-1224.00	Radiologists
29-1229.00	Physicians, All Other
29-1229.01	Allergists and Immunologists
29-1229.02	Hospitalists
29-1229.03	Urologists
29-1229.04	Physical Medicine and Rehabilitation Physicians
29-1229.05	Preventive Medicine Physicians
29-1229.06	Sports Medicine Physicians
29-1241.00	Ophthalmologists, Except Pediatric
29-1291.00	Acupuncturists
29-1292.00	Dental Hygienists
29-1299.00	Healthcare Diagnosing or Treating Practitioners, All Other

O*NET-SOC	
2019 Code	O*NET-SOC 2019 Title
29-1299.01	Naturopathic Physicians
29-1299.02	Orthoptists
29-2099.08	Patient Representatives
29-9093.00	Surgical Assistants
31-1121.00	Home Health Aides
31-1122.00	Personal Care Aides
31-1131.00	Nursing Assistants
31-1132.00	Orderlies
31-1133.00	Psychiatric Aides
33-3051.04	Customs and Border Protection Officers
35-3023.01	Baristas
39-1022.00	First-Line Supervisors of Personal Service Workers
47-2152.04	Solar Thermal Installers and Technicians
47-4011.01	Energy Auditors
47-5022.00	Excavating and Loading Machine and Dragline Operators, Surface Mining
47-5023.00	Earth Drillers, Except Oil and Gas
47-5032.00	Explosives Workers, Ordnance Handling Experts, and Blasters
47-5043.00	Roof Bolters, Mining
47-5044.00	Loading and Moving Machine Operators, Underground Mining
51-2051.00	Fiberglass Laminators and Fabricators
51-2061.00	Timing Device Assemblers and Adjusters
51-8013.03	Biomass Plant Technicians
51-8013.04	Hydroelectric Plant Technicians
51-9124.00	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders
51-9161.00	Computer Numerically Controlled Tool Operators
51-9162.00	Computer Numerically Controlled Tool Programmers
53-1041.00	Aircraft Cargo Handling Supervisors
53-1042.00	First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand
53-1042.01	Recycling Coordinators
53-1043.00	First-Line Supervisors of Material-Moving Machine and Vehicle Operators
53-3052.00	Bus Drivers, Transit and Intercity
53-7062.04	Recycling and Reclamation Workers
53-7065.00	Stockers and Order Fillers

Type 7. Occupations with Title Changes

O*NET-SOC	
2019 Code	O*NET-SOC 2019 Title
11-9031.00	Education and Childcare Administrators, Preschool and Daycare
11-9032.00	Education Administrators, Kindergarten through Secondary
11-9071.00	Gambling Managers
11-9171.00	Funeral Home Managers
11-9199.10	Wind Energy Development Managers
15-1211.01	Health Informatics Specialists
15-1253.00	Software Quality Assurance Analysts and Testers
17-2031.00	Bioengineers and Biomedical Engineers
17-2199.03	Energy Engineers, Except Wind and Solar
17-3021.00	Aerospace Engineering and Operations Technologists and Technicians
17-3022.00	Civil Engineering Technologists and Technicians
17-3023.00	Electrical and Electronic Engineering Technologists and Technicians
17-3024.00	Electro-Mechanical and Mechatronics Technologists and Technicians
17-3025.00	Environmental Engineering Technologists and Technicians
17-3026.00	Industrial Engineering Technologists and Technicians
17-3027.00	Mechanical Engineering Technologists and Technicians
17-3029.00	Engineering Technologists and Technicians, Except Drafters, All Other
19-2041.01	Climate Change Policy Analysts
19-4043.00	Geological Technicians, Except Hydrologic Technicians
21-1012.00	Educational, Guidance, and Career Counselors and Advisors
21-1091.00	Health Education Specialists
25-1192.00	Family and Consumer Sciences Teachers, Postsecondary
25-1194.00	Career/Technical Education Teachers, Postsecondary
25-3011.00	Adult Basic Education, Adult Secondary Education, and English as a Second Language Instructors
25-3021.00	Self-Enrichment Teachers
25-9021.00	Farm and Home Management Educators
25-9044.00	Teaching Assistants, Postsecondary
25-9099.00	Educational Instruction and Library Workers, All Other
27-1014.00	Special Effects Artists and Animators
27-2012.03	Media Programming Directors
27-2012.05	Media Technical Directors/Managers
27-3011.00	Broadcast Announcers and Radio Disc Jockeys
27-3092.00	Court Reporters and Simultaneous Captioners
27-4011.00	Audio and Video Technicians
27-4031.00	Camera Operators, Television, Video, and Film
29-1215.00	Family Medicine Physicians

O*NET-SOC	
2019 Code	O*NET-SOC 2019 Title
29-1216.00	General Internal Medicine Physicians
29-1222.00	Physicians, Pathologists
29-1229.00	Physicians, All Other
29-1241.00	Ophthalmologists, Except Pediatric
29-1299.00	Healthcare Diagnosing or Treating Practitioners, All Other
33-1021.00	First-Line Supervisors of Firefighting and Prevention Workers
33-3051.04	Customs and Border Protection Officers
33-9031.00	Gambling Surveillance Officers and Gambling Investigators
33-9091.00	Crossing Guards and Flaggers
39-2021.00	Animal Caretakers
39-3011.00	Gambling Dealers
39-3012.00	Gambling and Sports Book Writers and Runners
39-3019.00	Gambling Service Workers, All Other
39-4031.00	Morticians, Undertakers, and Funeral Arrangers
39-9031.00	Exercise Trainers and Group Fitness Instructors
41-2012.00	Gambling Change Persons and Booth Cashiers
41-9091.00	Door-to-Door Sales Workers, News and Street Vendors, and Related Workers
43-3041.00	Gambling Cage Workers
43-5031.00	Public Safety Telecommunicators
43-5071.00	Shipping, Receiving, and Inventory Clerks
43-6012.00	Legal Secretaries and Administrative Assistants
43-6013.00	Medical Secretaries and Administrative Assistants
47-2044.00	Tile and Stone Setters
47-2072.00	Pile Driver Operators
47-4021.00	Elevator and Escalator Installers and Repairers
47-5013.00	Service Unit Operators, Oil and Gas
47-5022.00	Excavating and Loading Machine and Dragline Operators, Surface Mining
47-5044.00	Loading and Moving Machine Operators, Underground Mining
47-5049.00	Underground Mining Machine Operators, All Other
49-2097.00	Audiovisual Equipment Installers and Repairers
49-9064.00	Watch and Clock Repairers
51-4193.00	Plating Machine Setters, Operators, and Tenders, Metal and Plastic
51-9141.00	Semiconductor Processing Technicians
51-9161.00	Computer Numerically Controlled Tool Operators
51-9162.00	Computer Numerically Controlled Tool Programmers
53-1043.00	First-Line Supervisors of Material-Moving Machine and Vehicle Operators
L	

O*NET-SOC	
2019 Code	O*NET-SOC 2019 Title
53-3033.00	Light Truck Drivers
53-6021.00	Parking Attendants
53-6061.00	Passenger Attendants
53-7065.00	Stockers and Order Fillers

Type 8. Occupations with Description Changes

O*NET-SOC	
2019 Code	O*NET-SOC 2019 Title
11-1021.00	General and Operations Managers
11-1031.00	Legislators
11-2011.00	Advertising and Promotions Managers
11-3012.00	Administrative Services Managers
11-9031.00	Education and Childcare Administrators, Preschool and Daycare
11-9032.00	Education Administrators, Kindergarten through Secondary
11-9033.00	Education Administrators, Postsecondary
11-9071.00	Gambling Managers
11-9131.00	Postmasters and Mail Superintendents
13-1021.00	Buyers and Purchasing Agents, Farm Products
13-1022.00	Wholesale and Retail Buyers, Except Farm Products
13-1023.00	Purchasing Agents, Except Wholesale, Retail, and Farm Products
13-1071.00	Human Resources Specialists
13-1081.00	Logisticians
13-1151.00	Training and Development Specialists
13-1161.00	Market Research Analysts and Marketing Specialists
13-2023.00	Appraisers and Assessors of Real Estate
13-2041.00	Credit Analysts
13-2052.00	Personal Financial Advisors
13-2071.00	Credit Counselors
13-2072.00	Loan Officers
13-2099.01	Financial Quantitative Analysts
15-1211.00	Computer Systems Analysts
15-1212.00	Information Security Analysts
15-1231.00	Computer Network Support Specialists
15-1232.00	Computer User Support Specialists
15-1241.00	Computer Network Architects

O*NET-SOC	
2019 Code	O*NET-SOC 2019 Title
15-1241.01	Telecommunications Engineering Specialists
15-1242.00	Database Administrators
15-1243.00	Database Architects
15-1244.00	Network and Computer Systems Administrators
15-1251.00	Computer Programmers
15-1253.00	Software Quality Assurance Analysts and Testers
15-1254.00	Web Developers
15-2031.00	Operations Research Analysts
15-2041.00	Statisticians
17-1021.00	Cartographers and Photogrammetrists
17-2031.00	Bioengineers and Biomedical Engineers
17-2051.00	Civil Engineers
17-2151.00	Mining and Geological Engineers, Including Mining Safety Engineers
17-3021.00	Aerospace Engineering and Operations Technologists and Technicians
17-3023.00	Electrical and Electronic Engineering Technologists and Technicians
17-3024.00	Electro-Mechanical and Mechatronics Technologists and Technicians
17-3025.00	Environmental Engineering Technologists and Technicians
17-3027.00	Mechanical Engineering Technologists and Technicians
17-3029.00	Engineering Technologists and Technicians, Except Drafters, All Other
17-3031.00	Surveying and Mapping Technicians
19-1042.00	Medical Scientists, Except Epidemiologists
19-2041.00	Environmental Scientists and Specialists, Including Health
19-2042.00	Geoscientists, Except Hydrologists and Geographers
19-2043.00	Hydrologists
19-3032.00	Industrial-Organizational Psychologists
19-3034.00	School Psychologists
19-3094.00	Political Scientists
19-4012.00	Agricultural Technicians
19-4013.00	Food Science Technicians
19-4021.00	Biological Technicians
19-4043.00	Geological Technicians, Except Hydrologic Technicians
19-4051.00	Nuclear Technicians
19-4071.00	Forest and Conservation Technicians
19-5011.00	Occupational Health and Safety Specialists
21-1012.00	Educational, Guidance, and Career Counselors and Advisors
21-1014.00	Mental Health Counselors
21-1015.00	Rehabilitation Counselors
21-1022.00	Healthcare Social Workers
21-1091.00	Health Education Specialists

n
ation
cond

O*NET-SOC	
2019 Code	O*NET-SOC 2019 Title
27-4011.00	Audio and Video Technicians
27-4012.00	Broadcast Technicians
27-4014.00	Sound Engineering Technicians
27-4021.00	Photographers
27-4031.00	Camera Operators, Television, Video, and Film
27-4032.00	Film and Video Editors
29-1024.00	Prosthodontists
29-1122.00	Occupational Therapists
29-1124.00	Radiation Therapists
29-1125.00	Recreational Therapists
29-1129.02	Music Therapists
29-1141.02	Advanced Practice Psychiatric Nurses
29-1141.03	Critical Care Nurses
29-1141.04	Clinical Nurse Specialists
29-1211.00	Anesthesiologists
29-1213.00	Dermatologists
29-1215.00	Family Medicine Physicians
29-1216.00	General Internal Medicine Physicians
29-1217.00	Neurologists
29-1218.00	Obstetricians and Gynecologists
29-1221.00	Pediatricians, General
29-1222.00	Physicians, Pathologists
29-1223.00	Psychiatrists
29-1224.00	Radiologists
29-1229.00	Physicians, All Other
29-1241.00	Ophthalmologists, Except Pediatric
29-1291.00	Acupuncturists
29-1292.00	Dental Hygienists
29-1299.00	Healthcare Diagnosing or Treating Practitioners, All Other
29-2011.01	Cytogenetic Technologists
29-2031.00	Cardiovascular Technologists and Technicians
29-2032.00	Diagnostic Medical Sonographers
29-2055.00	Surgical Technologists
29-9091.00	Athletic Trainers
29-9093.00	Surgical Assistants
31-1121.00	Home Health Aides
31-1122.00	Personal Care Aides
31-1131.00	Nursing Assistants
31-1132.00	Orderlies

O*NET-SOC	
2019 Code	O*NET-SOC 2019 Title
31-2011.00	Occupational Therapy Assistants
31-2021.00	Physical Therapist Assistants
31-9091.00	Dental Assistants
31-9096.00	Veterinary Assistants and Laboratory Animal Caretakers
33-1021.00	First-Line Supervisors of Firefighting and Prevention Workers
33-2021.00	Fire Inspectors and Investigators
33-2022.00	Forest Fire Inspectors and Prevention Specialists
33-3021.00	Detectives and Criminal Investigators
33-3051.00	Police and Sheriff's Patrol Officers
33-9021.00	Private Detectives and Investigators
33-9031.00	Gambling Surveillance Officers and Gambling Investigators
33-9092.00	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers
35-9011.00	Dining Room and Cafeteria Attendants and Bartender Helpers
37-3012.00	Pesticide Handlers, Sprayers, and Applicators, Vegetation
39-1022.00	First-Line Supervisors of Personal Service Workers
39-2011.00	Animal Trainers
39-2021.00	Animal Caretakers
39-3011.00	Gambling Dealers
39-3012.00	Gambling and Sports Book Writers and Runners
39-3019.00	Gambling Service Workers, All Other
39-3031.00	Ushers, Lobby Attendants, and Ticket Takers
39-3091.00	Amusement and Recreation Attendants
39-4021.00	Funeral Attendants
39-4031.00	Morticians, Undertakers, and Funeral Arrangers
39-5011.00	Barbers
39-5012.00	Hairdressers, Hairstylists, and Cosmetologists
39-6012.00	Concierges
39-7012.00	Travel Guides
39-9031.00	Exercise Trainers and Group Fitness Instructors
39-9041.00	Residential Advisors
41-2021.00	Counter and Rental Clerks
41-3011.00	Advertising Sales Agents
41-3041.00	Travel Agents
41-4011.00	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products
41-9022.00	Real Estate Sales Agents
43-3011.00	Bill and Account Collectors
43-3041.00	Gambling Cage Workers

O*NET-SOC	
2019 Code	O*NET-SOC 2019 Title
43-4011.00	Brokerage Clerks
43-4041.00	Credit Authorizers, Checkers, and Clerks
43-4051.00	Customer Service Representatives
43-4121.00	Library Assistants, Clerical
43-4181.00	Reservation and Transportation Ticket Agents and Travel Clerks
43-5011.00	Cargo and Freight Agents
43-5031.00	Public Safety Telecommunicators
43-5051.00	Postal Service Clerks
43-5052.00	Postal Service Mail Carriers
43-5053.00	Postal Service Mail Sorters, Processors, and Processing Machine Operators
43-5071.00	Shipping, Receiving, and Inventory Clerks
43-6011.00	Executive Secretaries and Executive Administrative Assistants
43-6014.00	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive
43-9022.00	Word Processors and Typists
43-9051.00	Mail Clerks and Mail Machine Operators, Except Postal Service
43-9061.00	Office Clerks, General
43-9081.00	Proofreaders and Copy Markers
45-2091.00	Agricultural Equipment Operators
45-2093.00	Farmworkers, Farm, Ranch, and Aquacultural Animals
45-4011.00	Forest and Conservation Workers
45-4022.00	Logging Equipment Operators
47-2021.00	Brickmasons and Blockmasons
47-2031.00	Carpenters
47-2044.00	Tile and Stone Setters
47-2061.00	Construction Laborers
47-2071.00	Paving, Surfacing, and Tamping Equipment Operators
47-2072.00	Pile Driver Operators
47-2081.00	Drywall and Ceiling Tile Installers
47-2152.00	Plumbers, Pipefitters, and Steamfitters
47-3011.00	HelpersBrickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters
47-3012.00	HelpersCarpenters
47-3013.00	HelpersElectricians
47-3014.00	HelpersPainters, Paperhangers, Plasterers, and Stucco Masons
47-3015.00	HelpersPipelayers, Plumbers, Pipefitters, and Steamfitters
47-3016.00	HelpersRoofers
47-4051.00	Highway Maintenance Workers

O*NET-SOC	
2019 Code	O*NET-SOC 2019 Title
47-5011.00	Derrick Operators, Oil and Gas
47-5013.00	Service Unit Operators, Oil and Gas
47-5022.00	Excavating and Loading Machine and Dragline Operators, Surface Mining
47-5023.00	Earth Drillers, Except Oil and Gas
47-5032.00	Explosives Workers, Ordnance Handling Experts, and Blasters
47-5041.00	Continuous Mining Machine Operators
47-5044.00	Loading and Moving Machine Operators, Underground Mining
47-5049.00	Underground Mining Machine Operators, All Other
47-5051.00	Rock Splitters, Quarry
49-1011.00	First-Line Supervisors of Mechanics, Installers, and Repairers
49-2021.00	Radio, Cellular, and Tower Equipment Installers and Repairers
49-2022.00	Telecommunications Equipment Installers and Repairers, Except Line Installers
49-2097.00	Audiovisual Equipment Installers and Repairers
49-2098.00	Security and Fire Alarm Systems Installers
49-3011.00	Aircraft Mechanics and Service Technicians
49-3042.00	Mobile Heavy Equipment Mechanics, Except Engines
49-3053.00	Outdoor Power Equipment and Other Small Engine Mechanics
49-9021.00	Heating, Air Conditioning, and Refrigeration Mechanics and Installers
49-9041.00	Industrial Machinery Mechanics
49-9045.00	Refractory Materials Repairers, Except Brickmasons
49-9071.00	Maintenance and Repair Workers, General
49-9092.00	Commercial Divers
49-9094.00	Locksmiths and Safe Repairers
51-1011.00	First-Line Supervisors of Production and Operating Workers
51-2061.00	Timing Device Assemblers and Adjusters
51-2092.00	Team Assemblers
51-3022.00	Meat, Poultry, and Fish Cutters and Trimmers
51-3023.00	Slaughterers and Meat Packers
51-4023.00	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic
51-4041.00	Machinists
51-4121.00	Welders, Cutters, Solderers, and Brazers
51-4191.00	Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic
51-4193.00	Plating Machine Setters, Operators, and Tenders, Metal and Plastic
51-6041.00	Shoe and Leather Workers and Repairers
51-7041.00	Sawing Machine Setters, Operators, and Tenders, Wood
51-7042.00	Woodworking Machine Setters, Operators, and Tenders, Except Sawing

O*NET-SOC	
2019 Code	O*NET-SOC 2019 Title
51-8021.00	Stationary Engineers and Boiler Operators
51-9041.00	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders
51-9051.00	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders
51-9071.00	Jewelers and Precious Stone and Metal Workers
51-9082.00	Medical Appliance Technicians
51-9123.00	Painting, Coating, and Decorating Workers
51-9124.00	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders
51-9161.00	Computer Numerically Controlled Tool Operators
51-9162.00	Computer Numerically Controlled Tool Programmers
51-9193.00	Cooling and Freezing Equipment Operators and Tenders
53-1042.00	First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand
53-1043.00	First-Line Supervisors of Material-Moving Machine and Vehicle Operators
53-2011.00	Airline Pilots, Copilots, and Flight Engineers
53-2012.00	Commercial Pilots
53-2021.00	Air Traffic Controllers
53-2022.00	Airfield Operations Specialists
53-2031.00	Flight Attendants
53-3031.00	Driver/Sales Workers
53-3032.00	Heavy and Tractor-Trailer Truck Drivers
53-3033.00	Light Truck Drivers
53-6021.00	Parking Attendants
53-6031.00	Automotive and Watercraft Service Attendants
53-6051.00	Transportation Inspectors
53-6061.00	Passenger Attendants
53-7062.00	Laborers and Freight, Stock, and Material Movers, Hand
53-7065.00	Stockers and Order Fillers
53-7071.00	Gas Compressor and Gas Pumping Station Operators
53-7121.00	Tank Car, Truck, and Ship Loaders
55-1011.00	Air Crew Officers
55-3011.00	Air Crew Members
55-3013.00	Armored Assault Vehicle Crew Members
55-3015.00	Command and Control Center Specialists
55-3019.00	Military Enlisted Tactical Operations and Air/Weapons Specialists and Crew Members, All Other