

Outlook

Akron **Metropolitan Statistical Area**

Portage and Summit Counties



2030 Job Outlook for Ohio Metropolitan Statistical Areas

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 eight largest metropolitan statistical areas. 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 102,228 in the Columbus MSA to a growth of 5,723 jobs in the Youngstown-Warren-Boardman MSA. Among the state's largest metropolitan statistical areas, the highest projected growth is in Columbus (9.4%), followed by Cincinnati (6.0%), Dayton (4.9%), Cleveland-Elyria (4.5%), Akron (4.2%), Canton-Massillon (3.7%), Youngstown-Warren-Boardman (3.6%), and Toledo (3.5%).

Comparison of Ohio Metropolitan Statistical Areas: 2020-2030

	2020	2030 Projected	Projected 2020-2	2030
Ohio Metropolitan Statistical Areas	Employment	Employment	Number	Percent
Akron MSA	325,672	339,438	13,766	4.2%
Canton-Massillon MSA	169,284	175,464	6,180	3.7%
Cincinnati MSA	888,939	942,233	53,294	6.0%
Cleveland-Elyria MSA	1,027,279	1,073,551	46,272	4.5%
Columbus MSA	1,087,191	1,189,419	102,228	9.4%
Dayton MSA	380,258	398,981	18,723	4.9%
Toledo MSA	293,705	303,899	10,194	3.5%
Youngstown-Warren-Boardman MSA	160,838	166,561	5,723	3.6%

Each 2030 Job Outlook report for Ohio's metropolitan statistical areas 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	al Openings		Median Wage
Code	Occupational Title	Annual	Projected	2020-2030	Percent	Growth	Exits	Transfers	Total	May 2021
00-0000	Total, All Occupations	325,672	339,438	13,766	4.2%	1,377	14,186	21,855	37,418	\$18.82
11-0000	Management Occupations	18,505	19,863	1,358	7.3%	136	505	1,020	1,661	\$47.62
11-1011	Chief Executives	325	294	-31	-9.5%	-3	8	12	17	\$90.65
11-1021	General and Operations Managers	4,280	4,515	235	5.5%	24	88	273	385	\$47.08
11-1031	Legislators	148	152	4	2.7%	0	4	7	11	\$36,940 ^^
11-2021	Marketing Managers	421	449	28	6.7%	3	9	27	39	\$60.25
11-2022	Sales Managers	763	797	34	4.5%	3	16	49	68	\$60.88
11-2030	Public Relations and Fundraising Managers	143	154	11	7.7%	1	4	8	13	\$57.62 ^
11-3010	Administrative Services and Facilities Managers	801	853	52	6.5%	5	24	41	70	\$47.73 ^
11-3021	Computer and Information Systems Managers	874	929	55	6.3%	6	15	51	72	\$61.52
11-3031	Financial Managers	1,301	1,514	213	16.4%	21	29	71	121	\$60.52
11-3051	Industrial Production Managers	809	828	19	2.4%	2	16	39	57	\$47.96
11-3061	Purchasing Managers	129	133	4	3.1%	0	3	7	10	\$59.28
11-3071	Transportation, Storage, and Distribution Managers	425	459	34	8.0%	3	8	24	35	\$43.95
11-3121	Human Resources Managers	282	297	15	5.3%	2	7	16	25	\$59.54
11-9021	Construction Managers	525	577	52	9.9%	5	11	28	44	\$47.20
11-9031	Education Administrators, Preschool and Childcare Center/Program	138	151	13	9.4%	1	4	7	12	\$22.19
11-9032	Education Administrators, Elementary and Secondary School	579	633	54	9.3%	5	15	28	48	\$98,160 **
11-9033	Education Administrators, Postsecondary	312	312	0	0.0%	0	8	14	22	\$47.29
11-9041	Architectural and Engineering Managers	461	473	12	2.6%	1	8	24	33	\$61.94
11-9051	Food Service Managers	682	766	84	12.3%	8	22	58	88	\$28.18
11-9111	Medical and Health Services Managers	1,025	1,324	299	29.2%	30	29	60	119	\$48.04
11-9141	Property, Real Estate, and Community Association Managers	780	798	18	2.3%	2	30	30	62	\$23.27
11-9151	Social and Community Service Managers	334	359	25	7.5%	2	10	19	31	\$36.97
13-0000	Business and Financial Operations Occupations	18,038	19,259	1,221	6.8%	122	493	1,105	1,720	\$30.37
13-1020	Buyers and Purchasing Agents	1,155	1,088	-67	-5.8%	-7	38	72	103	\$29.60
13-1031	Claims Adjusters, Examiners, and Investigators	697	684	-13	-1.9%	-1	16	36	51	\$29.11
13-1041	Compliance Officers	553	586	33	6.0%	3	14	30	47	\$30.17
13-1051	Cost Estimators	495	490	-5	-1.0%	0	14	30	44	\$30.37
13-1071	Human Resources Specialists	1,758	1,901	143	8.1%	14	50	122	186	\$29.05
13-1075	Labor Relations Specialists	285	264	-21	-7.4%	-2	7	18	23	\$37.59
13-1081	Logisticians	623	824	201	32.3%	20	15	47	82	\$30.72
13-1111	Management Analysts	1,544	1,678	134	8.7%	13	52	93	158	\$38.28
13-1121	Meeting, Convention, and Event Planners	186	215	29	15.6%	3	6	15	24	\$22.91
13-1131	Fundraisers	267	300	33	12.4%	3	9	18	30	\$28.91
13-1141	Compensation, Benefits, and Job Analysis Specialists	136	145	9	6.6%	1	4	8	13	\$29.17
13-1151	Training and Development Specialists	505	548	43	8.5%	4	16	32	52	\$28.14
13-1161	Market Research Analysts and Marketing Specialists	1,719	2,010	291	16.9%	29	44	136	209	\$29.35
13-1198	Project Management Specialists and Business Operations Specialists, All Other	2,974	3,085	111	3.7%	11	70	149	230	\$35.90 ^^^
13-2011	Accountants and Auditors	2,868	3,019	151	5.3%	15	82	174	271	\$35.62

		Emplo	yment*	Chang	e in					
soc		2020	2030	Employ			Annua	l Openings		Median Wage
Code	Occupational Title	Annual	Projected	2020-2030	Percent	Growth	Exits	Transfers	Total	May 2021
13-2052	Personal Financial Advisors	539	600	61	11.3%	6	13	28	47	\$47.23
13-2053	Insurance Underwriters	203	199	-4	-2.0%	0	4	10	14	\$44.15
13-2072	Loan Officers	377	392	15	4.0%	2	8	21	31	\$30.37
13-2098	Financial and Investment Analysts, Financial Risk Specialists, and Financial									,
	Specialists, All Other	692	741	49	7.1%	5	13	41	59	\$35.21 ^^^
15-0000	Computer and Mathematical Occupations	9,006	9,938	932	10.4%	93	193	467	753	\$37.63
15-1211	Computer Systems Analysts	1,302	1,335	33	2.5%	3	26	65	94	\$39.61
15-1212	Information Security Analysts	227	294	67	29.5%	7	4	14	25	\$46.86
15-1231	Computer Network Support Specialists	523	574	51	9.8%	5	10	29	44	\$29.40
15-1232	Computer User Support Specialists	1,257	1,340	83	6.6%	8	24	69	101	\$22.62
15-1241	Computer Network Architects	293	296	3	1.0%	0	4	13	17	\$48.51
15-1244	Network and Computer Systems Administrators	982	983	1	0.1%	0	16	46	62	\$38.39
15-1245	Database Administrators and Architects	289	306	17	5.9%	2	7	15	24	\$47.44 ^^^
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	2,655	3,170	515	19.4%	52	68	143	263	\$49.49 ^^^
15-1257	Web Developers and Digital Interface Designers	233	247	14	6.0%	1	6	12	19	\$49.49 ^^^
15-1299	Computer Occupations, All Other	536	546	10	1.9%	1	12	26	39	\$45.46
15-2031	Operations Research Analysts	189	242	53	28.0%	5	5	9	19	\$37.09
15-2098	Data Scientists and Mathematical Science Occupations, All Other	164	206	42	25.6%	4	4	9	17	\$30.03 ^^^
17-0000	Architecture and Engineering Occupations	6,358	6,655	297	4.7%	30	153	308	491	\$37.09
17-1011	Architects, Except Landscape and Naval	125	131	6	4.8%	1	4	5	10	\$37.03
17-1022	Surveyors	105	111	6	5.7%	1	4	5	10	\$29.19
17-2051	Civil Engineers	408	441	33	8.1%	3	8	21	32	\$37.56
17-2071									32	γ37.30
	Electrical Engineers	733	760	27	3.7%	3	18	30	51	\$46.68
17-2112	Electrical Engineers Industrial Engineers	733 830	760 892	27 62	3.7% 7.5%	3 6	18 19	30 34		
									51	\$46.68
17-2112	Industrial Engineers	830	892	62	7.5%	6	19	34	51 59	\$46.68 \$38.05
17-2112 17-2131	Industrial Engineers Materials Engineers	830 236	892 253	62 17	7.5% 7.2%	6	19 5	34 10	51 59 17	\$46.68 \$38.05 \$38.41
17-2112 17-2131 17-2141	Industrial Engineers Materials Engineers Mechanical Engineers	830 236 1,114	892 253 1,178	62 17 64	7.5% 7.2% 5.8%	6 2 6	19 5 20	34 10 47	51 59 17 73	\$46.68 \$38.05 \$38.41 \$37.75
17-2112 17-2131 17-2141 17-2199	Industrial Engineers Materials Engineers Mechanical Engineers Engineers, All Other	830 236 1,114 376	892 253 1,178 389	62 17 64 13	7.5% 7.2% 5.8% 3.5%	6 2 6 1	19 5 20 8	34 10 47 16	51 59 17 73 25	\$46.68 \$38.05 \$38.41 \$37.75 \$41.45
17-2112 17-2131 17-2141 17-2199 17-3011	Industrial Engineers Materials Engineers Mechanical Engineers Engineers, All Other Architectural and Civil Drafters	830 236 1,114 376 195	892 253 1,178 389 198	62 17 64 13	7.5% 7.2% 5.8% 3.5% 1.5%	6 2 6 1	19 5 20 8 6	34 10 47 16 12	51 59 17 73 25 18	\$46.68 \$38.05 \$38.41 \$37.75 \$41.45 \$28.26
17-2112 17-2131 17-2141 17-2199 17-3011 17-3013	Industrial Engineers Materials Engineers Mechanical Engineers Engineers, All Other Architectural and Civil Drafters Mechanical Drafters Civil Engineering Technicians	830 236 1,114 376 195 190	892 253 1,178 389 198 180	62 17 64 13 3 -10	7.5% 7.2% 5.8% 3.5% 1.5% -5.3%	6 2 6 1 0 -1	19 5 20 8 6	34 10 47 16 12	51 59 17 73 25 18	\$46.68 \$38.05 \$38.41 \$37.75 \$41.45 \$28.26 \$28.95
17-2112 17-2131 17-2141 17-2199 17-3011 17-3013 17-3022	Industrial Engineers Materials Engineers Mechanical Engineers Engineers, All Other Architectural and Civil Drafters Mechanical Drafters	830 236 1,114 376 195 190 204	892 253 1,178 389 198 180 203	62 17 64 13 3 -10	7.5% 7.2% 5.8% 3.5% 1.5% -5.3% -0.5%	6 2 6 1 0 -1	19 5 20 8 6 6 6	34 10 47 16 12 12	51 59 17 73 25 18 17	\$46.68 \$38.05 \$38.41 \$37.75 \$41.45 \$28.26 \$28.95 \$29.40
17-2112 17-2131 17-2141 17-2199 17-3011 17-3013 17-3022 17-3023 17-3027	Industrial Engineers Materials Engineers Mechanical Engineers Engineers, All Other Architectural and Civil Drafters Mechanical Drafters Civil Engineering Technicians Electrical and Electronics Engineering Technicians Mechanical Engineering Technicians	830 236 1,114 376 195 190 204	892 253 1,178 389 198 180 203 161	62 17 64 13 3 -10 -1	7.5% 7.2% 5.8% 3.5% 1.5% -5.3% -0.5% 0.0%	6 2 6 1 0 -1 0	19 5 20 8 6 6 6 5	34 10 47 16 12 12 12 10	51 59 17 73 25 18 17 18	\$46.68 \$38.05 \$38.41 \$37.75 \$41.45 \$28.26 \$28.95 \$29.40 \$29.96 \$23.21
17-2112 17-2131 17-2141 17-2199 17-3011 17-3013 17-3022 17-3023	Industrial Engineers Materials Engineers Mechanical Engineers Engineers, All Other Architectural and Civil Drafters Mechanical Drafters Civil Engineering Technicians Electrical and Electronics Engineering Technicians	830 236 1,114 376 195 190 204 161	892 253 1,178 389 198 180 203 161	62 17 64 13 3 -10 -1 0	7.5% 7.2% 5.8% 3.5% 1.5% -5.3% -0.5% 0.0% 3.0%	6 2 6 1 0 -1 0 0	19 5 20 8 6 6 6 5	34 10 47 16 12 12 12 10	51 59 17 73 25 18 17 18 15	\$46.68 \$38.05 \$38.41 \$37.75 \$41.45 \$28.26 \$28.95 \$29.40 \$29.96
17-2112 17-2131 17-2141 17-2199 17-3011 17-3013 17-3022 17-3023 17-3027 17-3031	Industrial Engineers Materials Engineers Mechanical Engineers Engineers, All Other Architectural and Civil Drafters Mechanical Drafters Civil Engineering Technicians Electrical and Electronics Engineering Technicians Mechanical Engineering Technicians Surveying and Mapping Technicians	830 236 1,114 376 195 190 204 161	892 253 1,178 389 198 180 203 161	62 17 64 13 3 -10 -1 0	7.5% 7.2% 5.8% 3.5% 1.5% -5.3% -0.5% 0.0% 3.0%	6 2 6 1 0 -1 0 0	19 5 20 8 6 6 6 5	34 10 47 16 12 12 12 10	51 59 17 73 25 18 17 18 15	\$46.68 \$38.05 \$38.41 \$37.75 \$41.45 \$28.26 \$28.95 \$29.40 \$29.96 \$23.21
17-2112 17-2131 17-2141 17-2199 17-3011 17-3013 17-3022 17-3023 17-3027 17-3031	Industrial Engineers Materials Engineers Mechanical Engineers Engineers, All Other Architectural and Civil Drafters Mechanical Drafters Civil Engineering Technicians Electrical and Electronics Engineering Technicians Mechanical Engineering Technicians Surveying and Mapping Technicians Calibration and Engineering Technologists and Technicians, Except Drafters, All	830 236 1,114 376 195 190 204 161 169	892 253 1,178 389 198 180 203 161 174 103	62 17 64 13 3 -10 -1 0 5	7.5% 7.2% 5.8% 3.5% 1.5% -5.3% -0.5% 0.0% 3.0% 1.0%	6 2 6 1 0 -1 0 0 0	19 5 20 8 6 6 6 5 5	34 10 47 16 12 12 12 10 10	51 59 17 73 25 18 17 18 15 15	\$46.68 \$38.05 \$38.41 \$37.75 \$41.45 \$28.26 \$28.95 \$29.40 \$29.96 \$23.21 \$22.64
17-2112 17-2131 17-2141 17-2199 17-3011 17-3013 17-3022 17-3023 17-3027 17-3031 17-3098	Industrial Engineers Materials Engineers Mechanical Engineers Engineers, All Other Architectural and Civil Drafters Mechanical Drafters Civil Engineering Technicians Electrical and Electronics Engineering Technicians Mechanical Engineering Technicians Surveying and Mapping Technicians Calibration and Engineering Technologists and Technicians, Except Drafters, All Other	830 236 1,114 376 195 190 204 161 169 102	892 253 1,178 389 198 180 203 161 174 103	62 17 64 13 3 -10 -1 0 5	7.5% 7.2% 5.8% 3.5% 1.5% -5.3% -0.5% 0.0% 3.0% 1.0%	6 2 6 1 0 -1 0 0 0	19 5 20 8 6 6 5 5	34 10 47 16 12 12 12 10 10	51 59 17 73 25 18 17 18 15 15 13	\$46.68 \$38.05 \$38.41 \$37.75 \$41.45 \$28.26 \$28.95 \$29.40 \$29.96 \$23.21 \$22.64
17-2112 17-2131 17-2141 17-2199 17-3011 17-3022 17-3023 17-3027 17-3031 17-3098	Industrial Engineers Materials Engineers Mechanical Engineers Engineers, All Other Architectural and Civil Drafters Mechanical Drafters Civil Engineering Technicians Electrical and Electronics Engineering Technicians Mechanical Engineering Technicians Surveying and Mapping Technicians Calibration and Engineering Technologists and Technicians, Except Drafters, All Other Life, Physical, and Social Science Occupations	830 236 1,114 376 195 190 204 161 169 102	892 253 1,178 389 198 180 203 161 174 103	62 17 64 13 3 -10 -1 0 5 1	7.5% 7.2% 5.8% 3.5% 1.5% -5.3% -0.5% 0.0% 3.0% 1.0% 2.4% 6.9%	6 2 6 1 0 -1 0 0 0 0	19 5 20 8 6 6 6 5 5 4	34 10 47 16 12 12 12 10 10 9	51 59 17 73 25 18 17 18 15 15 13	\$46.68 \$38.05 \$38.41 \$37.75 \$41.45 \$28.26 \$28.95 \$29.40 \$29.96 \$23.21 \$22.64
17-2112 17-2131 17-2141 17-2199 17-3011 17-3022 17-3023 17-3027 17-3031 17-3098	Industrial Engineers Materials Engineers Mechanical Engineers Engineers, All Other Architectural and Civil Drafters Mechanical Drafters Civil Engineering Technicians Electrical and Electronics Engineering Technicians Mechanical Engineering Technicians Surveying and Mapping Technicians Calibration and Engineering Technologists and Technicians, Except Drafters, All Other Life, Physical, and Social Science Occupations Medical Scientists, Except Epidemiologists	830 236 1,114 376 195 190 204 161 169 102 170 2,271	892 253 1,178 389 198 180 203 161 174 103 174 2,428 198	62 17 64 13 3 -10 -1 0 5 1	7.5% 7.2% 5.8% 3.5% 1.5% -5.3% -0.5% 0.0% 3.0% 1.0% 2.4% 6.9% 13.8%	6 2 6 1 0 -1 0 0 0 0	19 5 20 8 6 6 6 5 5 4 5 4 2	34 10 47 16 12 12 12 10 10 9	51 59 17 73 25 18 17 18 15 15 13	\$46.68 \$38.05 \$38.41 \$37.75 \$41.45 \$28.26 \$28.95 \$29.40 \$29.96 \$23.21 \$22.64 \$29.18 ^^^

		Emplo	/ment*	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
19-4031	Chemical Technicians	167	174	7	4.2%	1	3	15	19	\$22.73
19-4042	Environmental Science and Protection Technicians, Including Health	112	127	15	13.4%	2	3	11	16	\$21.85 †
19-5011	Occupational Health and Safety Specialists	254	261	7	2.8%	1	7	11	19	\$36.79
21-0000	Community and Social Service Occupations	6,315	6,859	544	8.6%	54	222	418	694	\$22.95
21-1012	Educational, Guidance, School, and Vocational Counselors	696	762	66	9.5%	7	24	43	74	\$24.03
21-1015	Rehabilitation Counselors	303	328	25	8.3%	2	10	19	31	\$29.17
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	375	458	83	22.1%	8	14	25	47	\$22.62
21-1021	Child, Family, and School Social Workers	940	999	59	6.3%	6	27	61	94	\$22.95
21-1022	Healthcare Social Workers	606	657	51	8.4%	5	18	40	63	\$28.90
21-1023	Mental Health and Substance Abuse Social Workers	404	459	55	13.6%	6	12	27	45	\$18.69
21-1029	Social Workers, All Other	343	375	32	9.3%	3	10	23	36	\$23.13
21-1091	Health Educators	115	124	9	7.8%	1	4	8	13	\$28.66
21-1092	Probation Officers and Correctional Treatment Specialists	167	169	2	1.2%	0	4	10	14	\$23.08
21-1093	Social and Human Service Assistants	792	896	104	13.1%	10	34	64	108	\$17.52
21-1094	Community Health Workers	106	120	14	13.2%	1	4	8	13	\$19.17
21-2011	Clergy	1,063	1,086	23	2.2%	2	44	62	108	\$22.88
23-0000	Legal Occupations	2,476	2,606	130	5.3%	13	71	102	186	\$30.95
23-1011	Lawyers	1,269	1,348	79	6.2%	8	28	32	68	\$48.30
23-1023	Judges, Magistrate Judges, and Magistrates	131	131	0	0.0%	0	3	3	6	\$60.80
23-2011	Paralegals and Legal Assistants	572	625	53	9.3%	5	23	40	68	\$21.97
25-0000	Education, Training, and Library Occupations	17,846	19,255	1,409	7.9%	141	717	832	1,690	\$29.41
25-1011	Business Teachers, Postsecondary	225	225	0	0.0%	0	10	10	20	\$98,830 **
25-1022	Mathematical Science Teachers, Postsecondary	106	107	1	0.9%	0	5	5	10	\$77,740 ††
25-1032	Engineering Teachers, Postsecondary	166	175	9	5.4%	1	8	8	17	\$104,940 **
25-1071	Health Specialties Teachers, Postsecondary	260	303	43	16.5%	4	13	13	30	\$104,940 **
25-1081	Education Teachers, Postsecondary	187	189	2	1.1%	0	8	9	17	\$61,550 **
25-1121	Art, Drama, and Music Teachers, Postsecondary	346	354	8	2.3%	1	16	16	33	\$64,100 ††
25-1122	Communications Teachers, Postsecondary	122	124	2	1.6%	0	6	6	12	\$77,630 ++
25-1123	English Language and Literature Teachers, Postsecondary	149	151	2	1.3%	0	7	7	14	\$61,380 **
25-1194	Vocational Education Teachers, Postsecondary	218	232	14	6.4%	1	10	10	21	\$22.33
25-1199	Postsecondary Teachers, All Other	221	201	-20	-9.1%	-2	9	10	17	\$63,740 **
25-2011	Preschool Teachers, Except Special Education	845	995	150	17.8%	15	38	54	107	\$13.69
25-2021	Elementary School Teachers, Except Special Education	2,302	2,460	158	6.9%	16	73	95	184	\$77,130 **
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	4,088	4,411	323	7.9%	32	113	172	317	\$76,520 **
25-2052	Special Education Teachers, Kindergarten and Elementary School	316	338	22	7.0%	2	11	13	26	\$61,450 **
25-2058	Special Education Teachers, Secondary School	617	671	54	8.8%	5	21	26	52	\$60,380 **
25-3021	Self-Enrichment Education Teachers	726	873	147	20.3%	15	48	43	106	\$14.65
25-3097	Teachers and Instructors, All Other, Except Substitute Teachers	789	875	86	10.9%	9	50	45	104	\$17.94 ^^^
25-4022	Librarians and Media Collections Specialists	359	375	16	4.5%	2	18	16	36	\$24.10
25-4031	Library Technicians	236	223	-13	-5.5%	-1	19	14	32	\$14.65

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soc		2020	2030	Employ	ment		Annua	al Openings		Median Wage
Code	Occupational Title	Annual	Projected	2020-2030	Percent	Growth	Exits	Transfers	Total	May 2021
25-9031	Instructional Coordinators	178	194	16	9.0%	2	9	8	19	\$23.97
25-9044	Teaching Assistants, Postsecondary	219	215	-4	-1.8%	0	10	10	20	\$30,400 **
25-9045	Teaching Assistants, Except Postsecondary	2,051	2,223	172	8.4%	17	96	100	213	\$28,760 **
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	3,949	4,100	151	3.8%	15	150	252	417	\$23.32
27-1023	Floral Designers	137	102	-35	-25.6%	-4	4	7	7	\$14.11
27-1024	Graphic Designers	625	626	1	0.2%	0	19	37	56	\$23.51
27-2012	Producers and Directors	102	118	16	15.7%	2	2	7	11	\$29.49
27-2022	Coaches and Scouts	443	494	51	11.5%	5	27	38	70	\$38,480 **
27-2042	Musicians and Singers	279	290	11	3.9%	1	17	16	34	\$47.38 †
27-3031	Public Relations Specialists	377	403	26	6.9%	3	10	26	39	\$29.76
27-3041	Editors	128	128	0	0.0%	0	4	8	12	\$30.26
27-3042	Technical Writers	110	124	14	12.7%	1	3	7	11	\$37.03
27-3043	Writers and Authors	155	159	4	2.6%	0	6	9	15	\$22.43
27-4021	Photographers	158	182	24	15.2%	2	6	10	18	\$17.44 †
29-0000	Healthcare Practitioners and Technical Occupations	22,920	24,481	1,561	6.8%	156	604	709	1,469	\$29.56
29-1011	Chiropractors	102	105	3	2.9%	0	2	1	3	\$29.11
29-1021	Dentists, General	188	179	-9	-4.8%	-1	3	2	4	#
29-1031	Dietitians and Nutritionists	166	175	9	5.4%	1	6	6	13	\$29.12
29-1051	Pharmacists	1,002	988	-14	-1.4%	-1	18	19	36	\$61.18
29-1122	Occupational Therapists	426	475	49	11.5%	5	10	15	30	\$38.16
29-1123	Physical Therapists	548	612	64	11.7%	6	12	12	30	\$47.27
29-1126	Respiratory Therapists	508	613	105	20.7%	10	12	14	36	\$29.21
29-1127	Speech-Language Pathologists	439	521	82	18.7%	8	11	17	36	\$37.26
29-1131	Veterinarians	192	231	39	20.3%	4	3	3	10	\$47.58
29-1141	Registered Nurses	8,868	9,411	543	6.1%	54	244	230	528	\$36.08
29-1171	Nurse Practitioners	590	855	265	44.9%	26	15	23	64	\$48.77
29-1215	Family Medicine Physicians	197	188	-9	-4.6%	-1	3	2	4	\$74.39
29-1228	Physicians, All Other; and Ophthalmologists, Except Pediatric	818	808	-10	-1.2%	-1	13	9	21	\$37.45 ^^^
29-1292	Dental Hygienists	445	441	-4	-0.9%	0	16	11	27	\$36.93
29-2010	Clinical Laboratory Technologists and Technicians	1,055	1,126	71	6.7%	7	28	40	75	\$28.54
29-2032	Diagnostic Medical Sonographers	232	269	37	16.0%	4	7	11	22	\$37.02
29-2034	Radiologic Technologists	572	598	26	4.6%	3	16	25	44	\$29.11
29-2035	Magnetic Resonance Imaging Technologists	117	129	12	10.3%	1	3	5	9	\$36.06
29-2040	Emergency Medical Technicians and Paramedics	531	550	19	3.6%	2	10	25	37	\$17.76 ^
29-2052	Pharmacy Technicians	1,126	1,148	22	2.0%	2	31	49	82	\$14.26
29-2055	Surgical Technologists	249	263	14	5.6%	1	7	11	19	\$22.56
29-2056	Veterinary Technologists and Technicians	271	318	47	17.3%	5	8	13	26	\$17.77
29-2061	Licensed Practical and Licensed Vocational Nurses	1,769	1,866	97	5.5%	10	61	76	147	\$22.90
29-2081	Opticians, Dispensing	182	186	4	2.2%	0	8	6	14	\$22.21
29-2091	Orthotists and Prosthetists	162	194	32	19.8%	3	5	8	16	\$24.57

		Emplo	yment*	Chang	ge in					
soc		2020	2030	Employ			Annua	l Openings		Median Wage
Code	Occupational Title	Annual	Projected	2020-2030	Percent	Growth	Exits	Transfers	Total	May 2021
29-2098	Medical Dosimetrists, Medical Records Specialists, and Health Technologists and		,							•
23 2030	Technicians, All Other	829	874	45	5.4%	4	23	37	64	\$22.55 ^^^
29-9091	Athletic Trainers	109	120	11	10.1%	1	3	5	9	\$47,020 **
31-0000	Healthcare Support Occupations	12,560	14,015	1,455	11.6%	146	765	836	1,747	\$14.11
31-1120	Home Health and Personal Care Aides	4,310	5,116	806	18.7%	81	302	267	650	\$11.49
31-1131	Nursing Assistants	3,364	3,522	158	4.7%	16	220	195	431	\$14.31
31-2021	Physical Therapist Assistants	417	518	101	24.2%	10	20	35	65	\$29.34
31-9011	Massage Therapists	267	311	44	16.5%	4	17	15	36	\$18.01
31-9091	Dental Assistants	578	571	-7	-1.2%	-1	26	40	65	\$18.19
31-9092	Medical Assistants	1,540	1,652	112	7.3%	11	66	119	196	\$17.58
31-9093	Medical Equipment Preparers	199	210	11	5.5%	1	11	14	26	\$17.63
31-9096	Veterinary Assistants and Laboratory Animal Caretakers	298	351	53	17.8%	5	16	36	57	\$14.24
31-9097	Phlebotomists	537	590	53	9.9%	5	24	41	70	\$17.65
33-0000	Protective Service Occupations	5,391	5,519	128	2.4%	13	251	339	603	\$23.57
33-1012	First-Line Supervisors of Police and Detectives	130	133	3	2.3%	0	3	5	8	\$40.15
33-1021	First-Line Supervisors of Fire Fighting and Prevention Workers	130	134	4	3.1%	0	3	5	8	\$37.39
33-2011	Firefighters	1,076	1,118	42	3.9%	4	24	57	85	\$24.58
33-3012	Correctional Officers and Jailers	173	160	-13	-7.5%	-1	6	9	14	\$22.29
33-3021	Detectives and Criminal Investigators	120	119	-1	-0.8%	0	3	6	9	\$37.66
33-3051	Police and Sheriff's Patrol Officers	1,489	1,520	31	2.1%	3	38	76	117	\$30.83
33-9032	Security Guards	1,396	1,393	-3	-0.2%	0	74	108	182	\$14.15
33-9091	Crossing Guards	200	222	22	11.0%	2	31	11	44	\$15.00
33-9092	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	102	123	21	20.6%	2	16	12	30	\$10.63
35-0000	Food Preparation and Serving Related Occupations	26,526	30,608	4,082	15.4%	408	2,231	2,920	5,559	\$11.00
35-1011	Chefs and Head Cooks	118	136	18	15.3%	2	4	12	18	\$26.32
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	1,963	2,323	360	18.3%	36	96	218	350	\$14.94
35-2011	Cooks, Fast Food	1,094	1,048	-46	-4.2%	-5	63	92	150	\$10.94
35-2012	Cooks, Institution and Cafeteria	1,285	1,357	72	5.6%	7	78	113	198	\$14.38
35-2014	Cooks, Restaurant	2,439	3,504	1,065	43.7%	106	175	254	535	\$13.93
35-2015	Cooks, Short Order	109	124	15	13.8%	2	7	10	19	\$12.82
35-2021	Food Preparation Workers	1,337	1,435	98	7.3%	10	109	128	247	\$11.12
35-3011	Bartenders	1,113	1,422	309	27.8%	31	57	154	242	\$10.25
35-3023	Fast Food and Counter Workers	11,049	12,304	1,255	11.4%	126	1,132	1,234	2,492	\$10.65
35-3031	Waiters and Waitresses	3,796	4,430	634	16.7%	63	302	491	856	\$9.87
35-3041	Food Servers, Nonrestaurant	648	690	42	6.5%	4	53	52	109	\$13.24
35-9021	Dishwashers	763	865	102	13.4%	10	61	68	139	\$10.82
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	537	654	117	21.8%	12	71	67	150	\$10.50
37-0000	Building and Grounds Cleaning and Maintenance Occupations	11,188	11,296	108	1.0%	11	618	833	1,462	\$14.26
37-1011	First-Line Supervisors of Housekeeping and Janitorial Workers	334	322	-12	-3.6%	-1	14	23	36	\$22.18
37-1012	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	657	641	-16	-2.4%	-2	20	47	65	\$18.93

		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
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	5,111	5,193	82	1.6%	8	322	361	691	\$14.09
37-2012	Maids and Housekeeping Cleaners	1,745	1,738	-7	-0.4%	-1	118	112	229	\$13.39
37-3011	Landscaping and Groundskeeping Workers	3,096	3,153	57	1.8%	6	134	268	408	\$14.40
39-0000	Personal Care and Service Occupations	8,603	9,215	612	7.1%	61	552	666	1,279	\$12.95
39-1098	First-Line Supervisors of Personal Service & Entertainment and Recreation									
	Workers, Exc Gambling Services	348	399	51	14.7%	5	14	26	45	\$21.67 ^^^
39-2021	Nonfarm Animal Caretakers	693	822	129	18.6%	13	49	63	125	\$10.98
39-3031	Ushers, Lobby Attendants, and Ticket Takers	166	222	56	33.7%	6	25	20	51	\$10.83
39-3091	Amusement and Recreation Attendants	635	756	121	19.1%	12	68	78	158	\$10.58
39-4021	Funeral Attendants	132	131	-1	-0.8%	0	7	10	17	\$14.20
39-5012	Hairdressers, Hairstylists, and Cosmetologists	2,665	2,651	-14	-0.5%	-1	141	148	288	\$13.73
39-9011	Childcare Workers	1,694	1,658	-36	-2.1%	-4	113	117	226	\$11.45
39-9031	Fitness Trainers and Aerobics Instructors	761	923	162	21.3%	16	49	80	145	\$14.68
39-9032	Recreation Workers	676	754	78	11.5%	8	42	68	118	\$13.23
41-0000	Sales and Related Occupations	29,723	28,711	-1,012	-3.4%	-101	1,439	2,302	3,640	\$14.36
41-1011	First-Line Supervisors of Retail Sales Workers	2,440	2,235	-205	-8.4%	-20	83	162	225	\$18.22
41-1012	First-Line Supervisors of Non-Retail Sales Workers	797	738	-59	-7.4%	-6	22	46	62	\$37.39
41-2011	Cashiers	5,456	4,817	-639	-11.7%	-64	437	492	865	\$10.91
41-2021	Counter and Rental Clerks	605	616	11	1.8%	1	27	42	70	\$14.06
41-2031	Retail Salespersons	7,719	7,459	-260	-3.4%	-26	424	627	1,025	\$13.47
41-3011	Advertising Sales Agents	117	108	-9	-7.7%	-1	3	10	12	\$23.58
41-3021	Insurance Sales Agents	921	985	64	7.0%	6	32	53	91	\$29.18
41-3031	Securities, Commodities, and Financial Services Sales Agents	614	656	42	6.8%	4	14	40	58	\$24.47
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial									
	Services, and Travel	2,070	2,279	209	10.1%	21	55	191	267	\$28.45
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific									
	Products	539	571	32	5.9%	3	16	38	57	\$37.46
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and									
	Scientific Products	4,579	4,651	72	1.6%	7	136	312	455	\$29.72
41-9011	Demonstrators and Product Promoters	298	304	6	2.0%	1	33	20	54	\$14.52
41-9022	Real Estate Sales Agents	817	829	12	1.5%	1	34	36	71	\$18.49
41-9031	Sales Engineers	109	111	2	1.8%	0	2	9	11	\$52.56
41-9041	Telemarketers	1,590	1,347	-243	-15.3%	-24	68	150	194	\$14.47
41-9099	Sales and Related Workers, All Other	290	274	-16	-5.5%	-2	13	23	34	\$13.63
43-0000	Office and Administrative Support Occupations	43,686	42,052	-1,634	-3.7%	-163	2,018	2,653	4,508	\$18.04
43-1011	First-Line Supervisors of Office and Administrative Support Workers	3,006	2,945	-61	-2.0%	-6	110	182	286	\$28.92
43-3011	Bill and Account Collectors	324	306	-18	-5.6%	-2	12	22	32	\$17.99
43-3021	Billing and Posting Clerks	1,471	1,516	45	3.1%	4	61	92	157	\$18.13
43-3031	Bookkeeping, Accounting, and Auditing Clerks	3,467	3,313	-154	-4.4%	-15	199	173	357	\$18.69
43-3051	Payroll and Timekeeping Clerks	255	215	-40	-15.7%	-4	11	13	20	\$22.45 †

		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
43-3061	Procurement Clerks	187	183	-4	-2.1%	0	5	12	17	\$21.66
43-3071	Tellers	873	738	-135	-15.5%	-14	33	51	70	\$17.77
43-4031	Court, Municipal, and License Clerks	674	696	22	3.3%	2	33	34	69	\$17.76
43-4051	Customer Service Representatives	7,269	7,075	-194	-2.7%	-19	337	564	882	\$17.73
43-4061	Eligibility Interviewers, Government Programs	172	177	5	2.9%	0	6	9	15	\$17.76
43-4071	File Clerks	123	104	-19	-15.5%	-2	6	7	11	\$18.12
43-4081	Hotel, Motel, and Resort Desk Clerks	226	247	21	9.3%	2	14	25	41	\$11.23
43-4111	Interviewers, Except Eligibility and Loan	396	363	-33	-8.3%	-3	22	24	43	\$17.55
43-4121	Library Assistants, Clerical	161	149	-12	-7.5%	-1	14	10	23	\$9.22
43-4131	Loan Interviewers and Clerks	400	410	10	2.5%	1	12	24	37	\$22.20
43-4151	Order Clerks	275	227	-48	-17.5%	-5	11	16	22	\$17.65
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	201	190	-11	-5.5%	-1	8	12	19	\$18.41
43-4171	Receptionists and Information Clerks	1,987	1,946	-41	-2.1%	-4	110	136	242	\$14.15
43-4199	Information and Record Clerks, All Other	149	156	7	4.7%	1	6	10	17	\$13.90
43-5011	Cargo and Freight Agents	128	141	13	10.2%	1	5	8	14	\$17.74
43-5021	Couriers and Messengers	192	181	-11	-5.7%	-1	8	10	17	\$14.28
43-5031	Police, Fire, and Ambulance Dispatchers	293	301	8	2.7%	1	10	17	28	\$22.87
43-5032	Dispatchers, Except Police, Fire, and Ambulance	675	664	-11	-1.6%	-1	24	38	61	\$18.69
43-5051	Postal Service Clerks	176	160	-16	-9.1%	-2	8	6	12	\$25.60
43-5052	Postal Service Mail Carriers	715	648	-67	-9.4%	-7	24	24	41	\$24.32
43-5053	Postal Service Mail Sorters, Processors, and Processing Machine Operators	272	235	-37	-13.6%	-4	14	8	18	\$21.29
43-5061	Production, Planning, and Expediting Clerks	1,118	1,159	41	3.7%	4	41	74	119	\$23.03
43-5071	Shipping, Receiving, and Traffic Clerks	2,586	2,428	-158	-6.1%	-16	92	147	223	\$17.56
43-6011	Executive Secretaries and Executive Administrative Assistants	745	589	-156	-20.9%	-16	34	37	55	\$29.17
43-6012	Legal Secretaries	280	215	-65	-23.2%	-6	13	14	21	\$22.50
43-6013	Medical Secretaries	2,865	2,998	133	4.6%	13	149	164	326	\$17.48
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	3,334	3,016	-318	-9.5%	-32	162	177	307	\$18.04
43-9021	Data Entry Keyers	435	350	-85	-19.5%	-8	18	25	35	\$17.26
43-9041	Insurance Claims and Policy Processing Clerks	945	944	-1	-0.1%	0	33	55	88	\$17.82
43-9051	Mail Clerks and Mail Machine Operators, Except Postal Service	300	298	-2	-0.7%	0	15	19	34	\$13.90
43-9061	Office Clerks, General	5,998	5,793	-205	-3.4%	-20	322	350	652	\$17.94
43-9199	Office and Administrative Support Workers, All Other	139	147	8	5.8%	1	6	10	17	\$21.52
45-0000	Farming, Fishing, and Forestry Occupations	351	361	10	2.9%	1	15	40	56	\$14.35
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	242	246	4	1.7%	0	10	28	38	\$14.33
47-0000	Construction and Extraction Occupations	11,173	11,711	538	4.8%	54	340	782	1,176	\$23.87
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	817	865	48	5.9%	5	24	54	83	\$30.01
47-2021	Brickmasons and Blockmasons	263	249	-14	-5.3%	-1	8	16	23	\$30.40
47-2031	Carpenters	1,143	1,151	8	0.7%	1	34	72	107	\$23.07
47-2051	Cement Masons and Concrete Finishers	288	291	3	1.0%	0	7	19	26	\$24.08
47-2061	Construction Laborers	2,442	2,592	150	6.1%	15	74	170	259	\$22.61

		Emplo	yment*	Chang	ge in					
soc		2020	2030	Employ	•		Annua	al Openings		Median Wage
Code	Occupational Title	Annual	Projected	2020-2030		Growth	Exits	Transfers	Total	May 2021
47-2073	Operating Engineers and Other Construction Equipment Operators	854	889	35	4.1%	4	28	62	94	\$29.15
47-2111	Electricians	1,400	1,534	134	9.6%	13	43	108	164	\$29.20
47-2121	Glaziers	141	149	8	5.7%	1	4	11	16	\$28.29
47-2141	Painters, Construction and Maintenance	453	473	20	4.4%	2	14	26	42	\$22.66
47-2152	Plumbers, Pipefitters, and Steamfitters	691	726	35	5.1%	4	21	51	76	\$29.50
47-2181	Roofers	218	229	11	5.1%	1	6	16	23	\$22.53 †
47-2221	Structural Iron and Steel Workers	200	211	11	5.5%	1	5	16	22	\$31.30
47-4011	Construction and Building Inspectors	151	144	-7	-4.6%	-1	8	9	16	\$29.17
47-4051	Highway Maintenance Workers	341	347	6	1.8%	1	14	22	37	\$22.58
49-0000	Installation, Maintenance, and Repair Occupations	12,699	13,281	582	4.6%	58	411	829	1,298	\$22.72
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	804	848	44	5.5%	4	24	49	77	\$30.30
49-2011	Computer, Automated Teller, and Office Machine Repairers	392	371	-21	-5.4%	-2	12	29	39	\$18.83
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	146	146	0	0.0%	0	5	11	16	\$29.73
49-2098	Security and Fire Alarm Systems Installers	252	265	13	5.2%	1	6	20	27	\$23.09
49-3011	Aircraft Mechanics and Service Technicians	173	186	13	7.5%	1	5	9	15	\$29.76
49-3021	Automotive Body and Related Repairers	337	348	11	3.3%	1	11	20	32	\$22.31
49-3023	Automotive Service Technicians and Mechanics	1,906	1,904	-2	-0.1%	0	57	129	186	\$22.46
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	602	637	35	5.8%	4	18	39	61	\$23.15
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	454	492	38	8.4%	4	14	32	50	\$23.54
49-3093	Tire Repairers and Changers	211	221	10	4.7%	1	7	18	26	\$16.79
49-9011	Mechanical Door Repairers	115	127	12	10.4%	1	3	7	11	\$18.39
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	658	691	33	5.0%	3	17	46	66	\$23.33
49-9041	Industrial Machinery Mechanics	738	887	149	20.2%	15	25	44	84	\$28.40
49-9043	Maintenance Workers, Machinery	100	110	10	10.0%	1	4	6	11	\$23.51
49-9051	Electrical Power-Line Installers and Repairers	102	100	-2	-2.0%	0	2	7	9	\$38.58
49-9052	Telecommunications Line Installers and Repairers	338	347	9	2.7%	1	8	29	38	\$18.89
49-9071	Maintenance and Repair Workers, General	3,550	3,727	177	5.0%	18	128	212	358	\$22.37
49-9099	Installation, Maintenance, and Repair Workers, All Other	493	507	14	2.8%	1	18	33	52	\$22.04
51-0000	Production Occupations	26,455	25,390	-1,065	-4.0%	-106	950	1,839	2,683	\$17.99
51-1011	First-Line Supervisors of Production and Operating Workers	2,047	2,076	29	1.4%	3	62	139	204	\$29.28
51-2028	Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders,									
	Tapers, and Finishers	521	546	25	4.8%	2	21	34	57	\$14.54
51-2041	Structural Metal Fabricators and Fitters	214	178	-36	-16.8%	-4	4	16	16	\$28.55
51-2090	Miscellaneous Assemblers and Fabricators	3,455	3,022	-433	-12.5%	-43	124	231	312	\$15.18
51-3011	Bakers	568	593	25	4.4%	2	32	43	77	\$14.03
51-3021	Butchers and Meat Cutters	120	107	-13	-10.8%	-1	5	8	12	\$14.29
51-3092	Food Batchmakers	326	324	-2	-0.6%	0	15	24	39	\$13.95
51-4021	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and									
	Plastic	400	364	-36	-9.0%	-4	13	24	33	\$18.05
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and									
	Plastic	830	779	-51	-6.1%	-5	26	55	76	\$17.83

		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
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and									
	Tenders, Metal and Plastic	396	368	-28	-7.1%	-3	17	26	40	\$17.65
51-4041	Machinists	1,456	1,526	70	4.8%	7	50	101	158	\$18.61
51-4071	Foundry Mold and Coremakers	203	193	-10	-4.9%	-1	6	13	18	\$18.19
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders,									
	Metal and Plastic	1,546	1,412	-134	-8.7%	-13	48	100	135	\$16.80
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	740	769	29	3.9%	3	24	51	78	\$18.14
51-4111	Tool and Die Makers	194	198	4	2.1%	0	7	12	19	\$23.47
51-4121	Welders, Cutters, Solderers, and Brazers	657	706	49	7.5%	5	18	54	77	\$22.42
51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	182	172	-10	-5.5%	-1	5	14	18	\$18.30
51-5112	Printing Press Operators	565	507	-58	-10.3%	-6	20	38	52	\$17.96
51-5113	Print Binding and Finishing Workers	308	239	-69	-22.4%	-7	14	17	24	\$17.83
51-6011	Laundry and Dry-Cleaning Workers	409	475	66	16.1%	7	29	30	66	\$11.35
51-6031	Sewing Machine Operators	269	242	-27	-10.0%	-3	16	14	27	\$13.97
51-8031	Water and Wastewater Treatment Plant and System Operators	168	155	-13	-7.7%	-1	4	10	13	\$28.78
51-9022	Grinding and Polishing Workers, Hand	123	102	-21	-17.1%	-2	4	8	10	\$16.35
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	745	764	19	2.6%	2	26	56	84	\$17.63
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	192	186	-6	-3.1%	-1	8	14	21	\$18.09
51-9041	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and									
	Tenders	670	649	-21	-3.1%	-2	18	49	65	\$17.05
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	1,917	1,639	-278	-14.5%	-28	68	141	181	\$18.09
51-9081	Dental Laboratory Technicians	137	142	5	3.7%	0	6	11	17	\$22.29
51-9111	Packaging and Filling Machine Operators and Tenders	1,310	1,345	35	2.7%	4	55	88	147	\$14.56
51-9124	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	355	370	15	4.2%	2	10	26	38	\$18.45
51-9161	Computer Numerically Controlled Tool Operators	654	618	-36	-5.5%	-4	22	47	65	\$22.63
51-9162	Computer Numerically Controlled Tool Programmers	107	130	23	21.5%	2	4	9	15	\$29.10
51-9196	Paper Goods Machine Setters, Operators, and Tenders	348	331	-17	-4.9%	-2	15	22	35	\$18.40
51-9198	HelpersProduction Workers	434	396	-38	-8.8%	-4	20	39	55	\$14.57
51-9199	Production Workers, All Other	615	657	42	6.8%	4	22	47	73	\$17.48
53-0000	Transportation and Material Moving Occupations	29,633	31,835	2,202	7.4%	220	1,438	2,444	4,102	\$17.50
53-2012	Commercial Pilots	111	124	13	11.7%	1	4	8	13	\$101,730 **
53-3031	Driver/Sales Workers	2,218	2,608	390	17.6%	39	99	164	302	\$11.07
53-3032	Heavy and Tractor-Trailer Truck Drivers	4,825	5,074	249	5.2%	25	203	336	564	\$23.32
53-3033	Light Truck or Delivery Services Drivers	2,462	2,689	227	9.2%	23	106	175	304	\$18.05
53-3052	Bus Drivers, Transit and Intercity	523	639	116	22.2%	12	38	29	79	\$29.47
53-3058	Passenger Vehicle Drivers, Except Bus Drivers, Transit and Intercity	741	875	134	18.1%	13	53	40	106	\$18.05 ^^^
53-6021	Parking Lot Attendants	268	292	24	9.0%	2	14	29	45	\$13.63
53-6031	Automotive and Watercraft Service Attendants	103	103	0	0.0%	0	5	9	14	\$14.01
53-7051	Industrial Truck and Tractor Operators	1,401	1,557	156	11.1%	16	44	114	174	\$18.43
53-7061	Cleaners of Vehicles and Equipment	898	966	68	7.6%	7	46	83	136	\$13.76

Occupational* Employment Projections Report, 2020-2030

		Employ	yment*	Chang	e in					
SOC		2020	2030	Employ	ment	Annual Ope		l Openings		Median Wage
Code	Occupational Title	Annual	Projected	2020-2030	Percent	Growth	Exits	Transfers	Total	May 2021
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	5,900	6,371	471	8.0%	47	268	534	849	\$17.48
53-7064	Packers and Packagers, Hand	1,410	1,431	21	1.5%	2	81	115	198	\$14.31
53-7065	Stockers and Order Fillers	6,537	6,747	210	3.2%	21	378	648	1,047	\$14.08
53-7081	Refuse and Recyclable Material Collectors	168	182	14	8.3%	1	7	16	24	\$18.10

^{*} 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 Evnerience 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
00-0000	Total, All Occupations	Needed for Entry	Occupation	Occupation	\$18.82
11-0000	Management Occupations				\$47.62
11-1011	Chief Executives	Bachelor's degree	5 years or more	None	\$90.65
11-1011	General and Operations Managers	Bachelor's degree	5 years or more	None	\$47.08
11-1031	Legislators	Bachelor's degree	Less than 5 years	None	\$36,940 ^^
11-2021	Marketing Managers	Bachelor's degree	5 years or more	None	\$60.25
11-2021	Sales Managers	· ·		None	\$60.88
11-2022	Public Relations and Fundraising Managers	Bachelor's degree	Less than 5 years	None	\$57.62 ^
11-2030		Bachelor's degree	5 years or more		\$47.73 ^
	Administrative Services and Facilities Managers	Bachelor's degree	Less than 5 years	None	•
11-3021	Computer and Information Systems Managers	Bachelor's degree	5 years or more	None	\$61.52
11-3031	Financial Managers	Bachelor's degree	5 years or more	None	\$60.52
11-3051	Industrial Production Managers	Bachelor's degree	5 years or more	None	\$47.96
11-3061	Purchasing Managers	Bachelor's degree	5 years or more	None	\$59.28
11-3071	Transportation, Storage, and Distribution Managers	High school diploma or equivalent	5 years or more	None	\$43.95
11-3121	Human Resources Managers	Bachelor's degree	5 years or more	None	\$59.54
11-9021	Construction Managers	Bachelor's degree	None	Moderate-term on-the-job training	\$47.20
11-9031	Education Administrators, Preschool and Childcare Center/Program	Bachelor's degree	Less than 5 years	None	\$22.19
11-9032	Education Administrators, Elementary and Secondary School	Master's degree	5 years or more	None	\$98,160 **
11-9033	Education Administrators, Postsecondary	Master's degree	Less than 5 years	None	\$47.29
11-9041	Architectural and Engineering Managers	Bachelor's degree	5 years or more	None	\$61.94
11-9051	Food Service Managers	High school diploma or equivalent	Less than 5 years	None	\$28.18
11-9111	Medical and Health Services Managers	Bachelor's degree	Less than 5 years	None	\$48.04
11-9141	Property, Real Estate, and Community Association Managers	High school diploma or equivalent	Less than 5 years	None	\$23.27
11-9151	Social and Community Service Managers	Bachelor's degree	Less than 5 years	None	\$36.97
13-0000	Business and Financial Operations Occupations				\$30.37
13-1020	Buyers and Purchasing Agents	Bachelor's degree	None	Moderate-term on-the-job training	\$29.60
13-1031	Claims Adjusters, Examiners, and Investigators	High school diploma or equivalent	None	Long-term on-the-job training	\$29.11
13-1041	Compliance Officers	Bachelor's degree	None	Moderate-term on-the-job training	\$30.17
13-1051	Cost Estimators	Bachelor's degree	None	Moderate-term on-the-job training	\$30.37
13-1071	Human Resources Specialists	Bachelor's degree	None	None	\$29.05
13-1075	Labor Relations Specialists	Bachelor's degree	Less than 5 years	None	\$37.59
13-1081	Logisticians	Bachelor's degree	None	None	\$30.72
13-1111	Management Analysts	Bachelor's degree	Less than 5 years	None	\$38.28
13-1121	Meeting, Convention, and Event Planners	Bachelor's degree	None	None	\$22.91
13-1131	Fundraisers	Bachelor's degree	None	None	\$28.91
13-1141	Compensation, Benefits, and Job Analysis Specialists	Bachelor's degree	Less than 5 years	None	\$29.17
13-1151	Training and Development Specialists	Bachelor's degree	Less than 5 years	None	\$28.14
13-1161	Market Research Analysts and Marketing Specialists	Bachelor's degree	None	None	\$29.35
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	\$35.62
13-2052	Personal Financial Advisors	Bachelor's degree	None	Long-term on-the-job training	\$47.23
13-2053	Insurance Underwriters	Bachelor's degree	None	Moderate-term on-the-job training	\$44.15
13-2072	Loan Officers	Bachelor's degree	Less than 5 years	Moderate-term on-the-job training	\$30.37

			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
	·	Needed for Entry	Occupation	Occupation	1VIAY 2021
13-2098	Financial and Investment Analysts, Financial Risk Specialists, and Financial	Darkala da assa	N a sa a	N	¢25.24.444
45 0000	Specialists, All Other	Bachelor's degree	None	None	\$35.21 ^^^
15-0000	Computer and Mathematical Occupations		N.	N.	\$37.63
15-1211	Computer Systems Analysts	Bachelor's degree	None	None	\$39.61
15-1212	Information Security Analysts	Bachelor's degree	Less than 5 years	None	\$46.86
15-1231	Computer Network Support Specialists	Associate's degree	None	None	\$29.40
15-1232	Computer User Support Specialists	Some college, no degree	None	None	\$22.62
15-1241	Computer Network Architects	Bachelor's degree	5 years or more	None	\$48.51
15-1244	Network and Computer Systems Administrators	Bachelor's degree	None	None	\$38.39
15-1245	Database Administrators and Architects	Bachelor's degree	None	None	\$47.44 ^^^
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	\$45.46
15-2031	Operations Research Analysts	Bachelor's degree	None	None	\$37.09
15-2098	Data Scientists and Mathematical Science Occupations, All Other	Bachelor's degree	None	None	\$30.03 ^^^
17-0000	Architecture and Engineering Occupations				\$37.09
17-1011	Architects, Except Landscape and Naval	Bachelor's degree	None	Internship/residency	\$37.03
17-1022	Surveyors	Bachelor's degree	None	Internship/residency	\$29.19
17-2051	Civil Engineers	Bachelor's degree	None	None	\$37.56
17-2071	Electrical Engineers	Bachelor's degree	None	None	\$46.68
17-2112	Industrial Engineers	Bachelor's degree	None	None	\$38.05
17-2131	Materials Engineers	Bachelor's degree	None	None	\$38.41
17-2141	Mechanical Engineers	Bachelor's degree	None	None	\$37.75
17-2199	Engineers, All Other	Bachelor's degree	None	None	\$41.45
17-3011	Architectural and Civil Drafters	Associate's degree	None	None	\$28.26
17-3013	Mechanical Drafters	Associate's degree	None	None	\$28.95
17-3022	Civil Engineering Technicians	Associate's degree	None	None	\$29.40
17-3023	Electrical and Electronics Engineering Technicians	Associate's degree	None	None	\$29.96
17-3027	Mechanical Engineering Technicians	Associate's degree	None	None	\$23.21
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			, J	·
	Other	Associate's degree	None	None	\$29.18 ^^^
19-0000	Life, Physical, and Social Science Occupations	ű			\$29.94
19-1042	Medical Scientists, Except Epidemiologists	Doctoral or professional degree	None	None	\$49.27
19-2031	Chemists	Bachelor's degree	None	None	\$35.22
19-2041	Environmental Scientists and Specialists, Including Health	Bachelor's degree	None	None	\$37.58
19-3031	Clinical, Counseling, and School Psychologists	Doctoral or professional degree	None	Internship/residency	\$38.96 ^^^
19-4031	Chemical Technicians	Associate's degree	None	Moderate-term on-the-job training	\$22.73
19-4042	Environmental Science and Protection Technicians, Including Health	Associate's degree	None	None	\$21.85 †
19-5011	Occupational Health and Safety Specialists	Bachelor's degree	None	None	\$36.79
21-0000	Community and Social Service Occupations	Duchicion 3 degree	110110		\$22.95
21-1012	Educational, Guidance, School, and Vocational Counselors	Master's degree	None	None	\$24.03
21-1012	Rehabilitation Counselors	Master's degree	None	None	\$29.17
51-1012	Netiabilitation Counselors	iviastel s degree	NOTIC	IVOIIC	/ ۱. ت. کې

			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
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	Bachelor's degree	None	None	\$22.62
21-1021	Child, Family, and School Social Workers	Bachelor's degree	None	None	\$22.95
21-1022	Healthcare Social Workers	Master's degree	None	Internship/residency	\$28.90
21-1023	Mental Health and Substance Abuse Social Workers	Master's degree	None	Internship/residency	\$18.69
21-1029	Social Workers, All Other	Bachelor's degree	None	None	\$23.13
21-1023	Health Educators	Bachelor's degree	None	None	\$28.66
21-1091	Probation Officers and Correctional Treatment Specialists	Bachelor's degree	None	Short-term on-the-job training	\$23.08
21-1093	Social and Human Service Assistants	High school diploma or equivalent	None	Short-term on the job training Short-term on-the-job training	\$17.52
21-1093	Community Health Workers	High school diploma or equivalent	None	Short-term on-the-job training	\$17.32
21-1094	Clergy	Bachelor's degree	None	Moderate-term on-the-job training	\$22.88
23-0000	Legal Occupations	Bachelor's degree	None	Moderate-term on-the-job training	\$30.95
23-1011	Lawyers	Destoral or professional degree	None	None	\$48.30
23-1011	•	Doctoral or professional degree Doctoral or professional degree		Short-term on-the-job training	
	Judges, Magistrate Judges, and Magistrates	i e	5 years or more	, ,	\$60.80
23-2011	Paralegals and Legal Assistants	Associate's degree	None	None	\$21.97
25-0000	Education, Training, and Library Occupations	Dastanal an anafassianal dasaa	Nana	Niero	\$29.41
25-1011	Business Teachers, Postsecondary	Doctoral or professional degree	None	None	\$98,830 **
25-1022	Mathematical Science Teachers, Postsecondary	Doctoral or professional degree	None	None	\$77,740 ++
25-1032	Engineering Teachers, Postsecondary	Doctoral or professional degree	None	None	\$104,940 **
25-1071	Health Specialties Teachers, Postsecondary	Doctoral or professional degree	Less than 5 years	None	\$104,940 **
25-1081	Education Teachers, Postsecondary	Doctoral or professional degree	Less than 5 years	None	\$61,550 **
25-1121	Art, Drama, and Music Teachers, Postsecondary	Master's degree	None	None	\$64,100 ++
25-1122	Communications Teachers, Postsecondary	Doctoral or professional degree	None	None	\$77,630 ++
25-1123	English Language and Literature Teachers, Postsecondary	Doctoral or professional degree	None	None	\$61,380 **
25-1194	Vocational Education Teachers, Postsecondary	Bachelor's degree	Less than 5 years	None	\$22.33
25-1199	Postsecondary Teachers, All Other	Doctoral or professional degree	None	None	\$63,740 **
25-2011	Preschool Teachers, Except Special Education	Associate's degree	None	None	\$13.69
25-2021	Elementary School Teachers, Except Special Education	Bachelor's degree	None	None	\$77,130 **
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's degree	None	None	\$76,520 **
25-2052	Special Education Teachers, Kindergarten and Elementary School	Bachelor's degree	None	None	\$61,450 **
25-2058	Special Education Teachers, Secondary School	Bachelor's degree	None	None	\$60,380 **
25-3021	Self-Enrichment Education Teachers	High school diploma or equivalent	Less than 5 years	None	\$14.65
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	\$24.10
25-4031	Library Technicians	Postsecondary non-degree award	None	None	\$14.65
25-9031	Instructional Coordinators	Master's degree	5 years or more	None	\$23.97
25-9044	Teaching Assistants, Postsecondary	Bachelor's degree	None	None	\$30,400 **
25-9045	Teaching Assistants, Except Postsecondary	Some college, no degree	None	None	\$28,760 **
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations				\$23.32
27-1023	Floral Designers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$14.11
27-1024	Graphic Designers	Bachelor's degree	None	None	\$23.51
27-2012	Producers and Directors	Bachelor's degree	Less than 5 years	None	\$29.49
27-2022	Coaches and Scouts	Bachelor's degree	None	None	\$38,480 **
27-2042	Musicians and Singers	No formal educational credential	None	Long-term on-the-job training	\$47.38 †

			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
27-3031	Public Relations Specialists	Bachelor's degree	None	None .	\$29.76
27-3041	Editors	Bachelor's degree	Less than 5 years	None	\$30.26
27-3042	Technical Writers	Bachelor's degree	Less than 5 years	Short-term on-the-job training	\$37.03
27-3043	Writers and Authors	Bachelor's degree	None	Long-term on-the-job training	\$22.43
27-4021	Photographers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.44 †
29-0000	Healthcare Practitioners and Technical Occupations	B at the property of			\$29.56
29-1011	Chiropractors	Doctoral or professional degree	None	None	\$29.11
29-1021	Dentists, General	Doctoral or professional degree	None	None	#
29-1031	Dietitians and Nutritionists	Bachelor's degree	None	Internship/residency	\$29.12
29-1051	Pharmacists	Doctoral or professional degree	None	None	\$61.18
29-1122	Occupational Therapists	Master's degree	None	None	\$38.16
29-1123	Physical Therapists	Doctoral or professional degree	None	None	\$47.27
29-1126	Respiratory Therapists	Associate's degree	None	None	\$29.21
29-1127	Speech-Language Pathologists	Master's degree	None	Internship/residency	\$37.26
29-1131	Veterinarians	Doctoral or professional degree	None	None	\$47.58
29-1141	Registered Nurses	Bachelor's degree	None	None	\$36.08
29-1171	Nurse Practitioners	Master's degree	None	None	\$48.77
29-1215	Family Medicine Physicians	Doctoral or professional degree	None	Internship/residency	\$74.39
29-1228	Physicians, All Other; and Ophthalmologists, Except Pediatric	Doctoral or professional degree	None	Internship/residency	\$37.45 ^^^
29-1292	Dental Hygienists	Associate's degree	None	None	\$36.93
29-2010	Clinical Laboratory Technologists and Technicians	Bachelor's degree	None	None	\$28.54
29-2032	Diagnostic Medical Sonographers	Associate's degree	None	None	\$37.02
29-2034	Radiologic Technologists	Associate's degree	None	None	\$29.11
29-2035	Magnetic Resonance Imaging Technologists	Associate's degree	Less than 5 years	None	\$36.06
29-2040	Emergency Medical Technicians and Paramedics	Postsecondary non-degree award	None	None	\$17.76 ^
29-2052	Pharmacy Technicians	High school diploma or equivalent	None	Moderate-term on-the-job training	\$14.26
29-2055	Surgical Technologists	Postsecondary non-degree award	None	None	\$22.56
29-2056	Veterinary Technologists and Technicians	Associate's degree	None	None	\$17.77
29-2061	Licensed Practical and Licensed Vocational Nurses	Postsecondary non-degree award	None	None	\$22.90
29-2081	Opticians, Dispensing	High school diploma or equivalent	None	Long-term on-the-job training	\$22.21
29-2091	Orthotists and Prosthetists	Master's degree	None	Internship/residency	\$24.57
29-2098	Medical Dosimetrists, Medical Records Specialists, and Health Technologists and	Ţ		,	·
	Technicians, All Other	Postsecondary non-degree award	None	None	\$22.55 ^^^
29-9091	Athletic Trainers	Bachelor's degree	None	None	\$47,020 **
31-0000	Healthcare Support Occupations				\$14.11
31-1120	Home Health and Personal Care Aides	High school diploma or equivalent	None	Short-term on-the-job training	\$11.49
31-1131	Nursing Assistants	Postsecondary non-degree award	None	None	\$14.31
31-2021	Physical Therapist Assistants	Associate's degree	None	None	\$29.34
31-9011	Massage Therapists	Postsecondary non-degree award	None	None	\$18.01
31-9091	Dental Assistants	Postsecondary non-degree award	None	None	\$18.19
31-9092	Medical Assistants	Postsecondary non-degree award	None	None	\$17.58
31-9093	Medical Equipment Preparers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.63
31-9096	Veterinary Assistants and Laboratory Animal Caretakers	High school diploma or equivalent	None	Short-term on-the-job training	\$14.24

Soc Cocyaptional Title Needed for firthy Needed for firthy Occupation Name Occupation Name				Work Experience in	Typical On-The-Job Training Needed	
December	SOC		Typical Education	•		Median Wage
3.9000 Protectomats Postsecondary non-degree award None \$17.65		Occupational Title	· ·		' '	U
33-3002 First-Line Supervisors of Picile and Detectives 133-3012 First-Line Supervisors of Picile faith Detectives 133-3021 First-Line Supervisors of First Fighting and Prevention Workers 234-3021 First-Line Supervisors of First Fighting and Prevention Workers 234-3021 First-Line Supervisors of First Fighting and Prevention Workers 234-3021 First-Line Supervisors of First Fighting and Prevention Workers 235-3021 Correctional Officers and Jaliers 234-303-3021 Detectives and Criminal Investigators 135-3021 First-Line Supervisors of First Fighting and Prevention Workers 235-3022 Correctional Officers and Jaliers 236-303-3022 Detectives and Criminal Investigators 137-303-3022 Detectives and Criminal Investigators 138-3032 Security Guards 237-303-3022 Line Supervisors of First Fighting and Prevention Workers 238-3032 Security Guards 238-3032 Security Gua		·	•	•	·	· · · · · · · · · · · · · · · · · · ·
33-1012 First-Line Supervisor of Police and Detectives 1-gh School diploma or equivalent 2-station Supervisor of Fire Fighting and Prevention Workers 2-stational Springer of Fire Fighting and Prevention Workers 2-stational Springer or Springer award 3-3-1012 First-Line Supervisor of Fire Fighting and Prevention Workers 3-3-2012 Treatment of Fire Fighting and Prevention Workers 3-3-2012 Treatment of Fire Fighting and Prevention Workers 3-3-2012 Treatment of Fire Fighting and Prevention Workers 3-3-2012 Detectives and Criminal Investigators 3-2-2012 Cooks, Braid Cooks 3-2-2012 Cooks, Past Food 3-2-2012 Cooks, Fast Food 3-2-2012 Cooks, Fast Food 3-2-2012 Cooks, Institution and Carleteria 3-2-2012 Montan Armininal Car			i ostsecondary non degree award	TTOTIC	TVOTIC	
33-2012 First-Line Supervisors of Fire Fighting and Prevention Workers Postsecondary non-degree award Associated from on-the-job training Associated from the fight stand for the fight stand diploma or equivalent High school diploma or equivale		•	High school diploma or equivalent	Less than 5 years	Moderate-term on-the-job training	
33-3012 Firefighters Postsecondary non-degree award None Long-term on-the-job training \$22.28				· '	,	
33 3021 Correctional Officers and failers High school diploma or equivalent 33 3021 Police and Sheriff's Patrol Officers High school diploma or equivalent 33 3021 Police and Sheriff's Patrol Officers High school diploma or equivalent None Moderate-term on-the-job training 33 4032 Security Guards High school diploma or equivalent None Moderate-term on-the-job training 33 4032 Security Guards High school diploma or equivalent None Moderate-term on-the-job training 34 0032 Security Guards High school diploma or equivalent None Moderate-term on-the-job training 34 0032 None Moderate-term on-the-job training 35 003 35 9093 Lifeguards, St Patrol, and Other Recreational Protective Service Workers No formal educational credential None More Short-term on-the-job training 10 003 35 9001 Cosks, Fast Food and Serving Related Occupations High school diploma or equivalent High school diploma or equivalent No formal educational credential None More Short-term on-the-job training 10 003 35 9012 Cosks, Fast Food of Oreparation and Serving Workers High school diploma or equivalent No formal educational credential No formal educational credential None More Short-term on-the-job training 10 003 35 9010 Cosks, Fast Food and Caleteria No formal educational credential None More Short-term on-the-job training 10 004 35 9010 Short-term on-the-job training 10 004 10 0						
33-3051 Detectives and Criminal Investigators High school diploma or equivalent None Moderate-term on-the-job training \$37.66 Migh school diploma or equivalent None Moderate-term on-the-job training \$38.08 33-909 Coronsing Guards High school diploma or equivalent None Moderate-term on-the-job training \$15.50 33-909 Coronsing Guards None No formal educational credential None Short-term on-the-job training \$15.50 33-909 Coronsing Guards None No formal educational credential None Short-term on-the-job training \$15.50 33-909 Coronsing Guards None None Short-term on-the-job training \$10.63 None N		0	,			
33-3032 Police and Sheriff's Patrol Offices						
33-902 Security Guards				· · · · · · · · · · · · · · · · · · ·		
33-9092 Crossing Guards No formal educational credential None Short-term on-the-job training \$15.00					, ,	
133-0002 Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers No formal educational credential None Short-term on-the-job training \$10.63					, ,	
35-0012 Chefs and Head Cooks State Sta						
35-1012 Chefs and Head Cooks			No formal educational credential	None	Short-term on-the-job training	
35-2012 First-Line Supervisors of Food Preparation and Serving Workers High school diploma or equivalent Less than 5 years None Short-term on-the-job training \$10.94			High school diploma or aguivalent	E vears or more	None	
35-2011 Cooks, Fast Food No formal educational credential None Short-term on-the-job training \$10.94				· '		
35-2012 Cooks, Institution and Cafeteria No formal educational credential Less than 5 years Moderate-term on-the-job training \$14.38						
155-2014 Cooks, Restaurant No formal educational credential Less than 5 years Moderate-term on-the-job training \$13.93 35-2015 Cooks, Short Order No formal educational credential None Short-term on-the-job training \$11.12 35-2011 Food Preparation Workers No formal educational credential None Short-term on-the-job training \$11.12 35-3011 Bartenders No formal educational credential None Short-term on-the-job training \$10.25 35-3021 Fast Food and Counter Workers No formal educational credential None Short-term on-the-job training \$10.65 35-3031 Waiters and Waitresses No formal educational credential None Short-term on-the-job training \$9.87 35-3031 Fast Food and Counter Workers No formal educational credential None Short-term on-the-job training \$9.87 35-3031 Food Servers, Nonrestaurant No formal educational credential None Short-term on-the-job training \$9.87 35-3031 Food Servers, Nonrestaurant No formal educational credential None Short-term on-the-job training \$10.82 35-9021 Dishwashers No formal educational credential None Short-term on-the-job training \$10.82 35-9031 Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop No formal educational credential None Short-term on-the-job training \$10.82 37-0001 First-Line Supervisors of Housekeeping and Maintenance Occupations Short-term on-the-job training \$10.50 37-2011 First-Line Supervisors of Housekeeping Cleaners No formal educational credential None Short-term on-the-job training \$11.40 37-2011 First-Line Supervisors of Housekeeping Cleaners No formal educational credential None Short-term on-the-job training \$13.39 37-2011 Landscaping and Groundskeeping Workers No formal educational credential None Short-term on-the-job training \$13.39 37-2011 Landscaping and Groundskeeping Workers High school diploma or equivalent None Short-term on-the-job tra				1	, ,	
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35-3011 Bartenders No formal educational credential None Short-term on-the-job training \$10.25 35-3023 Fast Food and Counter Workers No formal educational credential None Short-term on-the-job training \$9.87 35-3041 Food Servers, Nonrestaurant No formal educational credential None Short-term on-the-job training \$9.87 35-3041 Food Servers, Nonrestaurant No formal educational credential None Short-term on-the-job training \$13.24 35-9021 Dishwashers No formal educational credential None Short-term on-the-job training \$10.82 37-9021 Dishwashers No formal educational credential None Short-term on-the-job training \$10.82 37-9031 Hots and Hostsesses, Restaurant, Lounge, and Coffee Shop No formal educational credential None Short-term on-the-job training \$10.82 37-9040 Building and Grounds Cleaning and Maintenance Occupations 151.426 37-1011 First-Line Supervisors of Housekeeping and Janitorial Workers High school diploma or equivalent Short-term on-the-job training 151.426 37-1012 First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers No formal educational credential None Short-term on-the-job training 1514.09 37-2012 Maids and Housekeeping Cleaners No formal educational credential None Short-term on-the-job training 1514.09 37-2012 Maids and Housekeeping Workers No formal educational credential None Short-term on-the-job training 151.39 37-3011 Landscaping and Groundskeeping Workers No formal educational credential None Short-term on-the-job training 151.295 39-1098 First-Line Supervisors of Personal Service & Entertainment and Recreation Workers, Exc Gambling Services High school diploma or equivalent None Short-term on-the-job training 1510.98 39-3031 Ushers, Lobby Attendants, and Ticket Takers No formal educational credential None Short-term on-the-job training 1510.58 39-3031 Ushers, Lobby Attendants, and Ticket Takers No formal educational credential None Short-term on-the-job training 1510.58 39-3031 Ushers, Lobby Attendants None Short-term on-the-job training 1510.58 39-3031 Ushers, Lo		,				
35-3023 Fast Food and Counter Workers No formal educational credential None Short-term on-the-job training \$10.65					, ,	
35-3031 Waiters and Waitresses No formal educational credential None Short-term on-the-job training \$9.87 35-3041 Food Servers, Nonrestaurant No formal educational credential None Short-term on-the-job training \$13.24 35-9021 Dishwashers No formal educational credential None Short-term on-the-job training \$10.82 37-0000 Building and Grounds Cleaning and Maintenance Occupations Suiding and Grounds Cleaning Suiding and Grounds Cleaning Suiding Suid					, ,	
Short-term on-the-job training \$13.24					, ,	
35-9021 Dishwashers No formal educational credential None Short-term on-the-job training \$10.82					1	
35-9031 Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop No formal educational credential None Short-term on-the-job training \$10.50 37-000 Building and Grounds Cleaning and Maintenance Occupations High school diploma or equivalent Less than 5 years None \$18.93 37-1012 First-Line Supervisors of Housekeeping, Lawn Service, and Groundskeeping Workers High school diploma or equivalent Less than 5 years None \$18.93 37-2011 Janitors and Cleaners, Except Maids and Housekeeping Cleaners No formal educational credential None Short-term on-the-job training \$14.09 37-2012 Maids and Housekeeping Cleaners No formal educational credential None Short-term on-the-job training \$13.39 37-3011 Landscaping and Groundskeeping Workers No formal educational credential None Short-term on-the-job training \$14.40 39-000 Personal Care and Service Occupations 39-1098 First-Line Supervisors of Personal Service & Entertainment and Recreation Workers, Exc Gambling Services High school diploma or equivalent None Short-term on-the-job training \$10.98 39-3031 Ushers, Lobby Attendants, and Ticket Takers No formal educational credential None Short-term on-the-job training \$10.98 39-3091 Amusement and Recreation Attendants No formal educational credential None Short-term on-the-job training \$10.50 39-4021 Funeral Attendants High school diploma or equivalent None Short-term on-the-job training \$10.58 39-3091 Funeral Attendants High school diploma or equivalent None Short-term on-the-job training \$10.58 39-4021 Funeral Attendants High school diploma or equivalent None Short-term on-the-job training \$14.20 39-5012 Hairdressers, Hairstylists, and Cosmetologists Postsecondary non-degree award None None Short-term on-the-job training \$14.68 39-9031 Recreation Workers High school diploma or equivalent None Short-term on-the-job training \$14.68 39-9032 Recreation Workers High school diploma or equivalent None Short-term on-the-job training \$14.68					, ,	•
37-000 Suilding and Grounds Cleaning and Maintenance Occupations 37-1011 First-Line Supervisors of Housekeeping and Janitorial Workers High school diploma or equivalent Less than 5 years None \$22.18					, ,	
37-1011 First-Line Supervisors of Housekeeping and Janitorial Workers High school diploma or equivalent Less than 5 years None \$22.18			No formal educational credential	None	Short-term on-the-job training	·
37-1012 First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers High school diploma or equivalent Less than 5 years None \$18.93						
37-2011 Janitors and Cleaners, Except Maids and Housekeeping Cleaners No formal educational credential None Short-term on-the-job training \$14.09 37-2012 Maids and Housekeeping Cleaners No formal educational credential None Short-term on-the-job training \$13.39 37-3011 Landscaping and Groundskeeping Workers No formal educational credential None Short-term on-the-job training \$14.40 39-000 Personal Care and Service Occupations First-Line Supervisors of Personal Service & Entertainment and Recreation Workers, Exc Gambling Services High school diploma or equivalent None None Short-term on-the-job training \$10.98 39-3031 Ushers, Lobby Attendants, and Ticket Takers No formal educational credential None Short-term on-the-job training \$10.83 39-3091 Amusement and Recreation Attendants No formal educational credential None Short-term on-the-job training \$10.58 39-4021 Funeral Attendants Postsecondary non-degree award None Short-term on-the-job training \$10.58 39-9012 Hairdressers, Hairstylists, and Cosmetologists Postsecondary non-degree award None Short-term on-the-job training \$14.20 None Short-term on-the-job training \$14.20 Short-term on-the-job training \$14.68 Short-term on-the-job training \$14.68 Short-term on-the-job training \$14.68 Short-term on-the-job training \$14.68						
37-2012 Maids and Housekeeping Cleaners No formal educational credential None Short-term on-the-job training \$13.39 37-3011 Landscaping and Groundskeeping Workers No formal educational credential None Short-term on-the-job training \$14.40 39-0000 Personal Care and Service Occupations First-Line Supervisors of Personal Service & Entertainment and Recreation Workers, Exc Gambling Services High school diploma or equivalent Less than 5 years None \$21.67 ^^^ 39-2021 Nonfarm Animal Caretakers High school diploma or equivalent None Short-term on-the-job training \$10.83 39-3031 Ushers, Lobby Attendants, and Ticket Takers No formal educational credential None Short-term on-the-job training \$10.83 39-3091 Amusement and Recreation Attendants No formal educational credential None Short-term on-the-job training \$10.58 39-4021 Funeral Attendants High school diploma or equivalent None Short-term on-the-job training \$14.20 39-5012 Hairdressers, Hairstylists, and Cosmetologists Postsecondary non-degree award None None Short-term on-the-job training \$13.73 39-9011 Childcare Workers High school diploma or equivalent None Short-term on-the-job training \$11.45 39-9032 Recreation Workers High school diploma or equivalent None Short-term on-the-job training \$14.68 39-9032 Recreation Workers High school diploma or equivalent None Short-term on-the-job training \$14.68 41.40 Short-term on-the-job training \$14.68	37-1012	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	High school diploma or equivalent	Less than 5 years		\$18.93
37-3011 Landscaping and Groundskeeping Workers No formal educational credential None Short-term on-the-job training \$14.40 39-0000 Personal Care and Service Occupations \$12.95 39-1098 First-Line Supervisors of Personal Service & Entertainment and Recreation Workers, Exc Gambling Services High school diploma or equivalent Less than 5 years None \$21.67 ^^^ 39-2021 Nonfarm Animal Caretakers High school diploma or equivalent None Short-term on-the-job training \$10.98 39-3031 Ushers, Lobby Attendants, and Ticket Takers No formal educational credential None Short-term on-the-job training \$10.83 39-3091 Amusement and Recreation Attendants No formal educational credential None Short-term on-the-job training \$10.58 39-4021 Funeral Attendants High school diploma or equivalent None Short-term on-the-job training \$10.58 39-5012 Hairdressers, Hairstylists, and Cosmetologists Postsecondary non-degree award None None \$13.73 39-9011 Childcare Workers High school diploma or equivalent None Short-term on-the-job training \$11.45 39-9032 Recreation Workers High school diploma or equivalent None Short-term on-the-job training \$14.68 39-9032 Recreation Workers High school diploma or equivalent None Short-term on-the-job training \$14.68						
39-000 Personal Care and Service Occupations 39-1098 First-Line Supervisors of Personal Service & Entertainment and Recreation Workers, Exc Gambling Services 39-2021 Nonfarm Animal Caretakers 39-3031 Ushers, Lobby Attendants, and Ticket Takers 39-3031 Ushers, Lobby Attendants, and Ticket Takers 39-3091 Amusement and Recreation Attendants 39-4021 Funeral Attendants 39-4021 Funeral Attendants 39-5012 Hairdressers, Hairstylists, and Cosmetologists 39-9011 Childcare Workers 39-9031 Fitness Trainers and Aerobics Instructors 41gh school diploma or equivalent None None Short-term on-the-job training \$10.58 None Short-term on-the-job training \$14.20 None \$13.73 None Short-term on-the-job training \$11.45 None Short-term on-the-job training \$14.68 None Short-term on-the-job training \$13.23	37-2012	Maids and Housekeeping Cleaners	No formal educational credential	None	Short-term on-the-job training	\$13.39
39-1098 First-Line Supervisors of Personal Service & Entertainment and Recreation Workers, Exc Gambling Services 39-2021 Nonfarm Animal Caretakers 39-3031 Ushers, Lobby Attendants, and Ticket Takers 39-3031 Ushers, Lobby Attendants, and Ticket Takers No formal educational credential None 39-3091 Amusement and Recreation Attendants 39-4021 Funeral Attendants 39-5012 Hairdressers, Hairstylists, and Cosmetologists 39-901 Childcare Workers High school diploma or equivalent High school diploma or equivalent High school diploma or equivalent None Short-term on-the-job training \$10.58 No formal educational credential None Short-term on-the-job training \$14.20 Short-term on-the-job training \$13.73 Short-term on-the-job training \$13.73 Short-term on-the-job training \$11.45 Short-term on-the-job training \$11.45 Short-term on-the-job training \$14.68 Short-term on-the-job training \$14.68 Short-term on-the-job training \$13.23	37-3011	Landscaping and Groundskeeping Workers	No formal educational credential	None	Short-term on-the-job training	\$14.40
Workers, Exc Gambling Services High school diploma or equivalent None Short-term on-the-job training \$10.98 Workers, Lobby Attendants, and Ticket Takers No formal educational credential None Short-term on-the-job training \$10.83 No formal educational credential None Short-term on-the-job training \$10.83 Postage on the property of the property o	39-0000	Personal Care and Service Occupations				\$12.95
39-2021 Nonfarm Animal Caretakers High school diploma or equivalent None Short-term on-the-job training \$10.98	39-1098	First-Line Supervisors of Personal Service & Entertainment and Recreation				
39-3031 Ushers, Lobby Attendants, and Ticket Takers No formal educational credential None Short-term on-the-job training \$10.83 39-3091 Amusement and Recreation Attendants No formal educational credential None Short-term on-the-job training \$10.58 39-4021 Funeral Attendants High school diploma or equivalent None Short-term on-the-job training \$14.20 39-5012 Hairdressers, Hairstylists, and Cosmetologists Postsecondary non-degree award None None \$13.73 39-9011 Childcare Workers High school diploma or equivalent None Short-term on-the-job training \$11.45 39-9031 Fitness Trainers and Aerobics Instructors High school diploma or equivalent None Short-term on-the-job training \$14.68 39-9032 Recreation Workers High school diploma or equivalent None Short-term on-the-job training \$13.23		Workers, Exc Gambling Services	High school diploma or equivalent	Less than 5 years	None	\$21.67 ^^^
39-3091 Amusement and Recreation Attendants No formal educational credential None Short-term on-the-job training \$10.58 39-4021 Funeral Attendants High school diploma or equivalent None Short-term on-the-job training \$14.20 39-5012 Hairdressers, Hairstylists, and Cosmetologists Postsecondary non-degree award None None \$13.73 39-9011 Childcare Workers High school diploma or equivalent None Short-term on-the-job training \$11.45 39-9031 Fitness Trainers and Aerobics Instructors High school diploma or equivalent None Short-term on-the-job training \$14.68 39-9032 Recreation Workers High school diploma or equivalent None Short-term on-the-job training \$13.23	39-2021	Nonfarm Animal Caretakers	High school diploma or equivalent	None	Short-term on-the-job training	\$10.98
39-4021 Funeral Attendants High school diploma or equivalent None Short-term on-the-job training \$14.20 39-5012 Hairdressers, Hairstylists, and Cosmetologists Postsecondary non-degree award None None \$13.73 39-9011 Childcare Workers High school diploma or equivalent None Short-term on-the-job training \$11.45 39-9031 Fitness Trainers and Aerobics Instructors High school diploma or equivalent None Short-term on-the-job training \$14.68 39-9032 Recreation Workers High school diploma or equivalent None Short-term on-the-job training \$13.23	39-3031	Ushers, Lobby Attendants, and Ticket Takers	No formal educational credential	None	Short-term on-the-job training	\$10.83
39-5012 Hairdressers, Hairstylists, and Cosmetologists Postsecondary non-degree award None None Short-term on-the-job training \$11.45 39-9031 Fitness Trainers and Aerobics Instructors High school diploma or equivalent None Short-term on-the-job training \$14.68 39-9032 Recreation Workers High school diploma or equivalent None Short-term on-the-job training \$13.23	39-3091	Amusement and Recreation Attendants	No formal educational credential	None	Short-term on-the-job training	\$10.58
39-9011Childcare WorkersHigh school diploma or equivalentNoneShort-term on-the-job training\$11.4539-9031Fitness Trainers and Aerobics InstructorsHigh school diploma or equivalentNoneShort-term on-the-job training\$14.6839-9032Recreation WorkersHigh school diploma or equivalentNoneShort-term on-the-job training\$13.23	39-4021	Funeral Attendants	High school diploma or equivalent	None	Short-term on-the-job training	\$14.20
39-9011Childcare WorkersHigh school diploma or equivalentNoneShort-term on-the-job training\$11.4539-9031Fitness Trainers and Aerobics InstructorsHigh school diploma or equivalentNoneShort-term on-the-job training\$14.6839-9032Recreation WorkersHigh school diploma or equivalentNoneShort-term on-the-job training\$13.23	39-5012	Hairdressers, Hairstylists, and Cosmetologists	Postsecondary non-degree award	None	None	\$13.73
39-9031Fitness Trainers and Aerobics InstructorsHigh school diploma or equivalentNoneShort-term on-the-job training\$14.6839-9032Recreation WorkersHigh school diploma or equivalentNoneShort-term on-the-job training\$13.23	39-9011		High school diploma or equivalent	None	Short-term on-the-job training	\$11.45
39-9032 Recreation Workers High school diploma or equivalent None Short-term on-the-job training \$13.23	39-9031	Fitness Trainers and Aerobics Instructors	High school diploma or equivalent	None	Short-term on-the-job training	\$14.68
	39-9032	Recreation Workers	High school diploma or equivalent	None		\$13.23
	41-0000	Sales and Related Occupations				\$14.36

			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
41-1011	First-Line Supervisors of Retail Sales Workers	High school diploma or equivalent	Less than 5 years	None .	\$18.22
41-1012	First-Line Supervisors of Non-Retail Sales Workers	High school diploma or equivalent	Less than 5 years	None	\$37.39
41-2011	Cashiers	No formal educational credential	None	Short-term on-the-job training	\$10.91
41-2021	Counter and Rental Clerks	No formal educational credential	None	Short-term on-the-job training	\$14.06
41-2031	Retail Salespersons	No formal educational credential	None	Short-term on-the-job training	\$13.47
41-3011	Advertising Sales Agents	High school diploma or equivalent	None	Moderate-term on-the-job training	\$23.58
41-3021	Insurance Sales Agents	High school diploma or equivalent	None	Moderate-term on-the-job training	\$29.18
41-3031	Securities, Commodities, and Financial Services Sales Agents	Bachelor's degree	None	Moderate-term on-the-job training	\$24.47
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial	Ducticioi 3 degree	None	Moderate term on the job training	γ 2π.π/
41-3031	Services, and Travel	High school diploma or equivalent	None	Moderate-term on-the-job training	\$28.45
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific	riigii scriooi dipioiria di equivalent	None	Moderate-term on-the-job training	720.43
41-4011	Products	Bachelor's degree	None	Moderate-term on-the-job training	\$37.46
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and	Bachelor 3 degree	None	Moderate-term on-the-job training	Ç37.40
41-4012	Scientific Products	High school diploma or equivalent	None	Madarata tarm on the job training	\$29.72
41 0011		High school diploma or equivalent		Moderate-term on-the-job training	
41-9011	Demonstrators and Product Promoters	No formal educational credential	None	Short-term on-the-job training	\$14.52
41-9022	Real Estate Sales Agents	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.49
41-9031	Sales Engineers	Bachelor's degree	None	Moderate-term on-the-job training	\$52.56
41-9041	Telemarketers	No formal educational credential	None	Short-term on-the-job training	\$14.47
41-9099	Sales and Related Workers, All Other	High school diploma or equivalent	None	None	\$13.63
43-0000	Office and Administrative Support Occupations				\$18.04
43-1011	First-Line Supervisors of Office and Administrative Support Workers	High school diploma or equivalent	Less than 5 years	None	\$28.92
43-3011	Bill and Account Collectors	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.99
43-3021	Billing and Posting Clerks	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.13
43-3031	Bookkeeping, Accounting, and Auditing Clerks	Some college, no degree	None	Moderate-term on-the-job training	\$18.69
43-3051	Payroll and Timekeeping Clerks	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.45 †
43-3061	Procurement Clerks	High school diploma or equivalent	None	Moderate-term on-the-job training	\$21.66
43-3071	Tellers	High school diploma or equivalent	None	Short-term on-the-job training	\$17.77
43-4031	Court, Municipal, and License Clerks	High school diploma or equivalent	None	Long-term on-the-job training	\$17.76
43-4051	Customer Service Representatives	High school diploma or equivalent	None	Short-term on-the-job training	\$17.73
43-4061	Eligibility Interviewers, Government Programs	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.76
43-4071	File Clerks	High school diploma or equivalent	None	Short-term on-the-job training	\$18.12
43-4081	Hotel, Motel, and Resort Desk Clerks	High school diploma or equivalent	None	Short-term on-the-job training	\$11.23
43-4111	Interviewers, Except Eligibility and Loan	High school diploma or equivalent	None	Short-term on-the-job training	\$17.55
43-4121	Library Assistants, Clerical	High school diploma or equivalent	None	Short-term on-the-job training	\$9.22
43-4131	Loan Interviewers and Clerks	High school diploma or equivalent	None	Short-term on-the-job training	\$22.20
43-4151	Order Clerks	Some college, no degree	None	Short-term on-the-job training	\$17.65
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	Associate's degree	None	None	\$18.41
43-4171	Receptionists and Information Clerks	High school diploma or equivalent	None	Short-term on-the-job training	\$14.15
43-4199	Information and Record Clerks, All Other	High school diploma or equivalent	None	Short-term on-the-job training	\$13.90
43-5011	Cargo and Freight Agents	High school diploma or equivalent	None	Short-term on-the-job training	\$17.74
43-5021	Couriers and Messengers	High school diploma or equivalent	None	Short-term on-the-job training	\$14.28
43-5031	Police, Fire, and Ambulance Dispatchers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.87
43-5032	Dispatchers, Except Police, Fire, and Ambulance	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.69
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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
Code	Occupational Title	Needed for Entry	Occupation	Occupation	May 2021
43-5051	Postal Service Clerks	High school diploma or equivalent	None	Short-term on-the-job training	\$25.60
43-5052	Postal Service Mail Carriers	High school diploma or equivalent	None	Short-term on-the-job training	\$24.32
43-5053	Postal Service Mail Sorters, Processors, and Processing Machine Operators	High school diploma or equivalent	None	Short-term on-the-job training	\$21.29
43-5061	Production, Planning, and Expediting Clerks	High school diploma or equivalent	None	Moderate-term on-the-job training	\$23.03
43-5071	Shipping, Receiving, and Traffic Clerks	High school diploma or equivalent	None	Short-term on-the-job training	\$17.56
43-6011	Executive Secretaries and Executive Administrative Assistants	High school diploma or equivalent	Less than 5 years	None	\$29.17
43-6012	Legal Secretaries	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.50
43-6013	Medical Secretaries	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.48
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	High school diploma or equivalent	None	Short-term on-the-job training	\$18.04
43-9021	Data Entry Keyers	High school diploma or equivalent	None	Short-term on-the-job training	\$17.26
43-9041	Insurance Claims and Policy Processing Clerks	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.82
43-9051	Mail Clerks and Mail Machine Operators, Except Postal Service	High school diploma or equivalent	None	Short-term on-the-job training	\$13.90
43-9061	Office Clerks, General	High school diploma or equivalent	None	Short-term on-the-job training	\$17.94
43-9199	Office and Administrative Support Workers, All Other	High school diploma or equivalent	None	Short-term on-the-job training	\$21.52
45-0000	Farming, Fishing, and Forestry Occupations			,	\$14.35
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	No formal educational credential	None	Short-term on-the-job training	\$14.33
47-0000	Construction and Extraction Occupations			,	\$23.87
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	High school diploma or equivalent	5 years or more	None	\$30.01
47-2021	Brickmasons and Blockmasons	High school diploma or equivalent	None	Apprenticeship	\$30.40
47-2031	Carpenters	High school diploma or equivalent	None	Apprenticeship	\$23.07
47-2051	Cement Masons and Concrete Finishers	No formal educational credential	None	Moderate-term on-the-job training	\$24.08
47-2061	Construction Laborers	No formal educational credential	None	Short-term on-the-job training	\$22.61
47-2073	Operating Engineers and Other Construction Equipment Operators	High school diploma or equivalent	None	Moderate-term on-the-job training	\$29.15
47-2111	Electricians	High school diploma or equivalent	None	Apprenticeship	\$29.20
47-2121	Glaziers	High school diploma or equivalent	None	Apprenticeship	\$28.29
47-2141	Painters, Construction and Maintenance	No formal educational credential	None	Moderate-term on-the-job training	\$22.66
47-2152	Plumbers, Pipefitters, and Steamfitters	High school diploma or equivalent	None	Apprenticeship	\$29.50
47-2181	Roofers	No formal educational credential	None	Moderate-term on-the-job training	\$22.53 †
47-2221	Structural Iron and Steel Workers	High school diploma or equivalent	None	Apprenticeship	\$31.30
47-4011	Construction and Building Inspectors	High school diploma or equivalent	5 years or more	Moderate-term on-the-job training	\$29.17
47-4051	Highway Maintenance Workers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.58
49-0000	Installation, Maintenance, and Repair Occupations				\$22.72
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	High school diploma or equivalent	Less than 5 years	None	\$30.30
49-2011	Computer, Automated Teller, and Office Machine Repairers	Some college, no degree	None	Short-term on-the-job training	\$18.83
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	Postsecondary non-degree award	None	Moderate-term on-the-job training	\$29.73
49-2098	Security and Fire Alarm Systems Installers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$23.09
49-3011	Aircraft Mechanics and Service Technicians	Postsecondary non-degree award	None	None	\$29.76
49-3021	Automotive Body and Related Repairers	High school diploma or equivalent	None	Long-term on-the-job training	\$22.31
49-3023	Automotive Service Technicians and Mechanics	Postsecondary non-degree award	None	Short-term on-the-job training	\$22.46
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	High school diploma or equivalent	None	Long-term on-the-job training	\$23.15
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	High school diploma or equivalent	None	Long-term on-the-job training	\$23.54
49-3093	Tire Repairers and Changers	High school diploma or equivalent	None	Short-term on-the-job training	\$16.79
49-9011	Mechanical Door Repairers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.39

			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
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	Postsecondary non-degree award	None	Long-term on-the-job training	\$23.33
49-9041	Industrial Machinery Mechanics	High school diploma or equivalent	None	Long-term on-the-job training	\$28.40
49-9043	Maintenance Workers, Machinery	High school diploma or equivalent	None	Long-term on-the-job training	\$23.51
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	\$18.89
49-9071	Maintenance and Repair Workers, General		None	· · · · · ·	\$22.37
49-9071		High school diploma or equivalent	1	Moderate term on the job training	\$22.04
	Installation, Maintenance, and Repair Workers, All Other	High school diploma or equivalent	None	Moderate-term on-the-job training	
51-0000	Production Occupations			N.	\$17.99
51-1011	First-Line Supervisors of Production and Operating Workers	High school diploma or equivalent	Less than 5 years	None	\$29.28
51-2028	Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders,				1
	Tapers, and Finishers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$14.54
51-2041	Structural Metal Fabricators and Fitters	High school diploma or equivalent	None	Moderate-term on-the-job training	\$28.55
51-2090	Miscellaneous Assemblers and Fabricators	High school diploma or equivalent	None	Moderate-term on-the-job training	\$15.18
51-3011	Bakers	No formal educational credential	None	Long-term on-the-job training	\$14.03
51-3021	Butchers and Meat Cutters	No formal educational credential	None	Long-term on-the-job training	\$14.29
51-3092	Food Batchmakers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$13.95
51-4021	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and				
	Plastic	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.05
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and				
	Plastic	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.83
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and				
	Tenders, Metal and Plastic	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.65
51-4041	Machinists	High school diploma or equivalent	None	Long-term on-the-job training	\$18.61
51-4071	Foundry Mold and Coremakers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.19
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders,				
	Metal and Plastic	High school diploma or equivalent	None	Moderate-term on-the-job training	\$16.80
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.14
51-4111	Tool and Die Makers	Postsecondary non-degree award	None	Long-term on-the-job training	\$23.47
51-4121	Welders, Cutters, Solderers, and Brazers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.42
51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.30
51-5112	Printing Press Operators	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.96
51-5113	Print Binding and Finishing Workers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.83
51-6011	Laundry and Dry-Cleaning Workers	No formal educational credential	None	Short-term on-the-job training	\$11.35
51-6031	Sewing Machine Operators	No formal educational credential	None	Short-term on the job training Short-term on-the-job training	\$13.97
51-8031	Water and Wastewater Treatment Plant and System Operators	High school diploma or equivalent	None	Long-term on-the-job training	\$28.78
51-9022		No formal educational credential	None	1	\$16.35
51-9022	Grinding and Polishing Workers, Hand Mixing and Blending Machine Setters, Operators, and Tenders	High school diploma or equivalent	None	Moderate term on the job training	\$16.35
				Moderate term on the job training	
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.09
51-9041	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and				647.05
	Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.05
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.09
51-9081	Dental Laboratory Technicians	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.29
51-9111	Packaging and Filling Machine Operators and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$14.56

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

			•	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
51-9124	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.45
51-9161	Computer Numerically Controlled Tool Operators	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.63
51-9162	Computer Numerically Controlled Tool Programmers	Postsecondary non-degree award	None	Moderate-term on-the-job training	\$29.10
51-9196	Paper Goods Machine Setters, Operators, and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.40
51-9198	HelpersProduction Workers	High school diploma or equivalent	None	Short-term on-the-job training	\$14.57
51-9199	Production Workers, All Other	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.48
53-0000	Transportation and Material Moving Occupations				\$17.50
53-2012	Commercial Pilots	High school diploma or equivalent	None	Moderate-term on-the-job training	\$101,730 **
53-3031	Driver/Sales Workers	High school diploma or equivalent	None	Short-term on-the-job training	\$11.07
53-3032	Heavy and Tractor-Trailer Truck Drivers	Postsecondary non-degree award	None	Short-term on-the-job training	\$23.32
53-3033	Light Truck or Delivery Services Drivers	High school diploma or equivalent	None	Short-term on-the-job training	\$18.05
53-3052	Bus Drivers, Transit and Intercity	High school diploma or equivalent	None	Moderate-term on-the-job training	\$29.47
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	\$13.63
53-6031	Automotive and Watercraft Service Attendants	No formal educational credential	None	Short-term on-the-job training	\$14.01
53-7051	Industrial Truck and Tractor Operators	No formal educational credential	None	Short-term on-the-job training	\$18.43
53-7061	Cleaners of Vehicles and Equipment	No formal educational credential	None	Short-term on-the-job training	\$13.76
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	No formal educational credential	None	Short-term on-the-job training	\$17.48
53-7064	Packers and Packagers, Hand	No formal educational credential	None	Short-term on-the-job training	\$14.31
53-7065	Stockers and Order Fillers	High school diploma or equivalent	None	Short-term on-the-job training	\$14.08
53-7081	Refuse and Recyclable Material Collectors	No formal educational credential	None	Short-term on-the-job training	\$18.10

^{*} 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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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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