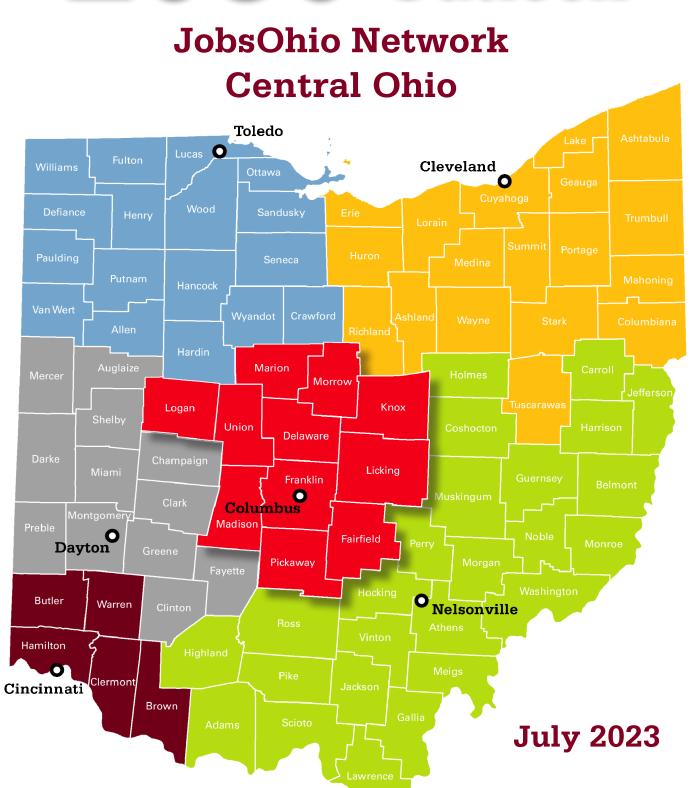


2030 Job Outlook



2030 Job Outlook for JobsOhio Network Regions

The Ohio Department of Job and Family Services' Bureau of Labor Market Information updates employment projections every two years. The projections are widely used for studying long-range economic and employment trends, planning education and training programs, and developing career information. This edition uses employment statistics through 2020 as a foundation to project employment conditions for the 10-year period ending in 2030.

The table below summarizes 2020 employment levels and projected 2030 levels for Ohio's six JobsOhio Regions. The difference between those years represents projected new jobs due to industry growth. The number of these new jobs is expected to range from a growth of 93,045 in the Central Region to a growth of 13,641 jobs in the Southeast Region. Among the state's regions, the highest projected growth is in Central Ohio (8.0%); followed by Southwest Ohio (6.0%), West Ohio (4.1%), Southeast Ohio (4.0%), Northeast Ohio (3.0%), and Northwest Ohio (2.7%).

Comparison of JobsOhio Regional Network: 2020-2030

	2020	2030 Projected	Projected 2020-2	
JobsOhio Regions	Employment	Employment	Number	Percent
Central Ohio	1,168,921	1,261,966	93,045	8.0%
Southwest Ohio	888,939	942,233	53,294	6.0%
West Ohio	590,922	615,181	24,259	4.1%
Southeast Ohio	345,649	359,290	13,641	4.0%
Northeast Ohio	1,996,374	2,056,711	60,337	3.0%
Northwest Ohio	576,227	591,855	15,628	2.7%

Each 2030 Job Outlook report for Ohio's JobsOhio Region contains a summary of the employment outlook by industry and occupation. Typical education, work experience, and on-the-job training required for each occupation are provided. Annual openings are the result of industry growth and vacancies resulting from retirement and transfers to different occupations.

Technical Notes

Projections of employment demand were made primarily at the four-digit industry level and then aggregated to the three-digit level, based on the North American Industry Classification System (NAICS). Shift-share, time-series and regression analysis techniques were used to compare Ohio's historical regional industry employment to statewide and national industry employment, population growth and various other factors. State and local area projections are partially dependent on the outlook for specific industries nationally.

Regional staffing patterns were estimated using the Local Employment and Wage Information System, which creates wage estimates for customized geographic regions using data from the Occupational Employment and Wage Statistics (OEWS) surveys. Wage estimates are based on Ohio's OEWS surveys. Wage estimates represent May 2021.

Ohio industry staffing patterns were adjusted for expected technological change and other factors from national data provided by the U.S. Bureau of Labor Statistics (BLS). To project occupational openings, Ohio uses national separation rates calculated by the BLS caused by workers exiting the labor force due to retirement or other reasons (labor force exits) and separations caused by workers transferring to different occupations (occupational transfers). Projections of separations are combined with projections of employment change to estimate occupational openings.

Inclusion of education and training levels is made possible by the classification of the Standard Occupational Classification-based occupations into 11 distinct categories by the BLS Office of Occupational Statistics and Employment Projections.

Because it is difficult to estimate future needs with certainty, the long-term job outlook data are updated every other year. More information about projected local job growth in Ohio is available through reports published at <u>Employment Projections (ohiolmi.com)</u>.

For more information, contact the Ohio Bureau of Labor Market Information at (614) 752-9494 or ContactLMI@ifs.ohio.gov.

		Emplo	yment*	Chang	ge in					
soc		2020	2030	Employ	ment		Annua	l Openings		Median Wage
Code	Occupational Title	Annual	Projected	2020-2030		Growth	Exits	Transfers	Total	May 2021
	Total, All Occupations	1,168,921	1,261,966	93,045	8.0%	9,304	50,873	79,184	139,361	\$22.40
11-0000	Management Occupations	70,397	77,059	6,662	9.5%	666	2,143	3,818	6,627	\$48.20
11-1011	Chief Executives	1,830	1,671	-159	-8.7%	-16	48	71	103	\$80.74
11-1021	General and Operations Managers	14,405	15,779	1,374	9.5%	137	301	936	1,374	\$47.63
11-1031	Legislators	336	372	36	10.7%	4	8	17	29	\$37,738 **
11-2021	Marketing Managers	1,777	1,869	92	5.2%	9	36	115	160	\$62.05
11-2022	Sales Managers	2,537	2,668	131	5.2%	13	52	164	229	\$61.39
11-2030	Public Relations and Fundraising Managers	376	413	37	9.8%	4	10	22	36	\$57.62 ^
11-3010	Administrative Services and Facilities Managers	2,900	3,152	252	8.7%	25	86	151	262	\$47.73 ^
11-3021	Computer and Information Systems Managers	3,250	3,353	103	3.2%	10	54	188	252	\$63.05
11-3031	Financial Managers	5,457	6,422	965	17.7%	96	122	298	516	\$61.39
11-3051	Industrial Production Managers	1,368	1,455	87	6.4%	9	27	67	103	\$48.25
11-3061	Purchasing Managers	430	459	29	6.7%	3	10	24	37	\$61.12
11-3071	Transportation, Storage, and Distribution Managers	1,446	1,674	228	15.8%	23	30	86	139	\$40.97
11-3111	Compensation and Benefits Managers	157	160	3	1.9%	0	3	8	11	\$61.39
11-3121	Human Resources Managers	1,017	1,101	84	8.3%	8	24	59	91	\$60.88
11-3131	Training and Development Managers	264	294	30	11.4%	3	6	18	27	\$50.40
11-9013	Farmers, Ranchers, and Other Agricultural Managers	11,389	11,903	514	4.5%	51	718	405	1,174	\$35.12 ^
11-9021	Construction Managers	2,579	2,927	348	13.5%	35	57	139	231	\$47.76
11-9031	Education Administrators, Preschool and Childcare Center/Program	414	506	92	22.2%	9	11	21	41	\$22.23
11-9032	Education Administrators, Elementary and Secondary School	1,715	1,887	172	10.0%	17	44	84	145	\$98,308 **
11-9033	Education Administrators, Postsecondary	1,077	1,121	44	4.1%	4	27	51	82	\$50.75
11-9039	Education Administrators, All Other	254	291	37	14.6%	4	7	13	24	\$38.46
11-9041	Architectural and Engineering Managers	1,158	1,208	50	4.3%	5	21	60	86	\$63.35
11-9051	Food Service Managers	2,322	2,556	234	10.1%	23	75	195	293	\$28.60
11-9111	Medical and Health Services Managers	3,463	4,771	1,308	37.8%	131	103	209	443	\$47.76
11-9121	Natural Sciences Managers	283	296	13	4.6%	1	6	14	21	\$49.32
11-9141	Property, Real Estate, and Community Association Managers	2,807	2,916	109	3.9%	11	109	108	228	\$22.86
11-9151	Social and Community Service Managers	948	1,081	133	14.0%	13	30	54	97	\$30.60
11-9198	Personal Service Managers; Entertainment & Recreation Managers, Except									
	Gambling; and Managers, All Other	3,629	3,905	276	7.6%	28	87	185	300	\$59.93 ^^^
13-0000	Business and Financial Operations Occupations	93,671	100,405	6,734	7.2%	673	2,532	5,621	8,826	\$33.24
13-1020	Buyers and Purchasing Agents	3,783	3,570	-213	-5.6%	-21	125	236	340	\$30.69
13-1031	Claims Adjusters, Examiners, and Investigators	5,081	4,979	-102	-2.0%	-10	118	261	369	\$29.60
13-1041	Compliance Officers	2,647	2,837	190	7.2%	19	66	146	231	\$36.57
13-1051	Cost Estimators	1,556	1,596	40	2.6%	4	44	95	143	\$30.63
13-1071	Human Resources Specialists	8,469	9,349	880	10.4%	88	241	592	921	\$29.41
13-1075	Labor Relations Specialists	631	592	-39	-6.2%	-4	17	41	54	\$38.76
13-1081	Logisticians	1,767	2,305	538	30.5%	54	43	132	229	\$37.24
13-1111	Management Analysts	9,400	10,277	877	9.3%	88	316	566	970	\$38.17
13-1121	Meeting, Convention, and Event Planners	794	902	108	13.6%	11	25	62	98	\$28.89

		Emplo	yment*	Change in						
soc		2020	2030	Employ			Annua	l Openings		Median Wage
Code	Occupational Title	Annual	Projected	2020-2030	Percent	Growth	Exits	Transfers	Total	May 2021
13-1131	Fundraisers	1,233	1,424	191	15.5%	19	41	84	144	\$29.16
13-1141	Compensation, Benefits, and Job Analysis Specialists	815	911	96	11.8%	10	26	50	86	\$29.38
13-1151	Training and Development Specialists	3,740	4,162	422	11.3%	42	119	242	403	\$24.01
13-1161	Market Research Analysts and Marketing Specialists	6,958	8,228	1,270	18.3%	127	180	555	862	\$30.05
13-1198	Project Management Specialists and Business Operations Specialists, All Other	17,598	18,297	699	4.0%	70	416	880	1,366	\$35.90 ^^^
13-2011	Accountants and Auditors	12,915	13,692	777	6.0%	78	371	788	1,237	\$36.57
13-2020	Property Appraisers and Assessors	1,013	1,055	42	4.2%	4	39	38	81	\$37.24
13-2031	Budget Analysts	213	229	16	7.5%	2	5	12	19	\$38.92
13-2041	Credit Analysts	832	823	-9	-1.1%	-1	14	56	69	\$30.78
13-2052	Personal Financial Advisors	1,821	2,034	213	11.7%	21	44	95	160	\$39.61
13-2053	Insurance Underwriters	1,448	1,375	-73	-5.0%	-7	29	73	95	\$37.21
13-2061	Financial Examiners	1,376	1,678	302	22.0%	30	40	71	141	\$37.24
13-2072	Loan Officers	3,341	3,466	125	3.7%	12	73	185	270	\$30.37
13-2081	Tax Examiners and Collectors, and Revenue Agents	501	493	-8	-1.6%	-1	19	22	40	\$30.51
13-2098	Financial and Investment Analysts, Financial Risk Specialists, and Financial									
	Specialists, All Other	5,074	5,451	377	7.4%	38	92	300	430	\$35.21 ^^^
15-0000	Computer and Mathematical Occupations	51,108	54,044	2,936	5.7%	294	1,097	2,593	3,984	\$39.47
15-1211	Computer Systems Analysts	7,387	7,391	4	0.1%	0	144	364	508	\$47.34
15-1212	Information Security Analysts	1,589	1,993	404	25.4%	40	28	99	167	\$47.76
15-1231	Computer Network Support Specialists	2,125	2,255	130	6.1%	13	41	116	170	\$30.03
15-1232	Computer User Support Specialists	5,561	5,561	0	0.0%	0	104	294	398	\$23.12
15-1244	Network and Computer Systems Administrators	2,715	2,768	53	2.0%	5	46	129	180	\$38.80
15-1245	Database Administrators and Architects	1,454	1,490	36	2.5%	4	34	72	110	\$47.44 ^^^
15-1251	Computer Programmers	1,560	1,211	-349	-22.4%	-35	28	63	56	\$39.18
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	18,223	20,025	1,802	9.9%	180	444	938	1,562	\$49.49 ^^^
15-1257	Web Developers and Digital Interface Designers	1,680	1,718	38	2.3%	4	39	83	126	\$49.49 ^^^
15-1299	Computer Occupations, All Other	4,168	4,363	195	4.7%	20	99	209	328	\$47.76
15-2011	Actuaries	546	674	128	23.4%	13	10	24	47	\$48.54
15-2031	Operations Research Analysts	1,492	1,762	270	18.1%	27	35	71	133	\$41.30
15-2098	Data Scientists and Mathematical Science Occupations, All Other	699	833	134	19.2%	13	16	38	67	\$30.03 ^^^
17-0000	Architecture and Engineering Occupations	17,908	19,014	1,106	6.2%	111	434	867	1,412	\$37.38
17-1011	Architects, Except Landscape and Naval	946	986	40	4.2%	4	26	41	71	\$37.45
17-1022	Surveyors	225	230	5	2.2%	0	8	11	19	\$29.68
17-2011	Aerospace Engineers	116	130	14	12.1%	1	2	4	7	\$49.05
17-2031	Biomedical Engineers	147	152	5	3.4%	0	3	6	9	\$47.49
17-2041	Chemical Engineers	188	203	15	8.0%	2	4	7	13	\$47.31
17-2051	Civil Engineers	1,678	1,832	154	9.2%	15	35	87	137	\$37.95
17-2061	Computer Hardware Engineers	199	197	-2	-1.0%	0	4	9	13	\$37.62
17-2071	Electrical Engineers	1,468	1,616	148	10.1%	15	37	62	114	\$47.36
17-2072	Electronics Engineers, Except Computer	721	755	34	4.7%	3	18	30	51	\$46.19
17-2081	Environmental Engineers	309	331	22	7.1%	2	8	16	26	\$39.48

		Emplo	yment*	Chang	ge in					
soc		2020	2030	Employ	ment		Annua	l Openings		Median Wage
Code	Occupational Title	Annual	Projected	2020-2030		Growth	Exits	Transfers	Total	May 2021
17-2112	Industrial Engineers	2,909	3,248	339	11.7%	34	67	123	224	\$38.80
17-2131	Materials Engineers	254	280	26	10.2%	3	5	10	18	\$39.92
17-2141	Mechanical Engineers	2,695	2,879	184	6.8%	18	48	115	181	\$38.05
17-2199	Engineers, All Other	1,485	1,529	44	3.0%	4	32	62	98	\$38.95
17-3011	Architectural and Civil Drafters	721	712	-9	-1.3%	-1	22	46	67	\$29.02
17-3012	Electrical and Electronics Drafters	128	130	2	1.6%	0	4	8	12	\$28.42
17-3013	Mechanical Drafters	432	400	-32	-7.4%	-3	13	26	36	\$29.19
17-3022	Civil Engineering Technicians	330	343	13	3.9%	1	10	21	32	\$29.03
17-3023	Electrical and Electronics Engineering Technicians	532	536	4	0.8%	0	16	33	49	\$31.99
17-3025	Environmental Engineering Technicians	120	128	8	6.7%	1	4	8	13	\$18.14
17-3026	Industrial Engineering Technicians	563	594	31	5.5%	3	17	36	56	\$28.95
17-3027	Mechanical Engineering Technicians	282	295	13	4.6%	1	9	18	28	\$29.04
17-3031	Surveying and Mapping Technicians	281	290	9	3.2%	1	10	25	36	\$22.64
17-3098	Calibration and Engineering Technologists and Technicians, Except Drafters, All									
	Other	390	407	17	4.4%	2	12	24	38	\$29.18 ^^^
19-0000	Life, Physical, and Social Science Occupations	9,453	10,153	700	7.4%	70	203	674	947	\$31.28
19-1012	Food Scientists and Technologists	141	148	7	5.0%	1	3	12	16	\$39.40
19-1041	Epidemiologists	177	235	58	32.8%	6	3	12	21	\$37.38
19-1042	Medical Scientists, Except Epidemiologists	975	1,142	167	17.1%	17	14	61	92	\$37.32
19-2031	Chemists	671	731	60	8.9%	6	10	52	68	\$37.16
19-2041	Environmental Scientists and Specialists, Including Health	741	751	10	1.4%	1	12	59	72	\$39.27
19-2043	Hydrologists	175	182	7	4.0%	1	3	14	18	\$39.53
19-2099	Physical Scientists, All Other	125	122	-3	-2.4%	0	2	8	10	\$39.27
19-3031	Clinical, Counseling, and School Psychologists	817	921	104	12.7%	10	23	34	67	\$38.96 ^^^
19-3051	Urban and Regional Planners	125	136	11	8.8%	1	2	9	12	\$30.33
19-3099	Social Scientists and Related Workers, All Other	683	678	-5	-0.7%	0	15	45	60	\$39.53
19-4021	Biological Technicians	931	994	63	6.8%	6	23	96	125	\$23.03
19-4031	Chemical Technicians	400	417	17	4.3%	2	7	37	46	\$24.17
19-4042	Environmental Science and Protection Technicians, Including Health	303	331	28	9.2%	3	8	30	41	\$17.76
19-4061	Social Science Research Assistants	121	131	10	8.3%	1	3	12	16	\$30.36
19-4092	Forensic Science Technicians	155	177	22	14.2%	2	4	16	22	\$30.89
19-4099	Life, Physical, and Social Science Technicians, All Other	223	242	19	8.5%	2	6	22	30	\$24.11
19-5011	Occupational Health and Safety Specialists	1,103	1,162	59	5.4%	6	31	49	86	\$37.98
19-5012	Occupational Health and Safety Technicians	140	145	5	3.6%	0	4	6	10	\$22.77
21-0000	Community and Social Service Occupations	20,102	23,274	3,172	15.8%	317	746	1,387	2,450	\$23.34
21-1012	Educational, Guidance, School, and Vocational Counselors	1,820	2,025	205	11.3%	20	63	114	197	\$29.57
21-1015	Rehabilitation Counselors	1,637	2,088	451	27.6%	45	61	110	216	\$18.61
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	1,746	2,184	438	25.1%	44	64	116	224	\$23.47
21-1021	Child, Family, and School Social Workers	1,369	1,630	261	19.1%	26	42	95	163	\$23.24
21-1022	Healthcare Social Workers	1,476	1,734	258	17.5%	26	45	101	172	\$29.43
21-1023	Mental Health and Substance Abuse Social Workers	1,650	1,951	301	18.2%	30	50	114	194	\$23.41

		Emplo	yment*	Change in						
soc		2020	2030	Employment				Median Wage		
Code	Occupational Title	Annual	Projected	2020-2030	Percent	Growth	Exits	I Openings Transfers	Total	May 2021
21-1029	Social Workers, All Other	600	641	41	6.8%	4	17	39	60	\$28.54
21-1091	Health Educators	567	644	77	13.6%	8	21	42	71	\$29.29
21-1092	Probation Officers and Correctional Treatment Specialists	695	748	53	7.6%	5	16	43	64	\$23.68
21-1093	Social and Human Service Assistants	3,328	3,962	634	19.1%	63	145	275	483	\$18.04
21-1094	Community Health Workers	403	510	107	26.6%	11	16	31	58	\$17.81
21-1099	Community and Social Service Specialists, All Other	511	546	35	6.9%	4	18	36	58	\$28.97
21-2011	Clergy	3,259	3,494	235	7.2%	24	138	195	357	\$23.96
23-0000	Legal Occupations	9,952	10,743	791	8.0%	79	278	389	746	\$36.90
23-1011	Lawyers	5,900	6,402	502	8.5%	50	133	151	334	\$49.85
23-1021	Administrative Law Judges, Adjudicators, and Hearing Officers	399	396	-3	-0.8%	0	9	10	19	\$30.49
23-1023	Judges, Magistrate Judges, and Magistrates	446	461	15	3.4%	2	10	11	23	\$39.31
23-2011	Paralegals and Legal Assistants	2,504	2,778	274	10.9%	27	102	178	307	\$22.96
23-2093	Title Examiners, Abstractors, and Searchers	458	451	-7	-1.5%	-1	16	27	42	\$23.39
23-2099	Legal Support Workers, All Other	152	155	3	2.0%	0	6	9	15	\$28.73
25-0000	Education, Training, and Library Occupations	64,293	72,346	8,053	12.5%	805	2,682	3,084	6,571	\$29.28
25-1011	Business Teachers, Postsecondary	410	413	3	0.7%	0	18	19	37	\$100,529 **
25-1021	Computer Science Teachers, Postsecondary	181	183	2	1.1%	0	8	8	16	\$101,107 **
25-1022	Mathematical Science Teachers, Postsecondary	395	398	3	0.8%	0	18	18	36	\$79,334 **
25-1042	Biological Science Teachers, Postsecondary	739	801	62	8.4%	6	34	36	76	\$96,617 **
25-1052	Chemistry Teachers, Postsecondary	172	181	9	5.2%	1	8	8	17	\$78,995 **
25-1054	Physics Teachers, Postsecondary	141	148	7	5.0%	1	6	7	14	\$95,912 **
25-1065	Political Science Teachers, Postsecondary	102	107	5	4.9%	0	5	5	10	\$96,815 **
25-1066	Psychology Teachers, Postsecondary	293	307	14	4.8%	1	13	14	28	\$81,120 **
25-1072	Nursing Instructors and Teachers, Postsecondary	446	506	60	13.5%	6	21	22	49	\$80,067 **
25-1081	Education Teachers, Postsecondary	230	238	8	3.5%	1	10	11	22	\$62,849 **
25-1111	Criminal Justice and Law Enforcement Teachers, Postsecondary	125	125	0	0.0%	0	6	6	12	\$75,840 **
25-1121	Art, Drama, and Music Teachers, Postsecondary	498	524	26	5.2%	3	23	24	50	\$78,725 **
25-1122	Communications Teachers, Postsecondary	135	140	5	3.7%	0	6	6	12	\$79,520 **
25-1123	English Language and Literature Teachers, Postsecondary	402	405	3	0.8%	0	18	19	37	\$75,926 **
25-1124	Foreign Language and Literature Teachers, Postsecondary	254	269	15	5.9%	2	12	12	26	\$78,575 **
25-1125	History Teachers, Postsecondary	278	284	6	2.2%	1	13	13	27	\$82,650 **
25-1126	Philosophy and Religion Teachers, Postsecondary	119	128	9	7.6%	1	6	6	13	\$79,898 **
25-1193	Recreation and Fitness Studies Teachers, Postsecondary	115	117	2	1.7%	0	5	5	10	\$79,268 **
25-1194	Vocational Education Teachers, Postsecondary	165	171	6	3.6%	1	8	8	17	\$23.12
25-2011	Preschool Teachers, Except Special Education	3,789	5,158	1,369	36.1%	137	183	261	581	\$13.96
25-2012	Kindergarten Teachers, Except Special Education	469	513	44	9.4%	4	20	29	53	\$63,168 **
25-2021	Elementary School Teachers, Except Special Education	10,446	11,401	955	9.1%	96	335	438	869	\$76,326 **
25-2022	Middle School Teachers, Except Special and Career/Technical Education	5,804	6,335	531	9.2%	53	186	243	482	\$63,668 **
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	8,843	9,720	877	9.9%	88	246	376	710	\$75,328 **
25-2032	Career/Technical Education Teachers, Secondary School	463	501	38	8.2%	4	13	20	37	\$63,698 **
25-2052	Special Education Teachers, Kindergarten and Elementary School	1,740	1,905	165	9.5%	16	59	72	147	\$76,762 **

		Emplo	yment*	Change in						
soc		2020	2030	Employ	ment		Annua	al Openings		Median Wage
Code	Occupational Title	Annual	Projected	2020-2030	Percent	Growth	Exits	Transfers	Total	May 2021
25-2057	Special Education Teachers, Middle School	796	870	74	9.3%	7	27	33	67	\$61,155 **
25-2058	Special Education Teachers, Secondary School	1,628	1,820	192	11.8%	19	56	69	144	\$62,670 **
25-3011	Adult Basic and Secondary Education and Literacy Teachers and Instructors	152	142	-10	-6.6%	-1	9	8	16	\$29.51
25-3021	Self-Enrichment Education Teachers	2,341	3,008	667	28.5%	67	160	143	370	\$14.39
25-3031	Substitute Teachers, Short-Term	1,058	1,241	183	17.3%	18	69	62	149	\$13.73
25-3097	Teachers and Instructors, All Other, Except Substitute Teachers	1,548	1,805	257	16.6%	26	100	90	216	\$17.94 ^^^
25-4022	Librarians and Media Collections Specialists	1,077	1,162	85	7.9%	8	55	49	112	\$28.87
25-4031	Library Technicians	667	665	-2	-0.3%	0	55	41	96	\$18.13
25-9031	Instructional Coordinators	1,212	1,338	126	10.4%	13	63	56	132	\$30.13
25-9044	Teaching Assistants, Postsecondary	2,843	2,923	80	2.8%	8	129	135	272	\$31,547 **
25-9045	Teaching Assistants, Except Postsecondary	7,503	8,674	1,171	15.6%	117	362	378	857	\$28,845 **
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	20,406	22,137	1,731	8.5%	173	807	1,336	2,316	\$23.76
27-1011	Art Directors	549	561	12	2.2%	1	27	29	57	\$42.39
27-1014	Multimedia Artists and Animators	224	215	-9	-4.0%	-1	11	11	21	\$26.39
27-1021	Commercial and Industrial Designers	233	249	16	6.9%	2	7	14	23	\$30.65
27-1023	Floral Designers	297	245	-52	-17.5%	-5	8	16	19	\$13.80
27-1024	Graphic Designers	1,822	1,905	83	4.6%	8	57	111	176	\$24.55
27-1025	Interior Designers	739	768	29	3.9%	3	23	45	71	\$27.99
27-1026	Merchandise Displayers and Window Trimmers	1,371	1,431	60	4.4%	6	43	83	132	\$14.56
27-2012	Producers and Directors	727	674	-53	-7.3%	-5	15	44	54	\$29.24
27-2022	Coaches and Scouts	2,849	3,309	460	16.2%	46	175	248	469	\$37,777 **
27-2041	Music Directors and Composers	388	422	34	8.8%	3	24	23	50	\$32.87
27-3011	Radio and Television Announcers	176	187	11	6.3%	1	7	10	18	\$14.11
27-3023	News Analysts, Reporters, and Journalists	423	394	-29	-6.9%	-3	12	31	40	\$19.95
27-3031	Public Relations Specialists	2,782	3,006	224	8.1%	22	72	190	284	\$30.20
27-3041	Editors	727	704	-23	-3.2%	-2	23	45	66	\$30.16
27-3042	Technical Writers	370	395	25	6.8%	2	10	24	36	\$31.60
27-3043	Writers and Authors	1,093	1,041	-52	-4.8%	-5	43	59	97	\$24.16
27-3091	Interpreters and Translators	2,124	2,861	737	34.7%	74	97	136	307	\$18.74
27-4011	Audio and Video Equipment Technicians	269	313	44	16.4%	4	8	21	33	\$23.35
27-4012	Broadcast Technicians	135	134	-1	-0.7%	0	4	10	14	\$23.03
27-4021	Photographers	708	734	26	3.7%	3	24	40	67	\$18.07
29-0000	Healthcare Practitioners and Technical Occupations	70,670	81,227	10,557	14.9%	1,056	1,962	2,277	5,295	\$30.18
29-1011	Chiropractors	387	447	60	15.5%	6	6	3	15	\$29.34
29-1021	Dentists, General	741	831	90	12.2%	9	14	7	30	\$80.68
29-1031	Dietitians and Nutritionists	458	525	67	14.6%	7	16	17	40	\$29.26
29-1041	Optometrists	302	346	44	14.6%	4	6	4	14	\$49.29
29-1051	Pharmacists	2,341	2,393	52	2.2%	5	44	46	95	\$61.71
29-1071	Physician Assistants	706	946	240	34.0%	24	13	33	70	\$49.27
29-1122	Occupational Therapists	959	1,157	198	20.7%	20	23	35	78	\$39.16
29-1123	Physical Therapists	1,604	1,954	350	21.8%	35	35	37	107	\$47.76

		Emplo	yment*	Change in						
soc		2020	2030	Employ			Annua	l Openings		Median Wage
Code	Occupational Title	Annual	Projected	2020-2030	Percent	Growth	Exits	Transfers	Total	May 2021
29-1125	Recreational Therapists	117	126	9	7.7%	1	4	5	10	\$22.99
29-1126	Respiratory Therapists	1,057	1,362	305	28.9%	30	26	30	86	\$29.87
29-1127	Speech-Language Pathologists	1,257	1,680	423	33.7%	42	34	53	129	\$38.11
29-1128	Exercise Physiologists	188	219	31	16.5%	3	6	7	16	\$17.80
29-1129	Therapists, All Other	907	1,012	105	11.6%	10	29	33	72	\$36.16
29-1131	Veterinarians	800	939	139	17.4%	14	14	14	42	\$47.83
29-1141	Registered Nurses	26,388	30,284	3,896	14.8%	390	756	713	1,859	\$36.08
29-1151	Nurse Anesthetists	645	759	114	17.7%	11	14	21	46	\$81.39
29-1171	Nurse Practitioners	1,771	2,717	946	53.4%	95	47	70	212	\$49.63
29-1211	Anesthesiologists	363	381	18	5.0%	2	6	4	12	#
29-1215	Family Medicine Physicians	333	365	32	9.6%	3	6	4	13	\$86.13
29-1216	General Internal Medicine Physicians	506	521	15	3.0%	2	8	6	16	\$85.12
29-1218	Obstetricians and Gynecologists	210	210	0	0.0%	0	3	2	5	\$81.57
29-1223	Psychiatrists	108	128	20	18.5%	2	2	1	5	#
29-1228	Physicians, All Other; and Ophthalmologists, Except Pediatric	2,142	2,359	217	10.1%	22	36	25	83	\$37.45 ^^^
29-1248	Surgeons, Except Ophthalmologists	396	400	4	1.0%	0	6	4	10	# ^^^
29-1292	Dental Hygienists	1,261	1,449	188	14.9%	19	49	34	102	\$37.13
29-1298	Acupuncturists and Healthcare Diagnosing or Treating Practitioners, All Other	155	167	12	7.7%	1	7	2	10	\$37.45 ^^^
29-2010	Clinical Laboratory Technologists and Technicians	2,440	2,721	281	11.5%	28	67	96	191	\$23.91
29-2031	Cardiovascular Technologists and Technicians	291	330	39	13.4%	4	8	13	25	\$29.90
29-2032	Diagnostic Medical Sonographers	435	539	104	23.9%	10	13	21	44	\$31.03
29-2033	Nuclear Medicine Technologists	140	156	16	11.4%	2	4	6	12	\$37.54
29-2034	Radiologic Technologists	1,647	1,870	223	13.5%	22	48	76	146	\$28.74
29-2035	Magnetic Resonance Imaging Technologists	200	220	20	10.0%	2	6	9	17	\$37.17
29-2040	Emergency Medical Technicians and Paramedics	939	1,013	74	7.9%	7	18	45	70	\$17.76 ^
29-2051	Dietetic Technicians	186	212	26	14.0%	3	5	9	17	\$17.58
29-2052	Pharmacy Technicians	3,103	3,225	122	3.9%	12	86	136	234	\$17.62
29-2053	Psychiatric Technicians	400	498	98	24.5%	10	12	19	41	\$14.26
29-2055	Surgical Technologists	786	898	112	14.3%	11	23	36	70	\$23.15
29-2056	Veterinary Technologists and Technicians	1,023	1,176	153	15.0%	15	30	47	92	\$17.51
29-2057	Ophthalmic Medical Technicians	559	679	120	21.5%	12	17	27	56	\$17.62
29-2061	Licensed Practical and Licensed Vocational Nurses	7,184	8,219	1,035	14.4%	104	260	322	686	\$22.95
29-2081	Opticians, Dispensing	748	802	54	7.2%	5	32	26	63	\$21.77
29-2091	Orthotists and Prosthetists	151	182	31	20.5%	3	4	7	14	\$29.34
29-2098	Medical Dosimetrists, Medical Records Specialists, and Health Technologists and									
	Technicians, All Other	2,583	2,872	289	11.2%	29	74	117	220	\$22.55 ^^^
29-9098	Health Information Technologists, Medical Registrars, Surgical Assistants, &									
	Healthcare Practitioners, AO	441	468	27	6.1%	3	12	20	35	\$26.19 ^^^
31-0000	Healthcare Support Occupations	47,611	60,146	12,535	26.3%	1,254	3,188	3,297	7,739	\$14.21
31-1120	Home Health and Personal Care Aides	23,796	32,404	8,608	36.2%	861	1,799	1,591	4,251	\$11.54
31-1131	Nursing Assistants	10,398	11,555	1,157	11.1%	116	703	622	1,441	\$14.44

		Emplo	yment*	Chang	ge in					
soc		2020	2030	Employ	ment		Annua	l Openings		Median Wage
Code	Occupational Title	Annual	Projected	2020-2030		Growth	Exits	Transfers	Total	May 2021
31-1132	Orderlies	411	468	57	13.9%	6	28	25	59	\$14.14
31-1133	Psychiatric Aides	179	202	23	12.9%	2	12	11	25	\$18.34
31-2011	Occupational Therapy Assistants	500	704	204	40.8%	20	30	44	94	\$29.98
31-2021	Physical Therapist Assistants	985	1,313	328	33.3%	33	49	87	169	\$30.08
31-9011	Massage Therapists	971	1,200	229	23.6%	23	64	57	144	\$23.15
31-9091	Dental Assistants	2,247	2,594	347	15.4%	35	110	170	315	\$22.58
31-9092	Medical Assistants	5,146	6,326	1,180	22.9%	118	235	429	782	\$17.96
31-9093	Medical Equipment Preparers	549	630	81	14.8%	8	33	39	80	\$18.23
31-9094	Medical Transcriptionists	132	111	-21	-15.9%	-2	6	10	14	\$18.37
31-9096	Veterinary Assistants and Laboratory Animal Caretakers	892	1,039	147	16.5%	15	47	107	169	\$14.27
31-9097	Phlebotomists	683	811	128	18.7%	13	32	54	99	\$17.85
31-9099	Healthcare Support Workers, All Other	478	518	40	8.4%	4	28	33	65	\$18.30
33-0000	Protective Service Occupations	22,769	25,010	2,241	9.8%	224	1,070	1,506	2,800	\$23.04
33-1011	First-Line Supervisors of Correctional Officers	106	104	-2	-1.9%	0	3	5	8	\$37.66
33-1021	First-Line Supervisors of Fire Fighting and Prevention Workers	566	624	58	10.3%	6	14	24	44	\$39.12
33-1090	Miscellaneous First-Line Supervisors, Protective Service Workers	614	704	90	14.7%	9	24	38	71	\$25.23 ^
33-2011	Firefighters	3,540	3,918	378	10.7%	38	82	192	312	\$29.01
33-3011	Bailiffs	253	266	13	5.1%	1	10	14	25	\$22.96
33-3012	Correctional Officers and Jailers	3,122	2,818	-304	-9.7%	-30	112	161	243	\$23.04
33-3021	Detectives and Criminal Investigators	569	575	6	1.1%	1	15	26	42	\$37.66
33-3051	Police and Sheriff's Patrol Officers	4,694	5,126	432	9.2%	43	123	249	415	\$37.21
33-9021	Private Detectives and Investigators	135	133	-2	-1.5%	0	4	8	12	\$23.94
33-9032	Security Guards	6,277	7,350	1,073	17.1%	107	361	528	996	\$14.14
33-9092	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	839	1,078	239	28.5%	24	132	106	262	\$10.84
33-9093	Transportation Security Screeners	310	324	14	4.5%	1	11	16	28	\$22.30
33-9098	School Bus Monitors and Protective Service Workers, All Other	680	823	143	21.0%	14	104	83	201	\$15.11 ^^^
35-0000	Food Preparation and Serving Related Occupations	84,443	96,042	11,599	13.7%	1,160	6,822	9,254	17,236	\$11.24
35-1011	Chefs and Head Cooks	564	670	106	18.8%	11	18	60	89	\$24.91
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	8,959	10,481	1,522	17.0%	152	434	991	1,577	\$17.47
35-2011	Cooks, Fast Food	4,166	3,878	-288	-6.9%	-29	237	344	552	\$11.35
35-2012	Cooks, Institution and Cafeteria	3,661	3,983	322	8.8%	32	225	327	584	\$14.34
35-2014	Cooks, Restaurant	6,119	8,625	2,506	41.0%	251	434	631	1,316	\$14.09
35-2015	Cooks, Short Order	1,019	1,091	72	7.1%	7	62	90	159	\$12.47
35-2021	Food Preparation Workers	5,264	5,391	127	2.4%	13	418	490	921	\$12.07
35-3011	Bartenders	3,393	4,354	961	28.3%	96	176	469	741	\$10.20
35-3023	Fast Food and Counter Workers	27,269	29,969	2,700	9.9%	270	2,775	3,026	6,071	\$10.78
35-3031	Waiters and Waitresses	15,688	17,969	2,281	14.5%	228	1,236	2,010	3,474	\$10.04
35-3041	Food Servers, Nonrestaurant	1,947	2,163	216	11.1%	22	163	160	345	\$12.80
35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	1,329	1,636	307	23.1%	31	128	128	287	\$11.18
35-9021	Dishwashers	2,160	2,446	286	13.2%	29	173	193	395	\$11.15
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	2,226	2,621	395	17.7%	40	287	273	600	\$10.96

		Emplo	/ment*	Chang	ge in					
soc		2020	2030	Employment Annual Op			l Openings		Median Wage	
Code	Occupational Title	Annual	Projected	2020-2030	Percent	Growth	Exits	Transfers	Total	May 2021
35-9099	Food Preparation and Serving Related Workers, All Other	476	585	109	22.9%	11	46	46	103	\$11.42
37-0000	Building and Grounds Cleaning and Maintenance Occupations	36,160	37,855	1,695	4.7%	170	2,087	2,711	4,968	\$14.41
37-1011	First-Line Supervisors of Housekeeping and Janitorial Workers	1,589	1,614	25	1.6%	2	69	111	182	\$19.46
37-1012	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	1,226	1,252	26	2.1%	3	38	89	130	\$23.33
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	17,091	17,801	710	4.2%	71	1,089	1,223	2,383	\$14.15
37-2012	Maids and Housekeeping Cleaners	6,937	7,355	418	6.0%	42	485	460	987	\$13.10
37-3011	Landscaping and Groundskeeping Workers	8,602	9,087	485	5.6%	48	380	758	1,186	\$14.79
39-0000	Personal Care and Service Occupations	23,381	27,817	4,436	19.0%	444	1,645	2,018	4,107	\$12.57
39-2011	Animal Trainers	125	161	36	28.8%	4	7	10	21	\$14.32
39-2021	Nonfarm Animal Caretakers	1,619	2,286	667	41.2%	67	125	162	354	\$11.09
39-3031	Ushers, Lobby Attendants, and Ticket Takers	608	966	358	58.9%	36	100	80	216	\$11.50
39-3091	Amusement and Recreation Attendants	1,808	2,352	544	30.1%	54	203	233	490	\$10.72
39-3093	Locker Room, Coatroom, and Dressing Room Attendants	111	137	26	23.4%	3	12	14	29	\$14.05
39-5012	Hairdressers, Hairstylists, and Cosmetologists	4,186	4,231	45	1.1%	4	223	234	461	\$13.98
39-5094	Skincare Specialists	344	390	46	13.4%	5	19	19	43	\$18.05
39-7010	Tour and Travel Guides	105	133	28	26.7%	3	8	11	22	\$22.66
39-9011	Childcare Workers	6,523	7,352	829	12.7%	83	467	485	1,035	\$11.28
39-9031	Fitness Trainers and Aerobics Instructors	2,137	2,992	855	40.0%	86	150	243	479	\$15.34
39-9032	Recreation Workers	2,653	3,105	452	17.0%	45	169	273	487	\$11.12
41-0000	Sales and Related Occupations	95,111	93,524	-1,587	-1.7%	-159	4,582	7,305	11,728	\$14.27
41-1011	First-Line Supervisors of Retail Sales Workers	8,325	7,771	-554	-6.7%	-55	284	558	787	\$18.77
41-1012	First-Line Supervisors of Non-Retail Sales Workers	2,771	2,583	-188	-6.8%	-19	78	159	218	\$38.09
41-2011	Cashiers	17,377	15,429	-1,948	-11.2%	-195	1,395	1,570	2,770	\$11.04
41-2021	Counter and Rental Clerks	2,044	2,192	148	7.2%	15	95	145	255	\$14.27
41-2031	Retail Salespersons	27,404	27,038	-366	-1.3%	-37	1,522	2,248	3,733	\$13.41
41-3011	Advertising Sales Agents	802	731	-71	-8.9%	-7	23	71	87	\$24.04
41-3021	Insurance Sales Agents	4,264	4,703	439	10.3%	44	149	251	444	\$29.02
41-3031	Securities, Commodities, and Financial Services Sales Agents	4,118	4,448	330	8.0%	33	95	270	398	\$37.24
41-3041	Travel Agents	289	258	-31	-10.7%	-3	13	18	28	\$18.57
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial									
	Services, and Travel	7,782	8,207	425	5.5%	42	201	703	946	\$27.83
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific									
	Products	1,775	1,836	61	3.4%	6	53	122	181	\$48.42
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and									
	Scientific Products	9,583	9,798	215	2.2%	22	286	655	963	\$30.00
41-9011	Demonstrators and Product Promoters	180	199	19	10.6%	2	21	12	35	\$14.80
41-9022	Real Estate Sales Agents	3,917	4,088	171	4.4%	17	166	176	359	\$17.74
41-9031	Sales Engineers	292	298	6	2.1%	1	6	24	31	\$47.92
41-9041	Telemarketers	1,125	894	-231	-20.5%	-23	47	103	127	\$13.61
41-9099	Sales and Related Workers, All Other	779	797	18	2.3%	2	36	65	103	\$13.73
43-0000	Office and Administrative Support Occupations	158,231	156,256	-1,975	-1.3%	-198	7,404	9,929	17,135	\$18.30

		Emplo	yment*	Change in						
soc		2020	2030	Employment			Annua	al Openings		Median Wage
Code	Occupational Title	Annual	Projected	2020-2030	Percent	Growth	Exits	Transfers	Total	May 2021
43-1011	First-Line Supervisors of Office and Administrative Support Workers	10,833	10,894	61	0.6%	6	403	664	1,073	\$29.28
43-2011	Switchboard Operators, Including Answering Service	492	370	-122	-24.8%	-12	22	25	35	\$14.33
43-3011	Bill and Account Collectors	2,309	2,040	-269	-11.7%	-27	80	154	207	\$18.13
43-3021	Billing and Posting Clerks	4,373	4,677	304	7.0%	30	186	278	494	\$18.33
43-3031	Bookkeeping, Accounting, and Auditing Clerks	11,986	11,676	-310	-2.6%	-31	693	604	1,266	\$21.51
43-3051	Payroll and Timekeeping Clerks	822	729	-93	-11.3%	-9	37	42	70	\$22.78
43-3071	Tellers	2,700	2,363	-337	-12.5%	-34	103	159	228	\$14.65
43-3099	Financial Clerks, All Other	752	796	44	5.9%	4	27	55	86	\$23.01
43-4011	Brokerage Clerks	535	515	-20	-3.7%	-2	21	35	54	\$23.42
43-4021	Correspondence Clerks	165	156	-9	-5.5%	-1	7	10	16	\$18.13
43-4031	Court, Municipal, and License Clerks	1,631	1,806	175	10.7%	18	84	86	188	\$22.28
43-4041	Credit Authorizers, Checkers, and Clerks	186	179	-7	-3.8%	-1	6	11	16	\$23.10
43-4051	Customer Service Representatives	33,376	32,929	-447	-1.3%	-45	1,558	2,607	4,120	\$18.00
43-4061	Eligibility Interviewers, Government Programs	1,051	1,109	58	5.5%	6	40	56	102	\$22.92
43-4071	File Clerks	843	736	-107	-12.7%	-11	43	49	81	\$17.91
43-4081	Hotel, Motel, and Resort Desk Clerks	812	921	109	13.4%	11	50	92	153	\$11.41
43-4111	Interviewers, Except Eligibility and Loan	849	842	-7	-0.8%	-1	49	55	103	\$17.92
43-4121	Library Assistants, Clerical	924	918	-6	-0.7%	-1	82	59	140	\$14.27
43-4131	Loan Interviewers and Clerks	2,148	2,129	-19	-0.9%	-2	62	126	186	\$22.55
43-4151	Order Clerks	977	766	-211	-21.6%	-21	37	55	71	\$17.95
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	1,486	1,457	-29	-2.0%	-3	56	89	142	\$18.80
43-4171	Receptionists and Information Clerks	7,289	7,833	544	7.5%	54	422	522	998	\$14.23
43-4199	Information and Record Clerks, All Other	509	537	28	5.5%	3	21	34	58	\$22.26
43-5011	Cargo and Freight Agents	313	348	35	11.2%	4	13	20	37	\$22.44
43-5021	Couriers and Messengers	582	548	-34	-5.8%	-3	23	31	51	\$14.71
43-5031	Police, Fire, and Ambulance Dispatchers	644	697	53	8.2%	5	24	38	67	\$23.25
43-5032	Dispatchers, Except Police, Fire, and Ambulance	1,110	1,195	85	7.7%	8	41	65	114	\$19.35
43-5041	Meter Readers, Utilities	398	361	-37	-9.3%	-4	11	17	24	\$23.05
43-5051	Postal Service Clerks	433	399	-34	-7.9%	-3	19	15	31	\$24.16
43-5052	Postal Service Mail Carriers	1,966	1,810	-156	-7.9%	-16	66	68	118	\$25.21
43-5053	Postal Service Mail Sorters, Processors, and Processing Machine Operators	840	736	-104	-12.4%	-10	43	26	59	\$22.25
43-5061	Production, Planning, and Expediting Clerks	3,921	4,183	262	6.7%	26	145	263	434	\$23.20
43-5071	Shipping, Receiving, and Traffic Clerks	8,470	8,234	-236	-2.8%	-24	305	491	772	\$17.91
43-5111	Weighers, Measurers, Checkers, and Samplers, Recordkeeping	340	395	55	16.2%	6	14	21	41	\$19.22
43-6011	Executive Secretaries and Executive Administrative Assistants	4,395	3,477	-918	-20.9%	-92	200	220	328	\$29.42
43-6012	Legal Secretaries	1,211	945	-266	-22.0%	-27	55	60	88	\$22.89
43-6013	Medical Secretaries	6,915	7,922	1,007	14.6%	101	378	414	893	\$17.93
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	10,974	10,311	-663	-6.0%	-66	542	594	1,070	\$18.29
43-9021	Data Entry Keyers	1,043	793	-250	-24.0%	-25	41	58	74	\$18.07
43-9022	Word Processors and Typists	198	127	-71	-35.9%	-7	10	9	12	\$18.08
43-9041	Insurance Claims and Policy Processing Clerks	2,839	2,899	60	2.1%	6	101	168	275	\$22.82

		Emplo	yment*	Change in						
soc		2020	2030	Employment			Annua	l Openings		Median Wage
Code	Occupational Title	Annual	Projected	2020-2030	Percent	Growth	Exits	Transfers	Total	May 2021
43-9051	Mail Clerks and Mail Machine Operators, Except Postal Service	936	895	-41	-4.4%	-4	46	57	99	\$15.05
43-9061	Office Clerks, General	19,984	19,864	-120	-0.6%	-12	1,087	1,182	2,257	\$18.13
43-9071	Office Machine Operators, Except Computer	1,126	965	-161	-14.3%	-16	54	63	101	\$17.95
43-9199	Office and Administrative Support Workers, All Other	877	950	73	8.3%	7	38	63	108	\$22.44
45-0000	Farming, Fishing, and Forestry Occupations	2,208	2,276	68	3.1%	7	94	254	355	\$15.06
45-1011	First-Line Supervisors of Farming, Fishing, and Forestry Workers	160	167	7	4.4%	1	6	17	24	\$30.40
45-2091	Agricultural Equipment Operators	244	266	22	9.0%	2	11	29	42	\$22.04
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	1,308	1,361	53	4.1%	5	56	152	213	\$15.00
45-2093	Farmworkers, Farm, Ranch, and Aquacultural Animals	273	258	-15	-5.5%	-2	11	30	39	\$14.30
47-0000	Construction and Extraction Occupations	38,627	41,371	2,744	7.1%	274	1,188	2,738	4,200	\$23.97
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	3,465	3,724	259	7.5%	26	102	233	361	\$31.67
47-2021	Brickmasons and Blockmasons	365	356	-9	-2.5%	-1	12	22	33	\$29.77
47-2031	Carpenters	4,186	4,353	167	4.0%	17	125	266	408	\$23.43
47-2044	Tile and Marble Setters	264	291	27	10.2%	3	7	16	26	\$22.47
47-2051	Cement Masons and Concrete Finishers	1,399	1,411	12	0.9%	1	34	92	127	\$23.41
47-2061	Construction Laborers	8,667	9,456	789	9.1%	79	268	612	959	\$22.61
47-2071	Paving, Surfacing, and Tamping Equipment Operators	373	410	37	9.9%	4	13	28	45	\$23.10
47-2073	Operating Engineers and Other Construction Equipment Operators	2,553	2,759	206	8.1%	21	87	190	298	\$29.09
47-2111	Electricians	6,083	6,728	645	10.6%	64	186	470	720	\$28.55
47-2121	Glaziers	260	271	11	4.2%	1	7	20	28	\$23.48
47-2141	Painters, Construction and Maintenance	1,326	1,403	77	5.8%	8	41	76	125	\$22.54
47-2151	Pipelayers	161	170	9	5.6%	1	5	12	18	\$22.61
47-2152	Plumbers, Pipefitters, and Steamfitters	2,585	2,751	166	6.4%	17	78	192	287	\$29.77
47-2181	Roofers	948	1,001	53	5.6%	5	24	68	97	\$23.02
47-2211	Sheet Metal Workers	479	497	18	3.8%	2	13	32	47	\$28.69
47-2221	Structural Iron and Steel Workers	446	472	26	5.8%	3	12	35	50	\$29.09
47-3011	HelpersBrickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	115	117	2	1.7%	0	3	10	13	\$22.61
47-3013	HelpersElectricians	486	494	8	1.7%	1	14	43	58	\$14.77
47-3015	HelpersPipelayers, Plumbers, Pipefitters, and Steamfitters	233	250	17	7.3%	2	7	21	30	\$14.03
47-4011	Construction and Building Inspectors	738	679	-59	-8.0%	-6	38	43	75	\$29.63
47-4041	Hazardous Materials Removal Workers	469	499	30	6.4%	3	18	39	60	\$22.89
47-4051	Highway Maintenance Workers	712	772	60	8.4%	6	29	47	82	\$22.61
47-4071	Septic Tank Servicers and Sewer Pipe Cleaners	174	208	34	19.5%	3	6	16	25	\$23.31
47-4090	Miscellaneous Construction and Related Workers	212	246	34	16.0%	3	7	19	29	\$18.12
47-5022	Excavating and Loading Machine and Dragline Operators, Surface Mining	109	118	9	8.3%	1	4	10	15	\$19.06
49-0000	Installation, Maintenance, and Repair Occupations	43,950	47,440	3,490	7.9%	349	1,429	2,879	4,657	\$23.21
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	3,741	4,050	309	8.3%	31	113	232	376	\$31.22
49-2011	Computer, Automated Teller, and Office Machine Repairers	680	669	-11	-1.6%	-1	20	51	70	\$18.88
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	1,513	1,467	-46	-3.0%	-5	52	114	161	\$29.20
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	480	539	59	12.3%	6	14	25	45	\$29.76
49-2097	Electronic Home Entertainment Equipment Installers and Repairers	106	120	14	13.2%	1	4	8	13	\$22.22

		Emplo	yment*	Chang	ge in					
soc		2020	2030	Employ	ment		Annua	l Openings		Median Wage
Code	Occupational Title	Annual	Projected	2020-2030	Percent	Growth	Exits	Transfers	Total	May 2021
49-2098	Security and Fire Alarm Systems Installers	567	697	130	22.9%	13	15	49	77	\$23.07
49-3021	Automotive Body and Related Repairers	1,173	1,237	64	5.5%	6	38	72	116	\$22.69
49-3023	Automotive Service Technicians and Mechanics	5,571	5,626	55	1.0%	6	166	380	552	\$21.76
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	1,708	1,874	166	9.7%	17	51	112	180	\$23.60
49-3041	Farm Equipment Mechanics and Service Technicians	226	235	9	4.0%	1	7	16	24	\$21.16
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	646	708	62	9.6%	6	20	46	72	\$28.72
49-3093	Tire Repairers and Changers	721	740	19	2.6%	2	22	61	85	\$14.68
49-9011	Mechanical Door Repairers	105	133	28	26.7%	3	3	7	13	\$22.43
49-9012	Control and Valve Installers and Repairers, Except Mechanical Door	224	225	1	0.5%	0	5	13	18	\$38.18
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	3,204	3,422	218	6.8%	22	85	226	333	\$23.96
49-9031	Home Appliance Repairers	215	219	4	1.9%	0	8	13	21	\$22.79
49-9041	Industrial Machinery Mechanics	3,134	3,821	687	21.9%	69	107	188	364	\$29.02
49-9043	Maintenance Workers, Machinery	451	521	70	15.5%	7	16	27	50	\$24.34
49-9044	Millwrights	482	556	74	15.4%	7	15	30	52	\$34.74
49-9051	Electrical Power-Line Installers and Repairers	1,027	1,033	6	0.6%	1	19	69	89	\$38.58
49-9052	Telecommunications Line Installers and Repairers	741	751	10	1.4%	1	17	63	81	\$23.04
49-9062	Medical Equipment Repairers	656	735	79	12.0%	8	30	42	80	\$29.02
49-9071	Maintenance and Repair Workers, General	11,108	12,239	1,131	10.2%	113	411	681	1,205	\$22.55
49-9091	Coin, Vending, and Amusement Machine Servicers and Repairers	191	199	8	4.2%	1	9	14	24	\$18.23
49-9098	HelpersInstallation, Maintenance, and Repair Workers	332	360	28	8.4%	3	15	29	47	\$17.72
49-9099	Installation, Maintenance, and Repair Workers, All Other	959	1,045	86	9.0%	9	35	67	111	\$18.62
51-0000	Production Occupations	64,640	64,837	197	0.3%	20	2,447	4,612	7,079	\$18.23
51-1011	First-Line Supervisors of Production and Operating Workers	3,994	4,179	185	4.6%	18	123	275	416	\$29.58
51-2028	Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders,									
	Tapers, and Finishers	1,431	1,538	107	7.5%	11	60	95	166	\$18.05
51-2041	Structural Metal Fabricators and Fitters	295	256	-39	-13.2%	-4	6	22	24	\$22.55
51-2090	Miscellaneous Assemblers and Fabricators	16,599	16,443	-156	-0.9%	-16	630	1,179	1,793	\$17.78
51-3011	Bakers	1,174	1,269	95	8.1%	10	68	91	169	\$14.31
51-3021	Butchers and Meat Cutters	649	607	-42	-6.5%	-4	26	47	69	\$14.56
51-3022	Meat, Poultry, and Fish Cutters and Trimmers	171	170	-1	-0.6%	0	7	13	20	\$14.46
51-3092	Food Batchmakers	895	879	-16	-1.8%	-2	41	66	105	\$14.43
51-3099	Food Processing Workers, All Other	126	118	-8	-6.4%	-1	4	8	11	\$14.13
51-4021	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and									
	Plastic	660	603	-57	-8.6%	-6	22	39	55	\$18.32
51-4022	Forging Machine Setters, Operators, and Tenders, Metal and Plastic	140	123	-17	-12.1%	-2	5	8	11	\$18.23
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and									
	Plastic	1,299	1,278	-21	-1.6%	-2	41	89	128	\$18.09
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and									
	Tenders, Metal and Plastic	220	205	-15	-6.8%	-2	10	15	23	\$17.42
51-4034	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and						_			
	Plastic	146	141	-5	-3.4%	0	5	10	15	\$23.05

		Emplo	yment*	Chang	ge in					
soc		2020	2030	Employ	Employment Annual Openings			Median Wage		
Code	Occupational Title	Annual	Projected	2020-2030	Percent	Growth	Exits	Transfers	Total	May 2021
51-4041	Machinists	1,314	1,388	74	5.6%	7	45	92	144	\$19.18
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders,	,	,							
	Metal and Plastic	1,327	1,257	-70	-5.3%	-7	42	88	123	\$15.37
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	1,289	1,401	112	8.7%	11	44	91	146	\$19.32
51-4111	Tool and Die Makers	623	644	21	3.4%	2	23	40	65	\$29.22
51-4121	Welders, Cutters, Solderers, and Brazers	2,296	2,495	199	8.7%	20	63	189	272	\$22.44
51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	172	181	9	5.2%	1	5	14	20	\$21.80
51-4193	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	195	192	-3	-1.5%	0	6	13	19	\$17.62
51-5111	Prepress Technicians and Workers	207	186	-21	-10.1%	-2	7	19	24	\$21.93
51-5112	Printing Press Operators	1,501	1,427	-74	-4.9%	-7	53	103	149	\$18.62
51-5113	Print Binding and Finishing Workers	305	259	-46	-15.1%	-5	14	18	27	\$14.61
51-6011	Laundry and Dry-Cleaning Workers	1,159	1,336	177	15.3%	18	81	84	183	\$11.50
51-6031	Sewing Machine Operators	618	621	3	0.5%	0	38	33	71	\$14.70
51-7011	Cabinetmakers and Bench Carpenters	531	574	43	8.1%	4	21	31	56	\$18.36
51-7042	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	462	515	53	11.5%	5	14	35	54	\$16.91
51-8021	Stationary Engineers and Boiler Operators	112	115	3	2.7%	0	6	8	14	\$30.07
51-8031	Water and Wastewater Treatment Plant and System Operators	621	637	16	2.6%	2	18	39	59	\$23.53
51-9011	Chemical Equipment Operators and Tenders	524	483	-41	-7.8%	-4	11	39	46	\$23.42
51-9012	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators,									
	and Tenders	524	515	-9	-1.7%	-1	11	40	50	\$19.08
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	1,354	1,419	65	4.8%	6	47	104	157	\$19.03
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	466	453	-13	-2.8%	-1	21	35	55	\$18.11
51-9041	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and									
	Tenders	657	668	11	1.7%	1	18	49	68	\$18.45
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	4,103	3,581	-522	-12.7%	-52	148	305	401	\$18.17
51-9081	Dental Laboratory Technicians	145	155	10	6.9%	1	7	12	20	\$22.67
51-9111	Packaging and Filling Machine Operators and Tenders	2,803	2,881	78	2.8%	8	117	189	314	\$18.05
51-9124	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	841	901	60	7.1%	6	24	62	92	\$18.90
51-9161	Computer Numerically Controlled Tool Operators	1,139	1,117	-22	-1.9%	-2	39	83	120	\$18.29
51-9162	Computer Numerically Controlled Tool Programmers	297	386	89	30.0%	9	12	25	46	\$23.21
51-9191	Adhesive Bonding Machine Operators and Tenders	111	110	-1	-0.9%	0	6	7	13	\$18.40
51-9195	Molders, Shapers, and Casters, Except Metal and Plastic	628	663	35	5.6%	4	23	42	69	\$18.05
51-9196	Paper Goods Machine Setters, Operators, and Tenders	843	892	49	5.8%	5	39	58	102	\$18.42
51-9198	HelpersProduction Workers	1,505	1,394	-111	-7.4%	-11	68	136	193	\$17.78
51-9199	Production Workers, All Other	1,602	1,659	57	3.6%	6	56	120	182	\$17.78
53-0000	Transportation and Material Moving Occupations	123,830	138,990	15,160	12.2%	1,516	6,035	10,634	18,185	\$18.12
53-1047	FirstLine Supervisors of Transportation & Material Moving Workers, Exc Aircraft									
	Cargo Handling Supervisor	6,040	6,718	678	11.2%	68	233	442	743	\$23.88
53-2012	Commercial Pilots	483	474	-9	-1.9%	-1	18	34	51	\$129,451 **
53-3031	Driver/Sales Workers	6,283	7,096	813	12.9%	81	274	454	809	\$13.73
53-3032	Heavy and Tractor-Trailer Truck Drivers	15,020	16,737	1,717	11.4%	172	650	1,077	1,899	\$23.41

Occupational* Employment Projections Report, 2020-2030

		Employ	yment*	Chang	ge in					
soc		2020	2030	Employ	ment		Annua	l Openings		Median Wage
Code	Occupational Title	Annual	Projected	2020-2030	Percent	Growth	Exits	Transfers	Total	May 2021
53-3033	Light Truck or Delivery Services Drivers	7,667	8,815	1,148	15.0%	115	338	559	1,012	\$18.57
53-3052	Bus Drivers, Transit and Intercity	808	933	125	15.5%	12	57	43	112	\$23.60
53-3058	Passenger Vehicle Drivers, Except Bus Drivers, Transit and Intercity	3,644	4,743	1,099	30.2%	110	276	208	594	\$18.05 ^^^
53-6021	Parking Lot Attendants	1,091	1,213	122	11.2%	12	56	119	187	\$11.62
53-6031	Automotive and Watercraft Service Attendants	991	1,060	69	7.0%	7	47	91	145	\$13.73
53-7021	Crane and Tower Operators	181	188	7	3.9%	1	5	14	20	\$23.84
53-7051	Industrial Truck and Tractor Operators	9,902	11,575	1,673	16.9%	167	323	824	1,314	\$18.93
53-7061	Cleaners of Vehicles and Equipment	1,915	2,052	137	7.2%	14	97	177	288	\$14.23
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	34,936	39,662	4,726	13.5%	473	1,632	3,245	5,350	\$17.82
53-7063	Machine Feeders and Offbearers	590	666	76	12.9%	8	36	46	90	\$22.24
53-7064	Packers and Packagers, Hand	6,346	6,789	443	7.0%	44	374	532	950	\$14.54
53-7065	Stockers and Order Fillers	24,654	26,759	2,105	8.5%	210	1,463	2,507	4,180	\$17.34
53-7081	Refuse and Recyclable Material Collectors	898	1,015	117	13.0%	12	40	86	138	\$18.89

^{*} Occupations with 100 or more workers.

Source: Ohio Department of Job and Family Services, Bureau of Labor Market Information, June 2023.

^{**} Certain occupations only report wages at the annual level.

[^] National hourly wage.

^{^^} National annual wage.

^{^^^} National aggregate wage.

[#] Wage above max.

[▲] Wage not available due to OES/SOC changes.

[†] Statewide hourly wage.

^{††} Statewide annual wage.

			Work Experience in	Typical On-The-Job Training Needed	
soc		Typical Education	a Related	to Attain Competency in the	Median Wage
Code	Occupational Title	Needed for Entry	Occupation	Occupation	May 2021
00-0000	Total, All Occupations	1100000 101 2110.	Оссиранен		\$22.40
11-0000	Management Occupations				\$48.20
11-1011	Chief Executives	Bachelor's degree	5 years or more	None	\$80.74
11-1021	General and Operations Managers	Bachelor's degree	5 years or more	None	\$47.63
11-1031	Legislators	Bachelor's degree	Less than 5 years	None	\$37,738 **
11-2021	Marketing Managers	Bachelor's degree	5 years or more	None	\$62.05
11-2022	Sales Managers	Bachelor's degree	Less than 5 years	None	\$61.39
11-2030	Public Relations and Fundraising Managers	Bachelor's degree	5 years or more	None	\$57.62 ^
11-3010	Administrative Services and Facilities Managers	Bachelor's degree	Less than 5 years	None	\$47.73 ^
11-3021	Computer and Information Systems Managers	Bachelor's degree	5 years or more	None	\$63.05
11-3031	Financial Managers	Bachelor's degree	5 years or more	None	\$61.39
11-3051	Industrial Production Managers	Bachelor's degree	5 years or more	None	\$48.25
11-3061	Purchasing Managers	Bachelor's degree	5 years or more	None	\$61.12
11-3071	Transportation, Storage, and Distribution Managers	High school diploma or equivalent	5 years or more	None	\$40.97
11-3111	Compensation and Benefits Managers	Bachelor's degree	5 years or more	None	\$61.39
11-3121	Human Resources Managers	Bachelor's degree	5 years or more	None	\$60.88
11-3131	Training and Development Managers	Bachelor's degree	5 years or more	None	\$50.40
11-9013	Farmers, Ranchers, and Other Agricultural Managers	High school diploma or equivalent	5 years or more	None	\$35.12 ^
11-9021	Construction Managers	Bachelor's degree	None	Moderate-term on-the-job training	\$47.76
11-9031	Education Administrators, Preschool and Childcare Center/Program	Bachelor's degree	Less than 5 years	None	\$22.23
11-9032	Education Administrators, Elementary and Secondary School	Master's degree	5 years or more	None	\$98,308 **
11-9033	Education Administrators, Postsecondary	Master's degree	Less than 5 years	None	\$50.75
11-9039	Education Administrators, All Other	Bachelor's degree	Less than 5 years	None	\$38.46
11-9041	Architectural and Engineering Managers	Bachelor's degree	5 years or more	None	\$63.35
11-9051	Food Service Managers	High school diploma or equivalent	Less than 5 years	None	\$28.60
11-9111	Medical and Health Services Managers	Bachelor's degree	Less than 5 years	None	\$47.76
11-9121	Natural Sciences Managers	Bachelor's degree	5 years or more	None	\$49.32
11-9141	Property, Real Estate, and Community Association Managers	High school diploma or equivalent	Less than 5 years	None	\$22.86
11-9151	Social and Community Service Managers	Bachelor's degree	Less than 5 years	None	\$30.60
11-9198	Personal Service Managers; Entertainment & Recreation Managers, Except		·		
	Gambling; and Managers, All Other	Bachelor's degree	Less than 5 years	None	\$59.93 ^^^
13-0000	Business and Financial Operations Occupations		·		\$33.24
13-1020	Buyers and Purchasing Agents	Bachelor's degree	None	Moderate-term on-the-job training	\$30.69
13-1031	Claims Adjusters, Examiners, and Investigators	High school diploma or equivalent	None	Long-term on-the-job training	\$29.60
13-1041	Compliance Officers	Bachelor's degree	None	Moderate-term on-the-job training	\$36.57
13-1051	Cost Estimators	Bachelor's degree	None	Moderate-term on-the-job training	\$30.63
13-1071	Human Resources Specialists	Bachelor's degree	None	None	\$29.41
13-1075	Labor Relations Specialists	Bachelor's degree	Less than 5 years	None	\$38.76
13-1081	Logisticians	Bachelor's degree	None	None	\$37.24
13-1111	Management Analysts	Bachelor's degree	Less than 5 years	None	\$38.17
13-1121	Meeting, Convention, and Event Planners	Bachelor's degree	None	None	\$28.89
13-1131	Fundraisers	Bachelor's degree	None	None	\$29.16
13-1141	Compensation, Benefits, and Job Analysis Specialists	Bachelor's degree	Less than 5 years	None	\$29.38
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			Work Experience in	Typical On-The-Job Training Needed	
soc		Typical Education	a Related	to Attain Competency in the	Median Wage
	Occupational Title	Needed for Entry	Occupation	Occupation	May 2021
13-1151	Training and Development Specialists	Bachelor's degree	Less than 5 years	None	\$24.01
13-1161	Market Research Analysts and Marketing Specialists	Bachelor's degree	None	None	\$30.05
13-1198	Project Management Specialists and Business Operations Specialists, All Other	Bachelor's degree	None	None	\$35.90 ^^^
13-2011	Accountants and Auditors	Bachelor's degree	None	None	\$36.57
13-2020	Property Appraisers and Assessors	Bachelor's degree	None	Long-term on-the-job training	\$37.24
13-2031	Budget Analysts	Bachelor's degree	None	None	\$38.92
13-2041	Credit Analysts	Bachelor's degree	None	None	\$30.78
13-2052	Personal Financial Advisors	Bachelor's degree	None	Long-term on-the-job training	\$39.61
13-2053	Insurance Underwriters	Bachelor's degree	None	Moderate-term on-the-job training	\$37.21
13-2061	Financial Examiners	Bachelor's degree	None	Long-term on-the-job training	\$37.24
13-2072	Loan Officers	Bachelor's degree	Less than 5 years	Moderate-term on-the-job training	\$30.37
13-2081	Tax Examiners and Collectors, and Revenue Agents	Bachelor's degree	None	Moderate-term on-the-job training	\$30.51
13-2098	Financial and Investment Analysts, Financial Risk Specialists, and Financial				70000
	Specialists, All Other	Bachelor's degree	None	None	\$35.21 ^^^
15-0000	Computer and Mathematical Occupations	Ç			\$39.47
15-1211	Computer Systems Analysts	Bachelor's degree	None	None	\$47.34
15-1212	Information Security Analysts	Bachelor's degree	Less than 5 years	None	\$47.76
15-1231	Computer Network Support Specialists	Associate's degree	None	None	\$30.03
15-1232	Computer User Support Specialists	Some college, no degree	None	None	\$23.12
15-1244	Network and Computer Systems Administrators	Bachelor's degree	None	None	\$38.80
15-1245	Database Administrators and Architects	Bachelor's degree	None	None	\$47.44 ^^^
15-1251	Computer Programmers	Bachelor's degree	None	None	\$39.18
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	Bachelor's degree	None	None	\$49.49 ^^^
15-1257	Web Developers and Digital Interface Designers	Bachelor's degree	None	None	\$49.49 ^^^
15-1299	Computer Occupations, All Other	Bachelor's degree	None	None	\$47.76
15-2011	Actuaries	Bachelor's degree	None	Long-term on-the-job training	\$48.54
15-2031	Operations Research Analysts	Bachelor's degree	None	None	\$41.30
15-2098	Data Scientists and Mathematical Science Occupations, All Other	Bachelor's degree	None	None	\$30.03 ^^^
17-0000	Architecture and Engineering Occupations				\$37.38
17-1011	Architects, Except Landscape and Naval	Bachelor's degree	None	Internship/residency	\$37.45
17-1022	Surveyors	Bachelor's degree	None	Internship/residency	\$29.68
17-2011	Aerospace Engineers	Bachelor's degree	None	None	\$49.05
17-2031	Biomedical Engineers	Bachelor's degree	None	None	\$47.49
17-2041	Chemical Engineers	Bachelor's degree	None	None	\$47.31
17-2051	Civil Engineers	Bachelor's degree	None	None	\$37.95
17-2061	Computer Hardware Engineers	Bachelor's degree	None	None	\$37.62
17-2071	Electrical Engineers	Bachelor's degree	None	None	\$47.36
17-2072	Electronics Engineers, Except Computer	Bachelor's degree	None	None	\$46.19
17-2081	Environmental Engineers	Bachelor's degree	None	None	\$39.48
17-2112	Industrial Engineers	Bachelor's degree	None	None	\$38.80
17-2131	Materials Engineers	Bachelor's degree	None	None	\$39.92
17-2141	Mechanical Engineers	Bachelor's degree	None	None	\$38.05
17-2199	Engineers, All Other	Bachelor's degree	None	None	\$38.95

			Work Experience in	Typical On-The-Job Training Needed	
soc		Typical Education	a Related	to Attain Competency in the	Median Wage
	Occupational Title	Needed for Entry	Occupation	Occupation	May 2021
17-3011	Architectural and Civil Drafters	Associate's degree	None	None	\$29.02
17-3011	Electrical and Electronics Drafters	Associate's degree	None	None	\$28.42
17-3012	Mechanical Drafters	Associate's degree	None	None	\$29.19
17-3013	Civil Engineering Technicians	Associate's degree	None	None	\$29.03
		-	8	1	
17-3023	Electrical and Electronics Engineering Technicians	Associate's degree	None	None None	\$31.99 \$18.14
17-3025	Environmental Engineering Technicians	Associate's degree	None		
17-3026	Industrial Engineering Technicians	Associate's degree	None	None	\$28.95
17-3027	Mechanical Engineering Technicians	Associate's degree	None	None	\$29.04
17-3031	Surveying and Mapping Technicians	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.64
17-3098	Calibration and Engineering Technologists and Technicians, Except Drafters, All				
	Other	Associate's degree	None	None	\$29.18 ^^^
19-0000	Life, Physical, and Social Science Occupations				\$31.28
19-1012	Food Scientists and Technologists	Bachelor's degree	None	None	\$39.40
19-1041	Epidemiologists	Master's degree	None	None	\$37.38
19-1042	Medical Scientists, Except Epidemiologists	Doctoral or professional degree	None	None	\$37.32
19-2031	Chemists	Bachelor's degree	None	None	\$37.16
19-2041	Environmental Scientists and Specialists, Including Health	Bachelor's degree	None	None	\$39.27
19-2043	Hydrologists	Bachelor's degree	None	None	\$39.53
19-2099	Physical Scientists, All Other	Bachelor's degree	None	None	\$39.27
19-3031	Clinical, Counseling, and School Psychologists	Doctoral or professional degree	None	Internship/residency	\$38.96 ^^^
19-3051	Urban and Regional Planners	Master's degree	None	None	\$30.33
19-3099	Social Scientists and Related Workers, All Other	Bachelor's degree	None	None	\$39.53
19-4021	Biological Technicians	Bachelor's degree	None	None	\$23.03
19-4031	Chemical Technicians	Associate's degree	None	Moderate-term on-the-job training	\$24.17
19-4042	Environmental Science and Protection Technicians, Including Health	Associate's degree	None	None	\$17.76
19-4061	Social Science Research Assistants	Bachelor's degree	None	None	\$30.36
19-4092	Forensic Science Technicians	Bachelor's degree	None	Moderate-term on-the-job training	\$30.89
19-4099	Life, Physical, and Social Science Technicians, All Other	Associate's degree	None	None	\$24.11
19-5011	Occupational Health and Safety Specialists	Bachelor's degree	None	None	\$37.98
19-5012	Occupational Health and Safety Technicians	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.77
21-0000	Community and Social Service Occupations			, j	\$23.34
21-1012	Educational, Guidance, School, and Vocational Counselors	Master's degree	None	None	\$29.57
21-1015	Rehabilitation Counselors	Master's degree	None	None	\$18.61
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	Bachelor's degree	None	None	\$23.47
21-1021	Child, Family, and School Social Workers	Bachelor's degree	None	None	\$23.24
21-1022	Healthcare Social Workers	Master's degree	None	Internship/residency	\$29.43
21-1023	Mental Health and Substance Abuse Social Workers	Master's degree	None	Internship/residency	\$23.41
21-1029	Social Workers, All Other	Bachelor's degree	None	None	\$28.54
21-1091	Health Educators	Bachelor's degree	None	None	\$29.29
21-1092	Probation Officers and Correctional Treatment Specialists	Bachelor's degree	None	Short-term on-the-job training	\$23.68
21-1092	Social and Human Service Assistants	High school diploma or equivalent	None	Short-term on-the-job training Short-term on-the-job training	\$18.04
21-1093	Community Health Workers	High school diploma or equivalent	None	Short-term on-the-job training	\$17.81
21-1094	Community and Social Service Specialists, All Other	Bachelor's degree	None	None	\$28.97
Z1-1039	Community and Journ Jervice Specialists, All Other	Daciferor 3 degree	INOTIE	INOTIC	7٤،٥٦٢

			Work Experience in	Typical On-The-Job Training Needed	
soc		Typical Education	a Related	to Attain Competency in the	Median Wage
	Occupational Title	Needed for Entry	Occupation	Occupation	May 2021
21-2011	•	•		·	\$23.96
21-2011 23-0000	Clergy Legal Occupations	Bachelor's degree	None	Moderate-term on-the-job training	\$23.96 \$36.90
		Doctoral or professional degree	None	None	
23-1011	Lawyers	Doctoral or professional degree	None	None	\$49.85
23-1021	Administrative Law Judges, Adjudicators, and Hearing Officers	Doctoral or professional degree	5 years or more	Short-term on-the-job training	\$30.49
23-1023	Judges, Magistrate Judges, and Magistrates	Doctoral or professional degree	5 years or more	Short-term on-the-job training	\$39.31
23-2011	Paralegals and Legal Assistants	Associate's degree	None	None	\$22.96
23-2093	Title Examiners, Abstractors, and Searchers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$23.39
23-2099	Legal Support Workers, All Other	Associate's degree	None	None	\$28.73
25-0000	Education, Training, and Library Occupations				\$29.28
25-1011	Business Teachers, Postsecondary	Doctoral or professional degree	None	None	\$100,529 **
25-1021	Computer Science Teachers, Postsecondary	Doctoral or professional degree	None	None	\$101,107 **
25-1022	Mathematical Science Teachers, Postsecondary	Doctoral or professional degree	None	None	\$79,334 **
25-1042	Biological Science Teachers, Postsecondary	Doctoral or professional degree	None	None	\$96,617 **
25-1052	Chemistry Teachers, Postsecondary	Doctoral or professional degree	None	None	\$78,995 **
25-1054	Physics Teachers, Postsecondary	Doctoral or professional degree	None	None	\$95,912 **
25-1065	Political Science Teachers, Postsecondary	Doctoral or professional degree	None	None	\$96,815 **
25-1066	Psychology Teachers, Postsecondary	Doctoral or professional degree	None	None	\$81,120 **
25-1072	Nursing Instructors and Teachers, Postsecondary	Doctoral or professional degree	Less than 5 years	None	\$80,067 **
25-1081	Education Teachers, Postsecondary	Doctoral or professional degree	Less than 5 years	None	\$62,849 **
25-1111	Criminal Justice and Law Enforcement Teachers, Postsecondary	Doctoral or professional degree	None	None	\$75,840 **
25-1121	Art, Drama, and Music Teachers, Postsecondary	Master's degree	None	None	\$78,725 **
25-1122	Communications Teachers, Postsecondary	Doctoral or professional degree	None	None	\$79,520 **
25-1123	English Language and Literature Teachers, Postsecondary	Doctoral or professional degree	None	None	\$75,926 **
25-1124	Foreign Language and Literature Teachers, Postsecondary	Doctoral or professional degree	None	None	\$78,575 **
25-1125	History Teachers, Postsecondary	Doctoral or professional degree	None	None	\$82,650 **
25-1126	Philosophy and Religion Teachers, Postsecondary	Doctoral or professional degree	None	None	\$79,898 **
25-1193	Recreation and Fitness Studies Teachers, Postsecondary	Doctoral or professional degree	None	None	\$79,268 **
25-1194	Vocational Education Teachers, Postsecondary	Bachelor's degree	Less than 5 years	None	\$23.12
25-2011	Preschool Teachers, Except Special Education	Associate's degree	None	None	\$13.96
25-2012	Kindergarten Teachers, Except Special Education	Bachelor's degree	None	None	\$63,168 **
25-2021	Elementary School Teachers, Except Special Education	Bachelor's degree	None	None	\$76,326 **
25-2022	Middle School Teachers, Except Special and Career/Technical Education	Bachelor's degree	None	None	\$63,668 **
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's degree	None	None	\$75,328 **
25-2032	Career/Technical Education Teachers, Secondary School	Bachelor's degree	Less than 5 years	None	\$63,698 **
25-2052	Special Education Teachers, Kindergarten and Elementary School	Bachelor's degree	None	None	\$76,762 **
25-2057	Special Education Teachers, Middle School	Bachelor's degree	None	None	\$61,155 **
25-2058	Special Education Teachers, Secondary School	Bachelor's degree	None	None	\$62,670 **
25-3011	Adult Basic and Secondary Education and Literacy Teachers and Instructors	Bachelor's degree	None	None	\$29.51
25-3021	Self-Enrichment Education Teachers	High school diploma or equivalent	Less than 5 years	None	\$14.39
25-3031	Substitute Teachers, Short-Term	Bachelor's degree	None	None	\$13.73
25-3097	Teachers and Instructors, All Other, Except Substitute Teachers	Bachelor's degree	None	None	\$17.94 ^^^
25-4022	Librarians and Media Collections Specialists	Master's degree	None	None	\$28.87
25-4031	Library Technicians	Postsecondary non-degree award	None	None	\$18.13
23 7031	Electrical processing	. solocomany non actice award	1		Ψ±0.±0

			Work Experience in	Typical On-The-Job Training Needed	
soc		Typical Education	a Related	to Attain Competency in the	Median Wage
	Occupational Title	Needed for Entry	Occupation	Occupation	May 2021
25-9031	Instructional Coordinators	Master's degree	5 years or more	None	\$30.13
25-9031	Teaching Assistants, Postsecondary	Bachelor's degree	None	None	\$31,547 **
25-9045	Teaching Assistants, Except Postsecondary	Some college, no degree	None	None	\$28,845 **
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	Some college, no degree	None	None	\$23.76
27-1011	Art Directors	Pachalor's dagrae	E voors or more	None	\$42.39
27-1011	Multimedia Artists and Animators	Bachelor's degree Bachelor's degree	5 years or more	None None	\$42.39
		U	None		
27-1021	Commercial and Industrial Designers	Bachelor's degree	None	None	\$30.65
27-1023	Floral Designers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$13.80
27-1024	Graphic Designers	Bachelor's degree	None	None	\$24.55
27-1025	Interior Designers	Bachelor's degree	None	None	\$27.99
27-1026	Merchandise Displayers and Window Trimmers	High school diploma or equivalent	None	Short-term on-the-job training	\$14.56
27-2012	Producers and Directors	Bachelor's degree	Less than 5 years	None	\$29.24
27-2022	Coaches and Scouts	Bachelor's degree	None	None	\$37,777 **
27-2041	Music Directors and Composers	Bachelor's degree	Less than 5 years	None	\$32.87
27-3011	Radio and Television Announcers	Bachelor's degree	None	None	\$14.11
27-3023	News Analysts, Reporters, and Journalists	Bachelor's degree	None	None	\$19.95
27-3031	Public Relations Specialists	Bachelor's degree	None	None	\$30.20
27-3041	Editors	Bachelor's degree	Less than 5 years	None	\$30.16
27-3042	Technical Writers	Bachelor's degree	Less than 5 years	Short-term on-the-job training	\$31.60
27-3043	Writers and Authors	Bachelor's degree	None	Long-term on-the-job training	\$24.16
27-3091	Interpreters and Translators	Bachelor's degree	None	None	\$18.74
27-4011	Audio and Video Equipment Technicians	Postsecondary non-degree award	None	Short-term on-the-job training	\$23.35
27-4012	Broadcast Technicians	Associate's degree	None	Short-term on-the-job training	\$23.03
27-4021	Photographers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.07
29-0000	Healthcare Practitioners and Technical Occupations				\$30.18
29-1011	Chiropractors	Doctoral or professional degree	None	None	\$29.34
29-1021	Dentists, General	Doctoral or professional degree	None	None	\$80.68
29-1031	Dietitians and Nutritionists	Bachelor's degree	None	Internship/residency	\$29.26
29-1041	Optometrists	Doctoral or professional degree	None	None	\$49.29
29-1051	Pharmacists	Doctoral or professional degree	None	None	\$61.71
29-1071	Physician Assistants	Master's degree	None	None	\$49.27
29-1122	Occupational Therapists	Master's degree	None	None	\$39.16
29-1123	Physical Therapists	Doctoral or professional degree	None	None	\$47.76
29-1125	Recreational Therapists	Bachelor's degree	None	None	\$22.99
29-1126	Respiratory Therapists	Associate's degree	None	None	\$29.87
29-1127	Speech-Language Pathologists	Master's degree	None	Internship/residency	\$38.11
29-1128	Exercise Physiologists	Bachelor's degree	None	None	\$17.80
29-1129	Therapists, All Other	Bachelor's degree	None	None	\$36.16
29-1131	Veterinarians	Doctoral or professional degree	None	None	\$47.83
29-1141	Registered Nurses	Bachelor's degree	None	None	\$36.08
29-1151	Nurse Anesthetists	Master's degree	None	None	\$81.39
29-1131	Nurse Practitioners	Master's degree	None	None	\$49.63
29-11/1	Anesthesiologists	Doctoral or professional degree	None	Internship/residency	\$49.03 #
72-1711	Allestriesiologists	poctoral or brolessional degree	INOTIC	internatip/residency	πt

			Work Experience in	Typical On-The-Job Training Needed	
soc		Typical Education	a Related	to Attain Competency in the	Median Wage
	Occupational Title	Needed for Entry	Occupation	Occupation	May 2021
29-1215	Family Medicine Physicians	Doctoral or professional degree	None	Internship/residency	\$86.13
29-1213	General Internal Medicine Physicians	Doctoral or professional degree	None	Internship/residency	\$85.12
29-1218	Obstetricians and Gynecologists	Doctoral or professional degree	None	Internship/residency	\$81.57
	, ,	·		, ,	
29-1223	Psychiatrists	Doctoral or professional degree	None	Internship/residency	#
29-1228	Physicians, All Other; and Ophthalmologists, Except Pediatric	Doctoral or professional degree	None	Internship/residency	\$37.45 ^^^ # ^^^
29-1248	Surgeons, Except Ophthalmologists	Doctoral or professional degree	None	Internship/residency	
29-1292	Dental Hygienists	Associate's degree	None	None	\$37.13
29-1298	Acupuncturists and Healthcare Diagnosing or Treating Practitioners, All Other	Master's degree	None	None	\$37.45 ^^^
29-2010	Clinical Laboratory Technologists and Technicians	Bachelor's degree	None	None	\$23.91
29-2031	Cardiovascular Technologists and Technicians	Associate's degree	None	None	\$29.90
29-2032	Diagnostic Medical Sonographers	Associate's degree	None	None	\$31.03
29-2033	Nuclear Medicine Technologists	Associate's degree	None	None	\$37.54
29-2034	Radiologic Technologists	Associate's degree	None	None	\$28.74
29-2035	Magnetic Resonance Imaging Technologists	Associate's degree	Less than 5 years	None	\$37.17
29-2040	Emergency Medical Technicians and Paramedics	Postsecondary non-degree award	None	None	\$17.76 ^
29-2051	Dietetic Technicians	Associate's degree	None	None	\$17.58
29-2052	Pharmacy Technicians	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.62
29-2053	Psychiatric Technicians	Postsecondary non-degree award	Less than 5 years	Short-term on-the-job training	\$14.26
29-2055	Surgical Technologists	Postsecondary non-degree award	None	None	\$23.15
29-2056	Veterinary Technologists and Technicians	Associate's degree	None	None	\$17.51
29-2057	Ophthalmic Medical Technicians	Postsecondary non-degree award	None	None	\$17.62
29-2061	Licensed Practical and Licensed Vocational Nurses	Postsecondary non-degree award	None	None	\$22.95
29-2081	Opticians, Dispensing	High school diploma or equivalent	None	Long-term on-the-job training	\$21.77
29-2091	Orthotists and Prosthetists	Master's degree	None	Internship/residency	\$29.34
29-2098	Medical Dosimetrists, Medical Records Specialists, and Health Technologists and	Ţ.		, ,	·
	Technicians, All Other	Postsecondary non-degree award	None	None	\$22.55 ^^^
29-9098	Health Information Technologists, Medical Registrars, Surgical Assistants, &	,			
	Healthcare Practitioners, AO	Postsecondary non-degree award	None	None	\$26.19 ^^^
31-0000	Healthcare Support Occupations	, , , , , , , , , , , , , , , , , , , ,			\$14.21
31-1120	Home Health and Personal Care Aides	High school diploma or equivalent	None	Short-term on-the-job training	\$11.54
31-1131	Nursing Assistants	Postsecondary non-degree award	None	None	\$14.44
31-1132	Orderlies	High school diploma or equivalent	None	Short-term on-the-job training	\$14.14
31-1133	Psychiatric Aides	High school diploma or equivalent	None	Short-term on-the-job training	\$18.34
31-2011	Occupational Therapy Assistants	Associate's degree	None	None	\$29.98
31-2021	Physical Therapist Assistants	Associate's degree	None	None	\$30.08
31-9011	Massage Therapists	Postsecondary non-degree award	None	None	\$23.15
31-9091	Dental Assistants	Postsecondary non-degree award	None	None	\$22.58
31-9092	Medical Assistants	Postsecondary non-degree award	None	None	\$17.96
31-9093	Medical Equipment Preparers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.23
31-9094	Medical Transcriptionists	Postsecondary non-degree award	None	None	\$18.37
31-9094		High school diploma or equivalent	None		\$16.57
31-9096	Veterinary Assistants and Laboratory Animal Caretakers Rhiphotomicts		1	Short-term on-the-job training	•
	Phlebotomists Healthears Support Workers All Other	Postsecondary non-degree award	None	None	\$17.85
31-9099	Healthcare Support Workers, All Other	High school diploma or equivalent	None	None	\$18.30

			Work Experience in	Typical On-The-Job Training Needed	
soc		Typical Education	a Related	to Attain Competency in the	Median Wage
	Occupational Title	Needed for Entry	Occupation	Occupation	May 2021
33-0000	Protective Service Occupations	receded for Entry	Occupation	Occupation	\$23.04
33-1011	First-Line Supervisors of Correctional Officers	High school diploma or equivalent	Less than 5 years	None	\$37.66
-	1		•	· ·	\$39.12
33-1021	First-Line Supervisors of Fire Fighting and Prevention Workers	Postsecondary non-degree award	Less than 5 years	Moderate-term on-the-job training	
33-1090	Miscellaneous First-Line Supervisors, Protective Service Workers	High school diploma or equivalent	Less than 5 years	None	\$25.23 ^
33-2011	Firefighters	Postsecondary non-degree award	None	Long-term on-the-job training	\$29.01
33-3011	Bailiffs	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.96
33-3012	Correctional Officers and Jailers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$23.04
33-3021	Detectives and Criminal Investigators	High school diploma or equivalent	•	Moderate-term on-the-job training	\$37.66
33-3051	Police and Sheriff's Patrol Officers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$37.21
33-9021	Private Detectives and Investigators	High school diploma or equivalent	Less than 5 years	Moderate-term on-the-job training	\$23.94
33-9032	Security Guards	High school diploma or equivalent	None	Short-term on-the-job training	\$14.14
33-9092	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	No formal educational credential	None	Short-term on-the-job training	\$10.84
33-9093	Transportation Security Screeners	High school diploma or equivalent	None	Short-term on-the-job training	\$22.30
33-9098	School Bus Monitors and Protective Service Workers, All Other	High school diploma or equivalent	None	Short-term on-the-job training	\$15.11 ^^^
35-0000	Food Preparation and Serving Related Occupations				\$11.24
35-1011	Chefs and Head Cooks	High school diploma or equivalent	5 years or more	None	\$24.91
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	High school diploma or equivalent	Less than 5 years	None	\$17.47
35-2011	Cooks, Fast Food	No formal educational credential	None	Short-term on-the-job training	\$11.35
35-2012	Cooks, Institution and Cafeteria	No formal educational credential	None	Short-term on-the-job training	\$14.34
35-2014	Cooks, Restaurant	No formal educational credential	Less than 5 years	Moderate-term on-the-job training	\$14.09
35-2015	Cooks, Short Order	No formal educational credential	None	Short-term on-the-job training	\$12.47
35-2021	Food Preparation Workers	No formal educational credential	None	Short-term on-the-job training	\$12.07
35-3011	Bartenders	No formal educational credential	None	Short-term on-the-job training	\$10.20
35-3023	Fast Food and Counter Workers	No formal educational credential	None	Short-term on-the-job training	\$10.78
35-3031	Waiters and Waitresses	No formal educational credential	None	Short-term on-the-job training	\$10.04
35-3041	Food Servers, Nonrestaurant	No formal educational credential	None	Short-term on-the-job training	\$12.80
35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	No formal educational credential	None	Short-term on-the-job training	\$11.18
35-9021	Dishwashers	No formal educational credential	None	Short-term on-the-job training	\$11.15
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	No formal educational credential	None	Short-term on-the-job training	\$10.96
35-9099	Food Preparation and Serving Related Workers, All Other	No formal educational credential	None	Short-term on-the-job training	\$11.42
37-0000	Building and Grounds Cleaning and Maintenance Occupations			, S	\$14.41
37-1011	First-Line Supervisors of Housekeeping and Janitorial Workers	High school diploma or equivalent	Less than 5 years	None	\$19.46
37-1012	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	High school diploma or equivalent	Less than 5 years	None	\$23.33
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	No formal educational credential	None	Short-term on-the-job training	\$14.15
37-2012	Maids and Housekeeping Cleaners	No formal educational credential	None	Short-term on-the-job training	\$13.10
37-3011	Landscaping and Groundskeeping Workers	No formal educational credential	None	Short-term on-the-job training	\$14.79
39-0000	Personal Care and Service Occupations	ito formal cadeational of cachilar	TTOTIC	Short term on the job training	\$12.57
39-2011	Animal Trainers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$14.32
39-2021	Nonfarm Animal Caretakers	High school diploma or equivalent	None	Short-term on-the-job training	\$11.09
39-3031	Ushers, Lobby Attendants, and Ticket Takers	No formal educational credential	None	Short-term on-the-job training	\$11.50
39-3031	Amusement and Recreation Attendants	No formal educational credential	None	Short-term on-the-job training	\$10.72
39-3091	Locker Room, Coatroom, and Dressing Room Attendants	High school diploma or equivalent	None	Short-term on-the-job training Short-term on-the-job training	\$14.05
39-5012	Hairdressers, Hairstylists, and Cosmetologists	Postsecondary non-degree award	None	None	\$13.98
33-3017	rian diessers, Fianstynsts, and Cosmetologists	r ostsetonically non-degree award	INOTIE	INOTIC	9E.CIÇ

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Society Soci		Occupational Title	**		•	
39-9101. Childer Workers ##gh Schood lippions or equivalent who should be started to the started of the starte			•	•	•	•
39-9031 Filtes Trainers and Aerobics instructors 11th School diploma or equivalent None 500-term on the job training 513.28 and 39-9032 Filters Trainers and Aerobics instructors 11th School diploma or equivalent None 500-term on the job training 513.34 and 39-9032 Recreation Workers 11th School diploma or equivalent None 500-term on the job training 513.37 and 39-9032 Recreation Workers 11th School diploma or equivalent None 500-term on the job training 513.37 and 39-9032 Recreation Workers 11th School diploma or equivalent None 500-term on the job training 514.27 and 513.39 a			, ,	1		
39-9393. Princes Trainers and Aerobics instructors high school diploma or equivalent None Short-term on-the-job training \$15.34 41-9093. Pacerston Workers high school diploma or equivalent None Short-term on-the-job training \$11.12 41-1011. First-Line Supervisors of Retail Sales Workers high school diploma or equivalent Less than 5 years None \$18.27 41-1012. First-Line Supervisors of Ron-Betail Sales Workers high school diploma or equivalent Less than 5 years None \$18.27 41-1012. First-Line Supervisors of Ron-Betail Sales Workers high school diploma or equivalent None Short-term on-the-job training \$11.04 41-2012. Counter and Bential Clerks No formal educational credential None Short-term on-the-job training \$11.24 41-2013. Retail Salespersons No formal educational credential None Short-term on-the-job training \$14.27 41-2013. Retail Salespersons No formal educational credential None Short-term on-the-job training \$14.27 41-2013. Advertising Sales Agents High school diploma or equivalent None Moderate-term on-the-job training \$24.04 41-2014. Advertising Sales Agents High school diploma or equivalent None Moderate-term on-the-job training \$24.04 41-2015. Sales Representatives of Services, Except Advertising, Insurance, Financial High school diploma or equivalent None Moderate-term on-the-job training \$37.24 41-2015. Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products None Moderate-term on-the-job training \$31.25 41-2015. Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products None Moderate-term on-the-job training \$31.27 41-2015. Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific None Moderate-term on-the-job training \$31.27 41-2015. Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific None Moderate-term on-the-job training \$31.27 41-20			<u> </u>		, ,	· · · · · · · · · · · · · · · · · · ·
39-9303. Recreation Workers 41-10100 Pales and Related Corpustions 41-1000 Pales and Related Corpustions 41-10100 Pales and Related Corpustions 41-1010 Pales and Related Corpustions 41-1011 First-Line Supervisors of Retail Sales Workers 41-1011 First-Line Supervisors of Retail Sales Workers 41-1012 First-Line Supervisors of Retail Sales Workers 41-1012 First-Line Supervisors of Roman Related Sales Workers 41-1012 First-Line Supervisors of Retail Sales Workers 41-1012 First-Line Supervisors of Retail Sales Workers 41-1011 Cashiers 41-1012 Counter and Rental Clerks 41-1011 Counter and Rental Clerks 41-1011 First-Line Supervisors 41-1011 Advertising Sales appears 41-1011 Advertising Sales Agents 41-1011 First-Line Supervisors 41-1011 Advertising Sales Agents 41-1011 Advertising Sales Agents 41-1011 Advertising Sales Agents 41-1011 First-Line Supervisors 41-1011 Advertising Sales Agents 41-1011 First-Line Supervisors 41-1011 First-Line Supervisors 41-1011 First-Line Supervisors 41-1011 Advertising Sales Agents 41-1011 First-Line Supervisors 41-1011 Demonstrators and Product Promoters 41-1011 Demonstrators a					, ,	,
1.000 Sales and Related Occupations High school diploma or equivalent Less than 5 years None \$38.77				1	, ,	•
41-1012 First-Line Supervisors of Retail Sales Workers High school diploma or equivalent Less than 5 years None \$38.70			High school dipionia of equivalent	None	Short-term on-the-job training	
41-1011 First-Line Supervisors of Non-Retall Sales Workers High school diploma or equalwalent None Short-term on-the-job training S11.04		•	High school diploma or equivalent	Loce than 5 years	None	•
A1-2011 Cashiers				-		,
Alt 2021 Counter and Rental Clerks No formal educational credential None Short-term on-the-job training \$13.21		-		<u> </u>		,
Advertising Sales Agents					, ,	
41-3021 Advertising Sales Agents				1		
41-3011 Insurance Sales Agents		<u>'</u>		1		
Al-3031 Securities, Commodities, and Financial Services Sales Agents Bachelor's degree None Moderate-term on-the-job training \$37.24					, ,	· · · · · · · · · · · · · · · · · · ·
41-3091 Tavel Agents High school diploma or equivalent None Moderate-term on-the-job training \$18.57						· · · · · · · · · · · · · · · · · · ·
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products Bachelor's degree None Moderate-term on-the-job training \$48.42					, ,	
Services, and Travel			High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.57
41-4011 Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products 41-4012 Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products 41-9013 Demonstrators and Product Promoters No formal educational credential 41-9014 Real Estate Sales Agents High school diploma or equivalent Al-9015 Sales Engineers Real Estate Sales Agents High school diploma or equivalent Al-9016 None Moderate-term on-the-job training Moderate-term	41-3091					
Products Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products High school diploma or equivalent None Moderate-term on-the-job training \$30.00		,	High school diploma or equivalent	None	Moderate-term on-the-job training	\$27.83
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products 41-9011 Demonstrators and Product Promoters No formal educational credential None Moderate-term on-the-job training S14.80 41-9022 Real Estate Sales Agents High school diploma or equivalent Variety Sales Engineers None Moderate-term on-the-job training S17.74 41-9031 Sales Engineers No formal educational credential None Moderate-term on-the-job training S17.74 41-9041 Telemarketers No formal educational credential None None Moderate-term on-the-job training S13.61 41-9095 Sales and Related Workers, All Other Sales and Related Workers, All Other Sales Engineers None None None Short-term on-the-job training S13.61 41-9091 Sales and Related Workers, All Other High school diploma or equivalent Siles Sales Engineers None None None Short-term on-the-job training S13.61 41-9091 Sales and Related Workers, All Other Sales And Related Workers, All Other High school diploma or equivalent Siles Sales Engineers None None None Short-term on-the-job training S18.30 Sales and Related Workers, All Other Sales	41-4011					
Scientific Products High school diploma or equivalent None Moderate-term on-the-job training \$30.00 41-9011 Demonstrators and Product Promoters No formal educational credential None Short-term on-the-job training \$14.80 41-9021 Real Estate Sales Agents None Moderate-term on-the-job training \$17.74 41-9031 Sales Engineers Bachelor's degree None Moderate-term on-the-job training \$47.92 41-9041 Telemarketers None Moderate-term on-the-job training \$13.61 41-9093 Sales and Related Workers, All Other High school diploma or equivalent None None None Short-term on-the-job training \$13.61 41-9099 Office and Administrative Support Occupations None None None \$133.73 43-000 Office and Administrative Support Occupations High school diploma or equivalent None None \$18.30 43-1011 First-Line Supervisors of Office and Administrative Support Workers High school diploma or equivalent None None Short-term on-the-job training \$14.33 43-2011 Silling and Posting Clerks High school diploma or equivalent None Moderate-term on-the-job training \$18.33 43-3011 Bill and Account Collectors High school diploma or equivalent None Moderate-term on-the-job training \$18.33 43-3021 Silling and Posting Clerks High school diploma or equivalent None Moderate-term on-the-job training \$18.33 43-3031 Payroll and Timekeeping Clerks High school diploma or equivalent None Moderate-term on-the-job training \$21.51 43-3051 Payroll and Timekeeping Clerks High school diploma or equivalent None Short-term on-the-job training \$22.78 43-3071 Tellers High school diploma or equivalent None Short-term on-the-job training \$23.01 43-4011 Srokerage Clerks High school diploma or equivalent None Short-term on-the-job training \$23.01 43-4011 Srokerage Clerks High school diploma or equivalent None Short-term on-the-job training \$23.01 43-4011 Srokerage Clerks High school diploma or equivalent None Short-term on-the-job training \$23.01 43-4011 Srokerage Clerks High school diploma or equivalent None Short-term on-the-job training \$23.01			Bachelor's degree	None	Moderate-term on-the-job training	\$48.42
41-9011 Demonstrators and Product Promoters No formal educational credential A1-9022 Real Estate Sales Agents High school diploma or equivalent A1-9031 Sales Engineers Bachelor's degree None Moderate-term on-the-job training S47.92 A1-9041 Telemarketers No formal educational credential None Short-term on-the-job training S47.92 A1-9099 Sales and Related Workers, All Other High school diploma or equivalent High school diploma or equivalent A3-0001 Solita Supervisors of Office and Administrative Support Occupations A3-0011 Switchboard Operators, Including Answering Service High school diploma or equivalent High school diploma or equivalent High school diploma or equivalent None Short-term on-the-job training S14.30 A3-3021 Silling and Posting Clerks High school diploma or equivalent High school diploma or equivalent None Moderate-term on-the-job training S18.33 A3-3031 Bookkeeping, Accounting, and Auditing Clerks High school diploma or equivalent High school diploma or equivalent None Moderate-term on-the-job training S18.13 A3-3031 Fallers High school diploma or equivalent High school diploma or equivalent None Moderate-term on-the-job training Moderate-term on-the-job training S18.13 A3-3031 Fallers High school diploma or equivalent None Moderate-term on-the-job training Moderate-term on-the-job training Moderate-term on-the-job training S22.78 A3-3031 Fallers High school diploma or equivalent None Moderate-term on-the-job training Moderate-	41-4012	•				
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43-4021 Correspondence Clerks High school diploma or equivalent None Short-term on-the-job training \$18.13 43-4031 Court, Municipal, and License Clerks High school diploma or equivalent None Long-term on-the-job training \$22.28 43-4041 Credit Authorizers, Checkers, and Clerks High school diploma or equivalent None Moderate-term on-the-job training \$23.10 43-4051 Customer Service Representatives High school diploma or equivalent None Short-term on-the-job training \$18.00 43-4061 Eligibility Interviewers, Government Programs High school diploma or equivalent None Moderate-term on-the-job training \$22.92 43-4071 File Clerks High school diploma or equivalent None Short-term on-the-job training \$17.91	43-3099	Financial Clerks, All Other	High school diploma or equivalent	None	Short-term on-the-job training	\$23.01
43-4031 Court, Municipal, and License Clerks High school diploma or equivalent Credit Authorizers, Checkers, and Clerks High school diploma or equivalent None Moderate-term on-the-job training \$22.28 43-4041 Credit Authorizers, Checkers, and Clerks High school diploma or equivalent None Short-term on-the-job training \$18.00 43-4061 Eligibility Interviewers, Government Programs High school diploma or equivalent None Moderate-term on-the-job training \$22.28 43-4051 Customer Service Representatives High school diploma or equivalent None Moderate-term on-the-job training \$22.28 43-4051 Customer Service Representatives High school diploma or equivalent None Moderate-term on-the-job training \$22.28 \$23.10 \$23.10 \$23.4051 Customer Service Representatives High school diploma or equivalent None Moderate-term on-the-job training \$22.28	43-4011	Brokerage Clerks	High school diploma or equivalent	None	Moderate-term on-the-job training	\$23.42
43-4041Credit Authorizers, Checkers, and ClerksHigh school diploma or equivalentNoneModerate-term on-the-job training\$23.1043-4051Customer Service RepresentativesHigh school diploma or equivalentNoneShort-term on-the-job training\$18.0043-4061Eligibility Interviewers, Government ProgramsHigh school diploma or equivalentNoneModerate-term on-the-job training\$22.9243-4071File ClerksHigh school diploma or equivalentNoneShort-term on-the-job training\$17.91	43-4021	Correspondence Clerks	High school diploma or equivalent	None	Short-term on-the-job training	\$18.13
43-4051Customer Service RepresentativesHigh school diploma or equivalentNoneShort-term on-the-job training\$18.0043-4061Eligibility Interviewers, Government ProgramsHigh school diploma or equivalentNoneModerate-term on-the-job training\$22.9243-4071File ClerksHigh school diploma or equivalentNoneShort-term on-the-job training\$17.91	43-4031	Court, Municipal, and License Clerks	High school diploma or equivalent	None	Long-term on-the-job training	\$22.28
43-4051Customer Service RepresentativesHigh school diploma or equivalentNoneShort-term on-the-job training\$18.0043-4061Eligibility Interviewers, Government ProgramsHigh school diploma or equivalentNoneModerate-term on-the-job training\$22.9243-4071File ClerksHigh school diploma or equivalentNoneShort-term on-the-job training\$17.91	43-4041	Credit Authorizers, Checkers, and Clerks	High school diploma or equivalent	None	Moderate-term on-the-job training	\$23.10
43-4061 Eligibility Interviewers, Government Programs High school diploma or equivalent None Moderate-term on-the-job training \$22.92 43-4071 File Clerks High school diploma or equivalent None Short-term on-the-job training \$17.91	43-4051	Customer Service Representatives	High school diploma or equivalent	None		\$18.00
43-4071 File Clerks High school diploma or equivalent None Short-term on-the-job training \$17.91	43-4061	Eligibility Interviewers, Government Programs	High school diploma or equivalent		Moderate-term on-the-job training	\$22.92
	43-4071		High school diploma or equivalent	None		\$17.91
		Hotel, Motel, and Resort Desk Clerks	High school diploma or equivalent	None	Short-term on-the-job training	\$11.41

			Work Experience in	Typical On-The-Job Training Needed	
soc		Typical Education	a Related	to Attain Competency in the	Median Wage
	Occupational Title	Needed for Entry	Occupation	Occupation	May 2021
43-4111	Interviewers, Except Eligibility and Loan	High school diploma or equivalent	None	Short-term on-the-job training	\$17.92
43-4121	Library Assistants, Clerical	High school diploma or equivalent	None	Short-term on-the-job training	\$14.27
43-4131	Loan Interviewers and Clerks	High school diploma or equivalent	None	Short-term on-the-job training	\$22.55
43-4151	Order Clerks	Some college, no degree	None	Short-term on-the-job training	\$17.95
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	Associate's degree	None	None	\$18.80
43-4171	Receptionists and Information Clerks	High school diploma or equivalent	None	Short-term on-the-job training	\$14.23
43-4199	Information and Record Clerks, All Other	High school diploma or equivalent	None	Short-term on the job training Short-term on-the-job training	\$22.26
43-5011	Cargo and Freight Agents	High school diploma or equivalent	None	Short-term on-the-job training	\$22.44
43-5021	Couriers and Messengers	High school diploma or equivalent	None	Short-term on-the-job training	\$14.71
43-5031	Police, Fire, and Ambulance Dispatchers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$23.25
43-5031	Dispatchers, Except Police, Fire, and Ambulance	High school diploma or equivalent	None	Moderate-term on-the-job training	\$19.35
43-5041	Meter Readers, Utilities	High school diploma or equivalent	None	Short-term on-the-job training	\$23.05
43-5051	Postal Service Clerks	High school diploma or equivalent	None	Short-term on-the-job training	\$24.16
43-5052	Postal Service Cierks Postal Service Mail Carriers	High school diploma or equivalent	None	Short-term on-the-job training	\$25.21
43-5053	Postal Service Mail Carriers Postal Service Mail Sorters, Processors, and Processing Machine Operators		None	, ,	\$23.21
		High school diploma or equivalent	1	Short-term on-the-job training	·
43-5061 43-5071	Production, Planning, and Expediting Clerks	High school diploma or equivalent	None None	Moderate-term on-the-job training	\$23.20 \$17.91
	Shipping, Receiving, and Traffic Clerks	High school diploma or equivalent	None	Short-term on-the-job training	,
43-5111	Weighers, Measurers, Checkers, and Samplers, Recordkeeping	High school diploma or equivalent		Short-term on-the-job training	\$19.22
43-6011	Executive Secretaries and Executive Administrative Assistants	High school diploma or equivalent	Less than 5 years	None	\$29.42
43-6012	Legal Secretaries	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.89
43-6013	Medical Secretaries	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.93
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	High school diploma or equivalent	None	Short-term on-the-job training	\$18.29
43-9021	Data Entry Keyers	High school diploma or equivalent	None	Short-term on-the-job training	\$18.07
43-9022	Word Processors and Typists	High school diploma or equivalent	None	Short-term on-the-job training	\$18.08
43-9041	Insurance Claims and Policy Processing Clerks	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.82
43-9051	Mail Clerks and Mail Machine Operators, Except Postal Service	High school diploma or equivalent	None	Short-term on-the-job training	\$15.05
43-9061	Office Clerks, General	High school diploma or equivalent	None	Short-term on-the-job training	\$18.13
43-9071	Office Machine Operators, Except Computer	High school diploma or equivalent	None	Short-term on-the-job training	\$17.95
43-9199	Office and Administrative Support Workers, All Other	High school diploma or equivalent	None	Short-term on-the-job training	\$22.44
45-0000	Farming, Fishing, and Forestry Occupations				\$15.06
45-1011	First-Line Supervisors of Farming, Fishing, and Forestry Workers	High school diploma or equivalent	Less than 5 years	None	\$30.40
45-2091	Agricultural Equipment Operators	No formal educational credential	None	Moderate-term on-the-job training	\$22.04
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	No formal educational credential	None	Short-term on-the-job training	\$15.00
45-2093	Farmworkers, Farm, Ranch, and Aquacultural Animals	No formal educational credential	None	Short-term on-the-job training	\$14.30
47-0000	Construction and Extraction Occupations				\$23.97
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	High school diploma or equivalent	5 years or more	None	\$31.67
47-2021	Brickmasons and Blockmasons	High school diploma or equivalent	None	Apprenticeship	\$29.77
47-2031	Carpenters	High school diploma or equivalent	None	Apprenticeship	\$23.43
47-2044	Tile and Marble Setters	No formal educational credential	None	Long-term on-the-job training	\$22.47
47-2051	Cement Masons and Concrete Finishers	No formal educational credential	None	Moderate-term on-the-job training	\$23.41
47-2061	Construction Laborers	No formal educational credential	None	Short-term on-the-job training	\$22.61
47-2071	Paving, Surfacing, and Tamping Equipment Operators	High school diploma or equivalent	None	Moderate-term on-the-job training	\$23.10
47-2073	Operating Engineers and Other Construction Equipment Operators	High school diploma or equivalent	None	Moderate-term on-the-job training	\$29.09

			Work Experience in	Typical On-The-Job Training Needed	
soc		Typical Education	a Related	to Attain Competency in the	Median Wage
	Occupational Title	Needed for Entry	Occupation	Occupation	May 2021
47-2111	Electricians	High school diploma or equivalent	None	Apprenticeship	\$28.55
47-2121	Glaziers	High school diploma or equivalent	None	Apprenticeship	\$23.48
47-2141	Painters, Construction and Maintenance	No formal educational credential	None	Moderate-term on-the-job training	\$22.54
47-2151	Pipelayers	No formal educational credential	None	Short-term on-the-job training	\$22.61
47-2152	Plumbers, Pipefitters, and Steamfitters	High school diploma or equivalent	None	Apprenticeship	\$29.77
47-2181	Roofers	No formal educational credential	None	Moderate-term on-the-job training	\$23.02
47-2211	Sheet Metal Workers	High school diploma or equivalent	None	Apprenticeship	\$28.69
47-2221	Structural Iron and Steel Workers	High school diploma or equivalent	None	Apprenticeship	\$29.09
47-2221	HelpersBrickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	No formal educational credential	None	Short-term on-the-job training	\$22.61
47-3011	HelpersElectricians	High school diploma or equivalent	None	, ,	\$14.77
-	'			Short-term on-the-job training	
47-3015	HelpersPipelayers, Plumbers, Pipefitters, and Steamfitters	High school diploma or equivalent	None	Short-term on-the-job training	\$14.03
47-4011	Construction and Building Inspectors	High school diploma or equivalent	5 years or more	Moderate-term on-the-job training	\$29.63
47-4041	Hazardous Materials Removal Workers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.89
47-4051	Highway Maintenance Workers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.61
47-4071	Septic Tank Servicers and Sewer Pipe Cleaners	High school diploma or equivalent	None	Moderate-term on-the-job training	\$23.31
47-4090	Miscellaneous Construction and Related Workers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.12
47-5022	Excavating and Loading Machine and Dragline Operators, Surface Mining	High school diploma or equivalent	Less than 5 years	Moderate-term on-the-job training	\$19.06
49-0000	Installation, Maintenance, and Repair Occupations				\$23.21
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	High school diploma or equivalent	Less than 5 years	None	\$31.22
49-2011	Computer, Automated Teller, and Office Machine Repairers	Some college, no degree	None	Short-term on-the-job training	\$18.88
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	Postsecondary non-degree award	None	Moderate-term on-the-job training	\$29.20
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	Postsecondary non-degree award	None	Long-term on-the-job training	\$29.76
49-2097	Electronic Home Entertainment Equipment Installers and Repairers	Postsecondary non-degree award	None	Short-term on-the-job training	\$22.22
49-2098	Security and Fire Alarm Systems Installers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$23.07
49-3021	Automotive Body and Related Repairers	High school diploma or equivalent	None	Long-term on-the-job training	\$22.69
49-3023	Automotive Service Technicians and Mechanics	Postsecondary non-degree award	None	Short-term on-the-job training	\$21.76
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	High school diploma or equivalent	None	Long-term on-the-job training	\$23.60
49-3041	Farm Equipment Mechanics and Service Technicians	High school diploma or equivalent	None	Long-term on-the-job training	\$21.16
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	High school diploma or equivalent	None	Long-term on-the-job training	\$28.72
49-3093	Tire Repairers and Changers	High school diploma or equivalent	None	Short-term on-the-job training	\$14.68
49-9011	Mechanical Door Repairers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.43
49-9012	Control and Valve Installers and Repairers, Except Mechanical Door	High school diploma or equivalent	None	Moderate-term on-the-job training	\$38.18
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	Postsecondary non-degree award	None	Long-term on-the-job training	\$23.96
49-9031	Home Appliance Repairers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.79
49-9041	Industrial Machinery Mechanics	High school diploma or equivalent	None	Long-term on-the-job training	\$29.02
49-9043	Maintenance Workers, Machinery	High school diploma or equivalent	None	Long-term on-the-job training	\$24.34
49-9044	Millwrights	High school diploma or equivalent	None	Apprenticeship	\$34.74
49-9051	Electrical Power-Line Installers and Repairers	High school diploma or equivalent	None	Long-term on-the-job training	\$38.58
49-9052	Telecommunications Line Installers and Repairers	High school diploma or equivalent	None	Long-term on-the-job training	\$23.04
49-9062	Medical Equipment Repairers	Associate's degree	None	Moderate-term on-the-job training	\$29.02
49-9071	Maintenance and Repair Workers, General	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.55
49-9091	Coin, Vending, and Amusement Machine Servicers and Repairers	High school diploma or equivalent	None	Short-term on-the-job training	\$18.23
49-9098	HelpersInstallation, Maintenance, and Repair Workers	High school diploma or equivalent	None	Short-term on-the-job training	\$17.72
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Soc de Coupational Title Supervisor of Production and Operating Workers All Other High school diploma or equivalent International Company of the State of St				Work Experience in	Typical On-The-Job Training Needed	
Section Sect	soc		Typical Education			Median Wage
Moderate-term on-the-job training 518.62		Occupational Title	• •		' '	U
\$1.000 Production Occupations \$1.01101 First Lies Supervisors of Production and Operating Workers \$1.01012 First Lies Supervisors of Production and Operating Workers \$1.01012 First Lies Supervisors of Production and Operating Workers \$1.01012 First Lies Supervisors of Production and Operating Workers \$1.01012 First Lies Supervisors of Production and Operating Workers \$1.01012 First Lies Supervisors of Production and Operating Workers \$1.01012 Structural Metal Fabricators and Hitters \$1.01012 Structural Metal Fabricators and Hitters \$1.01012 First Lies Supervisors \$1.01012 Structural Metal Fabricators and Fabricators \$1.01012 Structural Metal Fabricators and Fabricators \$1.01012 First Lies Supervisors \$1.01012 Structural Metal Fabricators and Fabricators \$1.01012 First Lies Supervisors \$1.01012 Structural Metal Fabricators and Fabricators \$1.01012 First Lies Supervisors \$1.01012 First Lies Supervisors \$1.01012 First Lies Supervisors \$1.01012 Structural Metal Fabricators \$1.01012 First Lies Supervisors \$1.010			•	†	·	· ·
Said First-Line Supervisors of Production and Operating Workers 18th school diploma or equivalent 18th school diploma or equivalen			riigii school dipionia oi equivalent	None	Moderate term on the job training	
Size Electrical, Electronic, and Electromechanical Assemblers, Except Coll Winders, Tapers, and Finishers High school diploma or equivalent. None Moderate-term on-the-job training Size S		•	High school diploma or equivalent	Less than 5 years	None	
Tapers, and finishers 1.2041 Structural Metal Fabricators and Fitters 1.1945 Structural Metal Fabricators and Fitters 1.195 Structural Metal Fabricators and Fitters 1.195 Structural Metal Fabricators and Fitters 1.195 Mischool diplomar or equivalent None Moderate-term on-the-job training 512.78 1.2021 Butchers and Mesa Cutters 1.2022 Mesa. Poultry, and Fish Cutters 1.2022 Mesa. Poultry, and Fish Cutters and Trimmers 1.2022 Food Batchmakers 1.	-		riigii school dipionid of equivalent	Less than 5 years	None	Ç23.30
Structural Metal Fabricators and Fitters High school diploma or equivalent None Moderate-term on-the-job training \$12.78	31 2020	•	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.05
S1-2090 Miscellaneous Assemblers and Fabricators High school diploma or equivalent None Moderate-term on-the-job training S1-78	51-20/1			1	, ,	
Sample S				1		
Si-3002 Butchers and Meat Cutters No formal educational credential None Long-term on-the-job training Si4.56						•
S1-3022 Meat, Pouttry, and Fish Cutters and Trimmers						
S1-309 Food Batchmakers High school diploma or equivalent None Moderate-term on-the-job training S1-4.31					, ,	
S1-309 Food Processing Workers, All Other No formal educational credential None Moderate-term on-the-job training S1-4021	-					
Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic High school diploma or equivalent None Moderate-term on-the-job training \$18.32					, ,	
Plastic High school diploma or equivalent None Moderate-term on-the-job training \$18.32		,	No formal educational credential	None	Moderate-term on-the-job training	\$14.13
S1-4021 Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic High school diploma or equivalent None Moderate-term on-the-job training S18.03	51-4021		Utah sahaal dialama ay ay iyalaw	N	Na danata tanna an tha iala tuainina	640.22
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic 51-4033 Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic 51-40404 Labe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic 51-4041 Machinists 51-4040 Moding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic 51-4072 Moding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic 51-4081 Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic 51-4081 Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic 51-4081 Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic 51-4081 Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic 51-4081 Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic 51-4081 Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic 51-4081 Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic 51-4081 Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic 51-4081 Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic 51-4081 Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic 51-4081 Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic 51-4081 Multiple Machine Tool Setters, Operators, and Tenders High school diploma or equivalent 51-4081 Multiple Machine Setters, Operators, and Tenders High school diploma or equivalent 51-4081 None Moderate-term on-the-job training State Setters, Operators 51-5112 Printing Press Operators 51-5112 Printing Press Operators 51-5112 Printing Press Operators 51-5113 Print Binding and Finishing Workers 51-5011 Sewing Machine Operators 51-6011 Laundry and Dry-Cleaning Workers 51-5012 Sewing Machine Operators 51-6012 Sewing Machine Operators 51-6013 Sewing Machine Operators 51-6014 Cabinetmakers and Bench Carpenters	54 4000					
Plastic High school diploma or equivalent None Moderate-term on-the-job training \$18.09			High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.23
51-4031 Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic 51-4034 Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic 51-4045 Machinists 51-4072 Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic 51-4073 Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic 51-4072 Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic 51-4072 Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic 51-4072 Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic 51-4081 Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic 51-4081 Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic 51-4091 Veliders, Cutters, Solderers, and Brazers 51-4111 Tool and Die Makers 51-4112 Welders, Cutters, Solderers, and Brazers 51-4121 Welders, Cutters, Solderers, and Brazers 51-4121 Welders, Cutters, Solderers, and Brazers 51-4121 Welders, Solderers, and Brazers 51-4122 High school diploma or equivalent None Moderate-term on-the-job training 51-4122 Molding, Soldering, and Brazing Machine Setters, Operators, and Tenders High school diploma or equivalent None Moderate-term on-the-job training 51-4122 Molding, Soldering, and Brazing Machine Setters, Operators, and Tenders High school diploma or equivalent None Moderate-term on-the-job training 51-5111 Printing Press Operators High school diploma or equivalent None Moderate-term on-the-job training 518-62 51-5111 Printing Press Operators High school diploma or equivalent None Moderate-term on-the-job training 518-62 51-5113 Print Binding and Finishing Workers None Moderate-term on-the-job training 518-62 51-5111 Printing Press Operators None Moderate-term on-the-job training 518-62 51-5111 Printing Press Operators None Moderate-term on-the-job training 518	51-4031					440.00
Tenders, Metal and Plastic 1-4034 1-4014 1-4015 1-4015 1-4014 1-4015 1-4015 1-4016 1-			High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.09
Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic High school diploma or equivalent None Moderate-term on-the-job training \$23.05	51-4033		L.,			4
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51-4041 Machinists High school diploma or equivalent None Long-term on-the-job training \$19.18 51-4072 Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Motal and Plastic High school diploma or equivalent None Moderate-term on-the-job training \$15.37 51-4081 Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic High school diploma or equivalent None Long-term on-the-job training \$19.32 51-4111 Tool and Die Makers Postsecondary non-degree award None Long-term on-the-job training \$29.22 51-4121 Welders, Cutters, Solderers, and Brazers High school diploma or equivalent None Moderate-term on-the-job training \$29.22 51-4121 Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders High school diploma or equivalent None Moderate-term on-the-job training \$21.80 51-4193 Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic High school diploma or equivalent None Moderate-term on-the-job training \$17.62 51-5111 Printing Press Technicians and Workers Postsecondary non-degree award None None Moderate-term on-the-job training \$17.62 51-5113 Printing Press Operators High school diploma or equivalent None Moderate-term on-the-job training \$18.62 51-5131 Printing Press Operators High school diploma or equivalent None Moderate-term on-the-job training \$18.61 51-6011 Laundry and Dry-Cleaning Workers High school diploma or equivalent None Moderate-term on-the-job training \$14.61 51-6012 Sewing Machine Operators No formal educational credential None Short-term on-the-job training \$14.70 Long-term on-the-job training \$18.36 51-7011 Cabinetmakers and Bench Carpenters High school diploma or equivalent None Moderate-term on-the-job training \$18.36 51-7021 Stationary Engineers and Boller Operators High school diploma or equivalent None Moderate-term on-the-job training \$18.30 51-7021 Stationary Engineers and Boller Operators High school diploma or equivalent None Moderate-term on-the-job training \$23.35 51-9021 Chemical Equipment Operators and Tenders Hig	51-4034					
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S1-6011 Laundry and Dry-Cleaning Workers No formal educational credential Sewing Machine Operators No formal educational credential None Short-term on-the-job training \$11.50 Sewing Machine Operators No formal educational credential None Short-term on-the-job training \$14.70 Cabinetmakers and Bench Carpenters High school diploma or equivalent None Moderate-term on-the-job training \$18.36 S1-7042 Woodworking Machine Setters, Operators, and Tenders, Except Sawing High school diploma or equivalent None Short-term on-the-job training \$18.36 Moderate-term on-the-job training \$16.91 Stationary Engineers and Boiler Operators High school diploma or equivalent None Long-term on-the-job training \$23.07 Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders High school diploma or equivalent None Moderate-term on-the-job training \$23.42 Moderate-term on-the-job training \$19.08 Moderate-term on-the-job training \$19.08 Moderate-term on-the-job training \$19.08		Printing Press Operators	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.62
S1-6031 Sewing Machine Operators No formal educational credential None Short-term on-the-job training \$14.70 S1-7011 Cabinetmakers and Bench Carpenters High school diploma or equivalent None Moderate-term on-the-job training \$18.36 S1-7042 Woodworking Machine Setters, Operators, and Tenders, Except Sawing High school diploma or equivalent None Moderate-term on-the-job training \$16.91 S1-8021 Stationary Engineers and Boiler Operators High school diploma or equivalent None Long-term on-the-job training \$30.07 S1-8031 Water and Wastewater Treatment Plant and System Operators High school diploma or equivalent None Long-term on-the-job training \$23.53 S1-9011 Chemical Equipment Operators and Tenders High school diploma or equivalent None Moderate-term on-the-job training \$23.42 Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders High school diploma or equivalent None Moderate-term on-the-job training \$19.08 S19.03	51-5113	Print Binding and Finishing Workers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$14.61
S1-7011 Cabinetmakers and Bench Carpenters High school diploma or equivalent None Moderate-term on-the-job training S18.36 S1-7042 Woodworking Machine Setters, Operators, and Tenders, Except Sawing High school diploma or equivalent Stationary Engineers and Boiler Operators High school diploma or equivalent None Long-term on-the-job training S30.07 S1-8031 Water and Wastewater Treatment Plant and System Operators High school diploma or equivalent Chemical Equipment Operators and Tenders High school diploma or equivalent None Moderate-term on-the-job training S23.53 Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders High school diploma or equivalent None Moderate-term on-the-job training S19.08 Mixing and Blending Machine Setters, Operators, and Tenders High school diploma or equivalent None Moderate-term on-the-job training S19.08	51-6011	Laundry and Dry-Cleaning Workers	No formal educational credential	None	Short-term on-the-job training	\$11.50
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S1-8031 Water and Wastewater Treatment Plant and System Operators High school diploma or equivalent None Long-term on-the-job training \$23.53 51-9011 Chemical Equipment Operators and Tenders High school diploma or equivalent None Moderate-term on-the-job training \$23.42 51-9012 Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders High school diploma or equivalent None Moderate-term on-the-job training \$19.08 51-9023 Mixing and Blending Machine Setters, Operators, and Tenders High school diploma or equivalent None Moderate-term on-the-job training \$19.03		Woodworking Machine Setters, Operators, and Tenders, Except Sawing	High school diploma or equivalent	None		\$16.91
51-9011 Chemical Equipment Operators and Tenders High school diploma or equivalent None Moderate-term on-the-job training \$23.42 51-9012 Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders High school diploma or equivalent None Moderate-term on-the-job training \$19.08 51-9023 Mixing and Blending Machine Setters, Operators, and Tenders High school diploma or equivalent None Moderate-term on-the-job training \$19.03	51-8021	Stationary Engineers and Boiler Operators	High school diploma or equivalent	None	Long-term on-the-job training	\$30.07
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and Tenders High school diploma or equivalent None Moderate-term on-the-job training \$19.08 51-9023 Mixing and Blending Machine Setters, Operators, and Tenders High school diploma or equivalent None Moderate-term on-the-job training \$19.08	51-9011		High school diploma or equivalent	None	Moderate-term on-the-job training	\$23.42
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			High school diploma or equivalent	None	Moderate-term on-the-job training	\$19.08
	51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$19.03
	51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.11

Occupational* Education and Training Classifications, Projections Report, 2020-2030

soc		Typical Education	Work Experience in a Related	Typical On-The-Job Training Needed to Attain Competency in the	Median Wage
Code	Occupational Title	Needed for Entry	Occupation	Occupation	May 2021
51-9041	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and				
	Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.45
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.17
51-9081	Dental Laboratory Technicians	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.67
51-9111	Packaging and Filling Machine Operators and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.05
51-9124	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.90
51-9161	Computer Numerically Controlled Tool Operators	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.29
51-9162	Computer Numerically Controlled Tool Programmers	Postsecondary non-degree award	None	Moderate-term on-the-job training	\$23.21
51-9191	Adhesive Bonding Machine Operators and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.40
51-9195	Molders, Shapers, and Casters, Except Metal and Plastic	High school diploma or equivalent	None	Long-term on-the-job training	\$18.05
51-9196	Paper Goods Machine Setters, Operators, and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.42
51-9198	HelpersProduction Workers	High school diploma or equivalent	None	Short-term on-the-job training	\$17.78
51-9199	Production Workers, All Other	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.78
53-0000	Transportation and Material Moving Occupations				\$18.12
53-1047	FirstLine Supervisors of Transportation & Material Moving Workers, Exc Aircraft				
	Cargo Handling Supervisor	High school diploma or equivalent	Less than 5 years	None	\$23.88
53-2012	Commercial Pilots	High school diploma or equivalent	None	Moderate-term on-the-job training	\$129,451 **
53-3031	Driver/Sales Workers	High school diploma or equivalent	None	Short-term on-the-job training	\$13.73
53-3032	Heavy and Tractor-Trailer Truck Drivers	Postsecondary non-degree award	None	Short-term on-the-job training	\$23.41
53-3033	Light Truck or Delivery Services Drivers	High school diploma or equivalent	None	Short-term on-the-job training	\$18.57
53-3052	Bus Drivers, Transit and Intercity	High school diploma or equivalent	None	Moderate-term on-the-job training	\$23.60
53-3058	Passenger Vehicle Drivers, Except Bus Drivers, Transit and Intercity	No formal educational credential	None	Short-term on-the-job training	\$18.05 ^^^
53-6021	Parking Lot Attendants	No formal educational credential	None	Short-term on-the-job training	\$11.62
53-6031	Automotive and Watercraft Service Attendants	No formal educational credential	None	Short-term on-the-job training	\$13.73
53-7021	Crane and Tower Operators	High school diploma or equivalent	Less than 5 years	Moderate-term on-the-job training	\$23.84
53-7051	Industrial Truck and Tractor Operators	No formal educational credential	None	Short-term on-the-job training	\$18.93
53-7061	Cleaners of Vehicles and Equipment	No formal educational credential	None	Short-term on-the-job training	\$14.23
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	No formal educational credential	None	Short-term on-the-job training	\$17.82
53-7063	Machine Feeders and Offbearers	No formal educational credential	None	Short-term on-the-job training	\$22.24
53-7064	Packers and Packagers, Hand	No formal educational credential	None	Short-term on-the-job training	\$14.54
53-7065	Stockers and Order Fillers	High school diploma or equivalent	None	Short-term on-the-job training	\$17.34
53-7081	Refuse and Recyclable Material Collectors	No formal educational credential	None	Short-term on-the-job training	\$18.89

^{*} Occupations with 100 or more workers.

Source: Ohio Department of Job and Family Services, Bureau of Labor Market Information, June 2023.

^{**} Certain occupations only report wages at the annual level.

[^] National hourly wage.

^{^^} National annual wage.

^{^^^} National aggregate wage.

[#] Wage above max.

[▲] Wage not available due to OES/SOC changes.

[†] Statewide hourly wage.

^{††} Statewide annual wage.

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Office of Workforce Development
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Bureau of Labor Market Information Business Principles for Workforce Development

- Partner with the workforce and economic development community.
- Develop and deploy new information solution tools and systems for the workforce and economic development community.
- Provide products and services that are customer- and demand-driven.
- Be known as an important and reliable source for information solutions that support workforce development goals and outcomes.

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