

2030 Job Outlook

Canton-Massillon Metropolitan Statistical Area

Carroll and Stark 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	e in					
soc		2020	2030	Employ			Annua	al Openings		Median Wage
Code	Occupational Title	Annual	Projected	2020-2030	Percent	Growth	Exits	Transfers	Total	May 2021
00-0000	Total, All Occupations	169,284	175,464	6,180	3.7%	618	7,731	11,560	19,909	\$17.79
11-0000	Management Occupations	9,514	10,198	684	7.2%	68	325	495	888	\$45.25
11-1011	Chief Executives	188	173	-15	-8.0%	-2	5	7	10	\$74.73
11-1021	General and Operations Managers	2,122	2,256	134	6.3%	13	44	136	193	\$37.26
11-2022	Sales Managers	250	254	4	1.6%	0	5	16	21	\$60.15
11-3010	Administrative Services and Facilities Managers	317	335	18	5.7%	2	9	16	27	\$47.73 ^
11-3021	Computer and Information Systems Managers	139	155	16	11.5%	2	2	8	12	\$58.19
11-3031	Financial Managers	359	426	67	18.7%	7	8	20	35	\$57.80
11-3051	Industrial Production Managers	434	446	12	2.8%	1	8	21	30	\$47.08
11-3071	Transportation, Storage, and Distribution Managers	166	180	14	8.4%	1	3	10	14	\$38.43
11-9021	Construction Managers	413	454	41	9.9%	4	9	22	35	\$38.40
11-9032	Education Administrators, Elementary and Secondary School	313	326	13	4.2%	1	8	15	24	\$94,860 **
11-9033	Education Administrators, Postsecondary	131	139	8	6.1%	1	3	6	10	\$46.96
11-9051	Food Service Managers	427	477	50	11.7%	5	14	36	55	\$22.93
11-9111	Medical and Health Services Managers	560	692	132	23.6%	13	16	32	61	\$46.01
11-9141	Property, Real Estate, and Community Association Managers	149	152	3	2.0%	0	6	6	12	\$22.45
11-9151	Social and Community Service Managers	123	142	19	15.5%	2	4	7	13	\$29.81
11-9198	Personal Service Managers; Entertainment & Recreation Managers, Except									
	Gambling; and Managers, All Other	306	325	19	6.2%	2	7	16	25	\$59.93 ^^^
13-0000	Business and Financial Operations Occupations	6,637	7,054	417	6.3%	42	186	409	637	\$29.08
13-1020	Buyers and Purchasing Agents	420	398	-22	-5.2%	-2	14	26	38	\$28.91
13-1031	Claims Adjusters, Examiners, and Investigators	262	250	-12	-4.6%	-1	6	13	18	\$29.62
13-1041	Compliance Officers	206	223	17	8.3%	2	5	11		\$27.82
							,		18	\$27.82
13-1051	Cost Estimators	263	262	-1	-0.4%	0	7	16	23	\$29.11
13-1051 13-1071	Cost Estimators Human Resources Specialists	263 556	262 596		-0.4% 7.2%			16 38	23 58	\$29.11 \$23.35
		263	262	-1	-0.4%	0	7	16	23	\$29.11
13-1071 13-1075 13-1081	Human Resources Specialists	263 556 236 113	262 596 233 147	-1 40 -3 34	-0.4% 7.2% -1.3% 30.1%	0	7 16 6 3	16 38 16 8	23 58	\$29.11 \$23.35
13-1071 13-1075	Human Resources Specialists Labor Relations Specialists	263 556 236	262 596 233 147 387	-1 40 -3 34 32	-0.4% 7.2% -1.3% 30.1% 9.0%	0 4 0 3 3	7 16 6 3 12	16 38 16 8 21	23 58 22 14 36	\$29.11 \$23.35 \$35.91 \$37.03 \$38.17
13-1071 13-1075 13-1081	Human Resources Specialists Labor Relations Specialists Logisticians Management Analysts Fundraisers	263 556 236 113	262 596 233 147 387 176	-1 40 -3 34 32 23	-0.4% 7.2% -1.3% 30.1% 9.0% 15.0%	0 4 0 3	7 16 6 3 12 5	16 38 16 8 21	23 58 22 14	\$29.11 \$23.35 \$35.91 \$37.03
13-1071 13-1075 13-1081 13-1111	Human Resources Specialists Labor Relations Specialists Logisticians Management Analysts	263 556 236 113 355 153 448	262 596 233 147 387	-1 40 -3 34 32	-0.4% 7.2% -1.3% 30.1% 9.0% 15.0% 9.6%	0 4 0 3 3	7 16 6 3 12 5	16 38 16 8 21 10 29	23 58 22 14 36	\$29.11 \$23.35 \$35.91 \$37.03 \$38.17 \$23.35 \$18.63
13-1071 13-1075 13-1081 13-1111 13-1131 13-1151 13-1161	Human Resources Specialists Labor Relations Specialists Logisticians Management Analysts Fundraisers	263 556 236 113 355 153 448	262 596 233 147 387 176	-1 40 -3 34 32 23 43 114	-0.4% 7.2% -1.3% 30.1% 9.0% 15.0% 9.6% 20.3%	0 4 0 3 3 2	7 16 6 3 12 5 14	16 38 16 8 21 10 29 45	23 58 22 14 36 17	\$29.11 \$23.35 \$35.91 \$37.03 \$38.17 \$23.35
13-1071 13-1075 13-1081 13-1111 13-1131 13-1151	Human Resources Specialists Labor Relations Specialists Logisticians Management Analysts Fundraisers Training and Development Specialists	263 556 236 113 355 153 448	262 596 233 147 387 176 491	-1 40 -3 34 32 23 43 114 27	-0.4% 7.2% -1.3% 30.1% 9.0% 15.0% 9.6% 20.3% 3.5%	0 4 0 3 3 2 4 11	7 16 6 3 12 5 14 15	16 38 16 8 21 10 29 45	23 58 22 14 36 17 47 71 60	\$29.11 \$23.35 \$35.91 \$37.03 \$38.17 \$23.35 \$18.63
13-1071 13-1075 13-1081 13-1111 13-1131 13-1151 13-1161 13-1198 13-2011	Human Resources Specialists Labor Relations Specialists Logisticians Management Analysts Fundraisers Training and Development Specialists Market Research Analysts and Marketing Specialists	263 556 236 113 355 153 448	262 596 233 147 387 176 491 676	-1 40 -3 34 32 23 43 114 27 84	-0.4% 7.2% -1.3% 30.1% 9.0% 15.0% 9.6% 20.3% 3.5% 6.4%	0 4 0 3 3 2 4 11 3	7 16 6 3 12 5 14 15 18 38	16 38 16 8 21 10 29 45 39 80	23 58 22 14 36 17 47 71	\$29.11 \$23.35 \$35.91 \$37.03 \$38.17 \$23.35 \$18.63 \$27.26 \$35.90 ^^^ \$30.04
13-1071 13-1075 13-1081 13-1111 13-1131 13-1151 13-1161 13-1198 13-2011 13-2052	Human Resources Specialists Labor Relations Specialists Logisticians Management Analysts Fundraisers Training and Development Specialists Market Research Analysts and Marketing Specialists Project Management Specialists and Business Operations Specialists, All Other Accountants and Auditors Personal Financial Advisors	263 556 236 113 355 153 448 562 774 1,315	262 596 233 147 387 176 491 676 801 1,399 136	-1 40 -3 34 32 23 43 114 27 84	-0.4% 7.2% -1.3% 30.1% 9.0% 15.0% 9.6% 20.3% 3.5% 6.4% 8.8%	0 4 0 3 3 2 4 11 3 8	7 16 6 3 12 5 14 15 18 38	16 38 16 8 21 10 29 45 39 80 6	23 58 22 14 36 17 47 71 60 126	\$29.11 \$23.35 \$35.91 \$37.03 \$38.17 \$23.35 \$18.63 \$27.26 \$35.90 ^^^ \$30.04 \$28.61
13-1071 13-1075 13-1081 13-1111 13-1131 13-1151 13-1161 13-1198 13-2011	Human Resources Specialists Labor Relations Specialists Logisticians Management Analysts Fundraisers Training and Development Specialists Market Research Analysts and Marketing Specialists Project Management Specialists and Business Operations Specialists, All Other Accountants and Auditors	263 556 236 113 355 153 448 562 774 1,315	262 596 233 147 387 176 491 676 801 1,399	-1 40 -3 34 32 23 43 114 27 84	-0.4% 7.2% -1.3% 30.1% 9.0% 15.0% 9.6% 20.3% 3.5% 6.4%	0 4 0 3 3 2 4 11 3	7 16 6 3 12 5 14 15 18 38	16 38 16 8 21 10 29 45 39 80	23 58 22 14 36 17 47 71 60	\$29.11 \$23.35 \$35.91 \$37.03 \$38.17 \$23.35 \$18.63 \$27.26 \$35.90 ^^^ \$30.04
13-1071 13-1075 13-1081 13-1111 13-1131 13-1151 13-1161 13-1198 13-2011 13-2052	Human Resources Specialists Labor Relations Specialists Logisticians Management Analysts Fundraisers Training and Development Specialists Market Research Analysts and Marketing Specialists Project Management Specialists and Business Operations Specialists, All Other Accountants and Auditors Personal Financial Advisors	263 556 236 113 355 153 448 562 774 1,315	262 596 233 147 387 176 491 676 801 1,399 136	-1 40 -3 34 32 23 43 114 27 84	-0.4% 7.2% -1.3% 30.1% 9.0% 15.0% 9.6% 20.3% 3.5% 6.4% 8.8%	0 4 0 3 3 2 4 11 3 8	7 16 6 3 12 5 14 15 18 38	16 38 16 8 21 10 29 45 39 80 6	23 58 22 14 36 17 47 71 60 126	\$29.11 \$23.35 \$35.91 \$37.03 \$38.17 \$23.35 \$18.63 \$27.26 \$35.90 ^^^ \$30.04 \$28.61
13-1071 13-1075 13-1081 13-1111 13-1131 13-1151 13-1161 13-1198 13-2011 13-2052 13-2072	Human Resources Specialists Labor Relations Specialists Logisticians Management Analysts Fundraisers Training and Development Specialists Market Research Analysts and Marketing Specialists Project Management Specialists and Business Operations Specialists, All Other Accountants and Auditors Personal Financial Advisors Loan Officers Financial and Investment Analysts, Financial Risk Specialists, and Financial Specialists, All Other	263 556 236 113 355 153 448 562 774 1,315	262 596 233 147 387 176 491 676 801 1,399 136 268	-1 40 -3 34 32 23 43 114 27 84	-0.4% 7.2% -1.3% 30.1% 9.0% 15.0% 9.6% 20.3% 3.5% 6.4% 8.8%	0 4 0 3 3 2 4 11 3 8	7 16 6 3 12 5 14 15 18 38 3 6	16 38 16 8 21 10 29 45 39 80 6	23 58 22 14 36 17 47 71 60 126	\$29.11 \$23.35 \$35.91 \$37.03 \$38.17 \$23.35 \$18.63 \$27.26 \$35.90 ^^^ \$30.04 \$28.61
13-1071 13-1075 13-1081 13-1111 13-1131 13-1151 13-1161 13-1198 13-2011 13-2052 13-2072 13-2098	Human Resources Specialists Labor Relations Specialists Logisticians Management Analysts Fundraisers Training and Development Specialists Market Research Analysts and Marketing Specialists Project Management Specialists and Business Operations Specialists, All Other Accountants and Auditors Personal Financial Advisors Loan Officers Financial and Investment Analysts, Financial Risk Specialists, and Financial	263 556 236 113 355 153 448 562 774 1,315 125 266	262 596 233 147 387 176 491 676 801 1,399 136 268	-1 40 -3 34 32 23 43 114 27 84 11 2 13	-0.4% 7.2% -1.3% 30.1% 9.0% 15.0% 9.6% 20.3% 3.5% 6.4% 8.8% 0.8%	0 4 0 3 3 2 4 11 3 8 1	7 16 6 3 12 5 14 15 18 38 3 6	16 38 16 8 21 10 29 45 39 80 6 14	23 58 22 14 36 17 47 71 60 126 10 20	\$29.11 \$23.35 \$35.91 \$37.03 \$38.17 \$23.35 \$18.63 \$27.26 \$35.90 ^^^ \$30.04 \$28.61 \$23.76
13-1071 13-1075 13-1081 13-1111 13-1131 13-1151 13-1161 13-2011 13-2052 13-2072 13-2098	Human Resources Specialists Labor Relations Specialists Logisticians Management Analysts Fundraisers Training and Development Specialists Market Research Analysts and Marketing Specialists Project Management Specialists and Business Operations Specialists, All Other Accountants and Auditors Personal Financial Advisors Loan Officers Financial and Investment Analysts, Financial Risk Specialists, and Financial Specialists, All Other Computer and Mathematical Occupations Computer Systems Analysts	263 556 236 113 355 153 448 562 774 1,315 125 266 144 2,166 348	262 596 233 147 387 176 491 676 801 1,399 136 268 157 2,373 363	-1 40 -3 34 32 23 43 114 27 84 11 2 13 207	-0.4% 7.2% -1.3% 30.1% 9.0% 15.0% 9.6% 20.3% 3.5% 6.4% 8.8% 0.8% 9.0% 4.3%	0 4 0 3 3 2 4 11 3 8 1 0	7 16 6 3 12 5 14 15 18 38 3 6 3 7	16 38 16 8 21 10 29 45 39 80 6 14	23 58 22 14 36 17 47 71 60 126 10 20 13 179 27	\$29.11 \$23.35 \$35.91 \$37.03 \$38.17 \$23.35 \$18.63 \$27.26 \$35.90 ^^^ \$30.04 \$28.61 \$23.76 \$35.21 ^^^
13-1071 13-1075 13-1081 13-1111 13-1131 13-1151 13-1161 13-1198 13-2011 13-2052 13-2072 13-2098	Human Resources Specialists Labor Relations Specialists Logisticians Management Analysts Fundraisers Training and Development Specialists Market Research Analysts and Marketing Specialists Project Management Specialists and Business Operations Specialists, All Other Accountants and Auditors Personal Financial Advisors Loan Officers Financial and Investment Analysts, Financial Risk Specialists, and Financial Specialists, All Other Computer and Mathematical Occupations	263 556 236 113 355 153 448 562 774 1,315 125 266 144 2,166	262 596 233 147 387 176 491 676 801 1,399 136 268 157 2,373	-1 40 -3 34 32 23 43 114 27 84 11 2 13	-0.4% 7.2% -1.3% 30.1% 9.0% 15.0% 9.6% 20.3% 3.5% 6.4% 8.8% 0.8%	0 4 0 3 3 2 4 11 3 8 1 0	7 16 6 3 12 5 14 15 18 38 3 6	16 38 16 8 21 10 29 45 39 80 6 14	23 58 22 14 36 17 47 71 60 126 10 20 13	\$29.11 \$23.35 \$35.91 \$37.03 \$38.17 \$23.35 \$18.63 \$27.26 \$35.90 ^^^ \$30.04 \$28.61 \$23.76

		Emplo	yment*	Chang	ge in					
soc		2020	2030	Employ			Annua	l Openings		Median Wage
	Occupational Title	Annual	Projected	2020-2030		Growth	Exits	Transfers	Total	May 2021
15-1244	Network and Computer Systems Administrators	242	246	4	1.7%	0	4	12	16	\$35.51
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	659	775	116	17.6%	12	17	35	64	\$49.49 ^^^
15-1299	Computer Occupations, All Other	121	128	7	5.8%	1	3	6	10	\$28.57
17-0000	Architecture and Engineering Occupations	1,557	1,629	72	4.6%	7	38	79	124	\$36.21
17-2051	Civil Engineers	127	136	9	7.1%	1	3	7	11	\$37.23
17-2071	Electrical Engineers	117	123	6	5.1%	1	3	5	9	\$38.41
17-2112	Industrial Engineers	221	249	28	12.7%	3	5	9	17	\$45.23
17-2141	Mechanical Engineers	277	300	23	8.3%	2	5	12	19	\$36.17
17-3011	Architectural and Civil Drafters	122	125	3	2.5%	0	4	8	12	\$22.82
19-0000	Life, Physical, and Social Science Occupations	N/A	N/A	N/A	N/A	4	14	41	59	\$31.13 †
19-3031	Clinical, Counseling, and School Psychologists	105	111	6	5.7%	1	3	4	8	\$38.96 ^^^
19-5011	Occupational Health and Safety Specialists	111	116	5	4.5%	0	3	5	8	\$37.03
21-0000	Community and Social Service Occupations	3,748	4,119	371	9.9%	37	138	252	427	\$22.34
21-1012	Educational, Guidance, School, and Vocational Counselors	317	341	24	7.6%	2	11	20	33	\$28.62
21-1015	Rehabilitation Counselors	247	302	55	22.3%	6	9	16	31	\$17.48
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	347	428	81	23.3%	8	13	23	44	\$22.62
21-1021	Child, Family, and School Social Workers	411	464	53	12.9%	5	12	28	45	\$22.47
21-1022	Healthcare Social Workers	117	116	-1	-0.9%	0	3	7	10	\$23.91
21-1023	Mental Health and Substance Abuse Social Workers	155	186	31	20.0%	3	5	11	19	\$22.60
21-1029	Social Workers, All Other	141	155	14	9.9%	1	4	9	14	\$22.96
21-1092	Probation Officers and Correctional Treatment Specialists	101	106	5	5.0%	0	2	6	8	\$22.96
21-1093	Social and Human Service Assistants	730	800	70	9.6%	7	30	58	95	\$16.86
21-2011	Clergy	730	739	9	1.2%	1	30	42	73	\$23.16
23-0000	Legal Occupations	928	1,003	75	8.1%	8	27	40	75	\$30.44
23-1011	Lawyers	417	454	37	8.9%	4	9	11	24	\$36.57
23-2011	Paralegals and Legal Assistants	284	317	33	11.6%	3	12	20	35	\$18.74
25-0000	Education, Training, and Library Occupations	9,457	9,938	481	5.1%	48	373	433	854	\$28.26
25-1194	Vocational Education Teachers, Postsecondary	155	153	-2	-1.3%	0	7	7	14	\$37.09
25-1199	Postsecondary Teachers, All Other	363	371	8	2.2%	1	16	17	34	\$60,900 **
25-2011	Preschool Teachers, Except Special Education	416	467	51	12.3%	5	18	26	49	\$13.52
25-2012	Kindergarten Teachers, Except Special Education	133	138	5	3.8%	0	6	8	14	\$60,900 **
25-2021	Elementary School Teachers, Except Special Education	1,499	1,536	37	2.5%	4	47	61	112	\$74,080 **
25-2022	Middle School Teachers, Except Special and Career/Technical Education	972	999	27	2.8%	3	30	40	73	\$62,470 **
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	1,612	1,660	48	3.0%	5	43	66	114	\$73,750 **
25-2052	Special Education Teachers, Kindergarten and Elementary School	168	178	10	6.0%	1	6	7	14	\$72,400 **
25-2058	Special Education Teachers, Secondary School	315	326	11	3.5%	1	10	13	24	\$72,470 **
25-3021	Self-Enrichment Education Teachers	310	384	74	23.9%	7	21	19	47	\$13.72
25-3097	Teachers and Instructors, All Other, Except Substitute Teachers	255	275	20	7.8%	2	16	14	32	\$17.94 †
25-4022	Librarians and Media Collections Specialists	192	202	10	5.2%	1	10	9	20	\$21.94
25-4031	Library Technicians	107	102	-5	-4.7%	0	9	6	15	\$14.49
25-9031	Instructional Coordinators	158	166	8	5.1%	1	8	7	16	\$29.28

		Emplo	yment*	Chang	ge in					
soc		2020	2030	Employ			Annua	l Openings		Median Wage
	Occupational Title	Annual	Projected	2020-2030		Growth	Exits	Transfers	Total	May 2021
25-9045	Teaching Assistants, Except Postsecondary	1,339	1,392	53	4.0%	5	61	64	130	\$28,190 **
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	1,756	1,840	84	4.8%	8	74	112	194	\$18.53
27-1024	Graphic Designers	181	188	7	3.9%	1	6	11	18	\$22.62
27-1026	Merchandise Displayers and Window Trimmers	108	108	0	0.0%	0	3	6	9	\$14.65
27-2022	Coaches and Scouts	261	297	36	13.8%	4	16	22	42	\$30,470 **
27-2042	Musicians and Singers	239	250	11	4.6%	1	14	14	29	\$47.38 †
27-3031	Public Relations Specialists	142	154	12	8.5%	1	4	10	15	\$24.19
27-3043	Writers and Authors	101	128	27	26.7%	3	5	6	14	\$24.06 +
29-0000	Healthcare Practitioners and Technical Occupations	11,557	11,639	82	0.7%	8	300	357	665	\$28.97
29-1051	Pharmacists	439	397	-42	-9.6%	-4	8	8	12	\$60.68
29-1071	Physician Assistants	112	140	28	25.0%	3	2	5	10	\$46.35
29-1122	Occupational Therapists	251	276	25	10.0%	2	6	9	17	\$38.16
29-1123	Physical Therapists	301	322	21	7.0%	2	6	6	14	\$45.26
29-1126	Respiratory Therapists	176	186	10	5.7%	1	4	5	10	\$28.50
29-1127	Speech-Language Pathologists	237	293	56	23.6%	6	6	10	22	\$36.90
29-1141	Registered Nurses	3,718	3,582	-136	-3.7%	-14	97	92	175	\$29.58
29-1171	Nurse Practitioners	203	289	86	42.4%	9	5	8	22	\$47.97
29-1228	Physicians, All Other; and Ophthalmologists, Except Pediatric	553	524	-29	-5.2%	-3	9	6	12	\$37.45 ^^^
29-1292	Dental Hygienists	264	270	6	2.3%	1	10	7	18	\$29.27
29-2034	Radiologic Technologists	299	295	-4	-1.3%	0	8	13	21	\$27.83
29-2040	Emergency Medical Technicians and Paramedics	254	251	-3	-1.2%	0	5	12	17	\$17.76 ^
29-2052	Pharmacy Technicians	668	673	5	0.8%	0	18	29	47	\$14.02
29-2055	Surgical Technologists	108	104	-4	-3.7%	0	3	5	8	\$21.62
29-2061	Licensed Practical and Licensed Vocational Nurses	1,679	1,726	47	2.8%	5	57	71	133	\$22.14
29-2098	Medical Dosimetrists, Medical Records Specialists, and Health Technologists and									
	Technicians, All Other	434	447	13	3.0%	1	12	19	32	\$26.19 ^^^
31-0000	Healthcare Support Occupations	9,413	10,680	1,267	13.5%	127	590	618	1,335	\$13.70
31-1120	Home Health and Personal Care Aides	3,633	4,762	1,129	31.1%	113	269	238	620	\$11.35
31-1131	Nursing Assistants	2,895	2,804	-91	-3.1%	-9	182	161	334	\$13.84
31-2011	Occupational Therapy Assistants	221	288	67	30.3%	7	13	19	39	\$28.28
31-2021	Physical Therapist Assistants	207	241	34	16.4%	3	10	17	30	\$28.28
31-9091	Dental Assistants	298	303	5	1.7%	0	14	21	35	\$18.06
31-9092	Medical Assistants	1,181	1,262	81	6.9%	8	50	91	149	\$16.73
31-9097	Phlebotomists	132	142	10	7.6%	1	6	10	17	\$17.04
33-0000	Protective Service Occupations	2,499	2,636	137	5.5%	14	134	170	318	\$19.25
33-2011	Firefighters	437	483	46	10.5%	5	10	24	39	\$18.74
33-3012	Correctional Officers and Jailers	378	355	-23	-6.1%	-2	14	20	32	\$22.81
33-3051	Police and Sheriff's Patrol Officers	459	482	23	5.0%	2	12	24	38	\$28.53
33-9032	Security Guards	614	638	24	3.9%	2	33	48	83	\$14.70
33-9098	School Bus Monitors and Protective Service Workers, All Other	263	269	6	2.3%	1	37	30	68	\$15.11 ^^^
35-0000	Food Preparation and Serving Related Occupations	15,370	17,725	2,355	15.3%	236	1,268	1,678	3,182	\$10.72

		Emplo	yment*	Chang	ze in					
soc		2020	2030	Employ			Annua	l Openings		Median Wage
	Occupational Title	Annual	Projected	2020-2030		Growth	Exits	Transfers	Total	May 2021
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	1,398	1,648	250	17.9%	25	68	155	248	\$17.08
35-2011	Cooks, Fast Food	597	569	-28	-4.7%	-3	34	50	81	\$10.43
35-2012	Cooks, Institution and Cafeteria	1,051	1,007	-44	-4.2%	-4	61	88	145	\$14.03
35-2014	Cooks, Restaurant	1,409	2,058	649	46.1%	65	102	148	315	\$13.54
35-2021	Food Preparation Workers	496	517	21	4.2%	2	40	47	89	\$11.38
35-3011	Bartenders	559	730	171	30.6%	17	29	78	124	\$9.90
35-3023	Fast Food and Counter Workers	5,338	5,953	615	11.5%	62	547	597	1,206	\$10.50
35-3031	Waiters and Waitresses	2,459	2,873	414	16.8%	41	196	318	555	\$9.63
35-3041	Food Servers, Nonrestaurant	601	596	-5	-0.8%	0	47	47	94	\$11.08
35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	458	580	122	26.6%	12	45	45	102	\$10.74
35-9021	Dishwashers	415	485	70	16.9%	7	34	38	79	\$10.66
37-0000	Building and Grounds Cleaning and Maintenance Occupations	6,131	6,233	102	1.7%	10	342	463	815	\$13.79
37-1011	First-Line Supervisors of Housekeeping and Janitorial Workers	120	122	2	1.7%	0	5	8	13	\$21.29
37-1012	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	106	105	-1	-0.9%	0	3	8	11	\$22.49
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	2,668	2,710	42	1.6%	4	168	188	360	\$13.55
37-2012	Maids and Housekeeping Cleaners	1,065	1,074	9	0.9%	1	73	69	143	\$11.34
37-3011	Landscaping and Groundskeeping Workers	2,107	2,152	45	2.1%	4	92	183	279	\$14.62
39-0000	Personal Care and Service Occupations	3,453	3,704	251	7.3%	25	222	272	519	\$11.25
39-1098	First-Line Supervisors of Personal Service & Entertainment and Recreation	3,433	3,704	231	7.370	23		2/2	313	711.23
33 1030	Workers, Exc Gambling Services	156	188	32	20.5%	3	6	12	21	\$21.67 ^^^
39-3091	Amusement and Recreation Attendants	235	307	72	30.6%	7	26	30	63	\$9.61
39-5012	Hairdressers, Hairstylists, and Cosmetologists	1,021	874	-147	-14.4%	-15	50	53	88	\$13.18
39-9011	Childcare Workers	584	608	24	4.1%	2	40	42	84	\$10.56
39-9032	Recreation Workers	370	428	58	15.7%	6	23	38	67	\$11.92
39-9041	Residential Advisors	111	152	41	36.9%	4		12	23	\$17.29
41-0000	Sales and Related Occupations	16,637	15,822	-815	- 4.9%	-82	852	1,315	2,085	\$13.63
41-1011	First-Line Supervisors of Retail Sales Workers	1,583	1,472	-111	-7.0%	-11	54	106	149	\$17.90
41-1011	First-Line Supervisors of Non-Retail Sales Workers	415	392	-23	-5.5%	-2	12	24	34	\$35.94
41-2011	Cashiers	4,158	3,680	-478	-11.5%	-48	333	375	660	\$10.63
41-2011	Counter and Rental Clerks	247	246	-478	-0.4%	0	11	17	28	\$13.86
41-2021	Parts Salespersons	340	346	6	1.8%	1	14	26	41	\$14.02
41-2022	Retail Salespersons	4,369	4,279	-90	-2.1%	-9	242	357	590	\$11.60
41-3021	Insurance Sales Agents	4,309	434	33	8.2%	3	14	23	40	\$23.47
	Securities, Commodities, and Financial Services Sales Agents	498	517	19	3.8%	2	11	32	45	\$23.66
41-3031 41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial	498	51/	19	3.070		11	32	43	\$25.00
41-3091	Services, and Travel	649	746	97	15.0%	10	18	61	89	\$23.15
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific	049	/40	97	13.0%	10	18	91	89	323.13
41-4011	Products	203	209	6	2.00/		6	14	21	¢2E 07
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and	203	209	D	3.0%	1	Ö	14	21	\$35.87
41-4012	•	1 0/10	1 065	17	0.9%	2	58	122	192	\$28.72
41-9022	Scientific Products	1,948 223	1,965 230	7	3.1%	1	58 9	132 10	20	\$28.72 \$16.98
41-9022	Real Estate Sales Agents	223	230	/	3.1%	1	9	10	20	\$10.98

		Emplo	yment*	Chang	ge in					
soc		2020	2030	Employ			Annua	l Openings		Median Wage
	Occupational Title	Annual	Projected	2020-2030		Growth	Exits	Transfers	Total	May 2021
41-9041	Telemarketers	1,205	968	-237	-19.7%	-24	50	111	137	\$14.47
43-0000	Office and Administrative Support Occupations	21,313	20,276	-1,037	-4.9%	-104	984	1,284	2,164	\$17.56
43-1011	First-Line Supervisors of Office and Administrative Support Workers	1,197	1,148	-49	-4.1%	-5	44	72	111	\$23.53
43-3011	Bill and Account Collectors	370	335	-35	-9.5%	-4	13	25	34	\$17.30
43-3021	Billing and Posting Clerks	590	584	-6	-1.0%	-1	24	36	59	\$17.74
43-3031	Bookkeeping, Accounting, and Auditing Clerks	1,744	1,679	-65	-3.7%	-6	100	87	181	\$17.90
43-3071	Tellers	542	442	-100	-18.5%	-10	20	31	41	\$14.10
43-4031	Court, Municipal, and License Clerks	314	336	22	7.0%	2	16	16	34	\$17.72
43-4051	Customer Service Representatives	3,193	3,110	-83	-2.6%	-8	148	248	388	\$16.95
43-4061	Eligibility Interviewers, Government Programs	269	285	16	6.0%	2	10	14	26	\$22.69
43-4081	Hotel, Motel, and Resort Desk Clerks	106	129	23	21.7%	2	7	12	21	\$10.90
43-4111	Interviewers, Except Eligibility and Loan	121	109	-12	-9.9%	-1	7	7	13	\$16.89
43-4121	Library Assistants, Clerical	122	117	-5	-4.1%	0	11	8	19	\$10.43
43-4131	Loan Interviewers and Clerks	105	105	0	0.0%	0	3	6	9	\$17.90
43-4151	Order Clerks	173	159	-14	-8.1%	-1	7	10	16	\$17.48
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	125	125	0	0.0%	0	5	8	13	\$17.67
43-4171	Receptionists and Information Clerks	1,221	1,178	-43	-3.5%	-4	67	83	146	\$13.52
43-5031	Police, Fire, and Ambulance Dispatchers	121	127	6	5.0%	1	4	7	12	\$21.95
43-5032	Dispatchers, Except Police, Fire, and Ambulance	139	150	11	7.9%	1	5	8	14	\$17.57
43-5052	Postal Service Mail Carriers	488	430	-58	-11.9%	-6	16	16	26	\$24.32
43-5061	Production, Planning, and Expediting Clerks	872	899	27	3.1%	3	32	58	93	\$23.14
43-5071	Shipping, Receiving, and Traffic Clerks	1,342	1,254	-88	-6.6%	-9	47	76	114	\$17.06
43-6011	Executive Secretaries and Executive Administrative Assistants	208	159	-49	-23.6%	-5	9	10	14	\$27.38
43-6012	Legal Secretaries	212	166	-46	-21.7%	-5	10	11	16	\$21.89
43-6013	Medical Secretaries	672	673	1	0.2%	0	34	38	72	\$16.82
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	1,782	1,615	-167	-9.4%	-17	86	95	164	\$17.18
43-9041	Insurance Claims and Policy Processing Clerks	250	244	-6	-2.4%	-1	9	14	22	\$21.38
43-9061	Office Clerks, General	3,712	3,557	-155	-4.2%	-16	198	216	398	\$17.33
45-0000	Farming, Fishing, and Forestry Occupations	N/A	N/A	N/A	N/A	1	19	51	71	\$15.06 †
47-0000	Construction and Extraction Occupations	6,281	6,579	298	4.7%	30	191	437	658	\$22.89
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	460	483	23	5.0%	2	13	30	45	\$29.99
47-2021	Brickmasons and Blockmasons	156	144	-12	-7.7%	-1	5	9	13	\$28.03
47-2031	Carpenters	804	809	5	0.6%	0	24	50	74	\$22.07
47-2051	Cement Masons and Concrete Finishers	146	143	-3	-2.1%	0	4	10	14	\$23.10
47-2061	Construction Laborers	1,303	1,397	94	7.2%	9	40	91	140	\$21.22
47-2073	Operating Engineers and Other Construction Equipment Operators	530	551	21	4.0%	2	18	39	59	\$27.29
47-2111	Electricians	797	858	61	7.7%	6	24	61	91	\$29.34
47-2141	Painters, Construction and Maintenance	333	339	6	1.8%	1	10	19	30	\$21.38
47-2152	Plumbers, Pipefitters, and Steamfitters	387	404	17	4.4%	2	12	28	42	\$28.07
47-2181	Roofers	289	304	15	5.2%	2	7	21	30	\$22.48
47-4051	Highway Maintenance Workers	231	247	16	6.9%	2	9	15	26	\$21.71

		Emplo	yment*	Chang	ge in					
soc		2020	2030	Employ			Annua	l Openings		Median Wage
Code	Occupational Title	Annual	Projected	2020-2030		Growth	Exits	Transfers	Total	May 2021
47-4071	Septic Tank Servicers and Sewer Pipe Cleaners	117	131	14	12.0%	1	4	10	15	\$22.21
49-0000	Installation, Maintenance, and Repair Occupations	7,808	8,255	447	5.7%	45	254	508	807	\$22.59
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	486	510	24	4.9%	2	14	30	46	\$30.18
49-2011	Computer, Automated Teller, and Office Machine Repairers	120	107	-13	-10.8%	-1	3	9	11	\$18.13
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	210	212	2	1.0%	0	7	16	23	\$29.20
49-3021	Automotive Body and Related Repairers	127	132	5	3.9%	0	4	8	12	\$21.45
49-3023	Automotive Service Technicians and Mechanics	926	914	-12	-1.3%	-1	27	62	88	\$17.82
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	478	501	23	4.8%	2	14	30	46	\$22.42
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	132	140	8	6.1%	1	4	9	14	\$27.80
49-3093	Tire Repairers and Changers	140	142	2	1.4%	0	4	12	16	\$13.63
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	584	614	30	5.1%	3	15	41	59	\$22.96
49-9041	Industrial Machinery Mechanics	1,150	1,341	191	16.6%	19	38	67	124	\$26.95
49-9052	Telecommunications Line Installers and Repairers	168	172	4	2.4%	0	4	14	18	\$22.80
49-9071	Maintenance and Repair Workers, General	1,696	1,781	85	5.0%	8	61	101	170	\$21.25
49-9099	Installation, Maintenance, and Repair Workers, All Other	441	466	25	5.7%	2	16	30	48	\$17.48
51-0000	Production Occupations	17,356	16,970	-386	-2.2%	-39	643	1,227	1,831	\$17.74
51-1011	First-Line Supervisors of Production and Operating Workers	1,236	1,246	10	0.8%	1	37	84	122	\$28.41
51-2028	Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders,									
	Tapers, and Finishers	208	214	6	2.9%	1	8	14	23	\$17.04
51-2041	Structural Metal Fabricators and Fitters	146	124	-22	-15.1%	-2	3	11	12	\$19.16
51-2090	Miscellaneous Assemblers and Fabricators	1,918	1,760	-158	-8.2%	-16	70	131	185	\$13.86
51-3011	Bakers	415	419	4	1.0%	0	23	31	54	\$12.83
51-3021	Butchers and Meat Cutters	135	122	-13	-9.6%	-1	5	10	14	\$14.02
51-3092	Food Batchmakers	345	353	8	2.3%	1	16	26	43	\$13.99
51-4021	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and									
	Plastic	185	168	-17	-9.2%	-2	6	11	15	\$16.43
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and									
	Plastic	351	322	-29	-8.3%	-3	11	23	31	\$17.92
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and									
	Tenders, Metal and Plastic	237	221	-16	-6.8%	-2	10	16	24	\$14.46
51-4041	Machinists	1,406	1,440	34	2.4%	3	48	97	148	\$18.52
51-4071	Foundry Mold and Coremakers	115	109	-6	-5.2%	-1	4	8	11	\$18.35 †
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders,									
	Metal and Plastic	335	303	-32	-9.6%	-3	10	22	29	\$14.43
51-4111	Tool and Die Makers	133	128	-5	-3.8%	0	5	8	13	\$22.71
51-4121	Welders, Cutters, Solderers, and Brazers	895	961	66	7.4%	7	24	73	104	\$18.23
51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	158	145	-13	-8.2%	-1	4	12	15	\$17.92
51-4191	Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	106	100	-6	-5.7%	-1	3	7	9	\$22.73
51-4193	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	148	137	-11	-7.4%	-1	5	10	14	\$14.16
51-5112	Printing Press Operators	264	259	-5	-1.9%	0	10	18	28	\$17.89
51-6011	Laundry and Dry-Cleaning Workers	397	396	-1	-0.3%	0	26	27	53	\$11.21

Occupational* Employment Projections Report, 2020-2030

		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
51-6031	Sewing Machine Operators	278	244	-34	-12.2%	-3	16	14	27	\$11.24
51-7011	Cabinetmakers and Bench Carpenters	195	210	15	7.7%	2	8	11	21	\$17.31
51-7042	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	117	123	6	5.1%	1	4	9	14	\$14.43
51-8031	Water and Wastewater Treatment Plant and System Operators	135	128	-7	-5.2%	-1	4	8	11	\$22.58
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	101	104	3	3.0%	0	4	8	12	\$17.06
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	1,006	861	-145	-14.4%	-14	36	74	96	\$17.92
51-9111	Packaging and Filling Machine Operators and Tenders	954	1,001	47	4.9%	5	40	65	110	\$14.48
51-9124	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	275	286	11	4.0%	1	8	20	29	\$17.92
51-9161	Computer Numerically Controlled Tool Operators	714	685	-29	-4.1%	-3	24	52	73	\$18.20
51-9162	Computer Numerically Controlled Tool Programmers	102	123	21	20.6%	2	4	8	14	\$28.36
51-9196	Paper Goods Machine Setters, Operators, and Tenders	128	118	-10	-7.8%	-1	6	8	13	\$17.79
51-9198	HelpersProduction Workers	294	269	-25	-8.5%	-2	13	26	37	\$13.63
51-9199	Production Workers, All Other	200	210	10	5.0%	1	7	15	23	\$17.63
53-0000	Transportation and Material Moving Occupations	14,635	15,673	1,038	7.1%	104	710	1,206	2,020	\$16.49
53-1047	FirstLine Supervisors of Transportation & Material Moving Workers, Exc Aircraft									
	Cargo Handling Supervisor	536	539	3	0.6%	0	20	37	57	\$22.58
53-3031	Driver/Sales Workers	988	1,143	155	15.7%	16	44	72	132	\$10.65
53-3032	Heavy and Tractor-Trailer Truck Drivers	1,913	2,012	99	5.2%	10	80	133	223	\$22.36
53-3033	Light Truck or Delivery Services Drivers	1,334	1,479	145	10.9%	14	58	95	167	\$17.48
53-3058	Passenger Vehicle Drivers, Except Bus Drivers, Transit and Intercity	634	828	194	30.6%	19	48	36	103	\$18.05 ^^^
53-7021	Crane and Tower Operators	160	160	0	0.0%	0	4	12	16	\$23.60
53-7051	Industrial Truck and Tractor Operators	537	555	18	3.4%	2	16	42	60	\$18.29
53-7061	Cleaners of Vehicles and Equipment	426	443	17	4.0%	2	21	39	62	\$13.88
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	3,266	3,472	206	6.3%	21	147	293	461	\$14.74
53-7064	Packers and Packagers, Hand	1,063	1,108	45	4.2%	4	62	88	154	\$13.43
53-7065	Stockers and Order Fillers	2,758	2,847	89	3.2%	9	160	273	442	\$13.63
53-7081	Refuse and Recyclable Material Collectors	198	219	21	10.6%	2	9	19	30	\$17.56

^{*} Occupations with 100 or more workers.

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

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

[^] National hourly wage.

^{^^} National annual wage.

^{^^^} National aggregate wage.

[#] Wage above max.

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

[†] Statewide hourly wage.

^{††} Statewide annual wage.

			Work Experience in	Typical On-The-Job Training Needed	
soc		Typical Education	a Related	to Attain Competency in the	Median Wage
	Occupational Title	Needed for Entry	Occupation	Occupation	May 2021
	Total, All Occupations	Needed for Lifting	Occupation	Occupation	\$17.79
11-0000	Management Occupations				\$45.25
11-1011	Chief Executives	Bachelor's degree	5 years or more	None	\$74.73
11-1011	General and Operations Managers	Bachelor's degree	5 years or more	None	\$37.26
11-2022	Sales Managers	Bachelor's degree	Less than 5 years	None	\$60.15
11-3010	Administrative Services and Facilities Managers	Bachelor's degree	Less than 5 years	None	\$47.73 ^
11-3021	Computer and Information Systems Managers	Bachelor's degree	5 years or more	None	\$58.19
11-3031	Financial Managers	Bachelor's degree	5 years or more	None	\$57.80
11-3051	Industrial Production Managers	Bachelor's degree	5 years or more	None	\$47.08
11-3071	Transportation, Storage, and Distribution Managers	High school diploma or equivalent	5 years or more	None	\$38.43
11-9021	Construction Managers	Bachelor's degree	None	Moderate-term on-the-job training	\$38.40
11-9032	Education Administrators, Elementary and Secondary School	Master's degree	5 years or more	None	\$94,860 **
11-9033	Education Administrators, Postsecondary	Master's degree	Less than 5 years	None	\$46.96
11-9051	Food Service Managers	High school diploma or equivalent	Less than 5 years	None	\$22.93
11-9111	Medical and Health Services Managers	Bachelor's degree	Less than 5 years	None	\$46.01
11-9141	Property, Real Estate, and Community Association Managers	High school diploma or equivalent	Less than 5 years	None	\$22.45
11-9151	Social and Community Service Managers	Bachelor's degree	Less than 5 years	None	\$29.81
11-9198	Personal Service Managers; Entertainment & Recreation Managers, Except	Buchelor 3 degree	Less than 5 years	None	Q23.01
11 3130	Gambling; and Managers, All Other	Bachelor's degree	Less than 5 years	None	\$59.93 ^^^
13-0000	Business and Financial Operations Occupations	Dadinerer of degree	zess man s years		\$29.08
					·
13-1020	Buyers and Purchasing Agents	Bachelor's degree	None	Moderate-term on-the-job training	\$28.91
13-1020 13-1031	Buyers and Purchasing Agents Claims Adjusters, Examiners, and Investigators	Bachelor's degree High school diploma or equivalent	None None	Moderate-term on-the-job training Long-term on-the-job training	
13-1031	Claims Adjusters, Examiners, and Investigators	High school diploma or equivalent	+	Long-term on-the-job training	\$29.62
13-1031 13-1041	Claims Adjusters, Examiners, and Investigators Compliance Officers	High school diploma or equivalent Bachelor's degree	None None	Long-term on-the-job training Moderate-term on-the-job training	
13-1031 13-1041 13-1051	Claims Adjusters, Examiners, and Investigators	High school diploma or equivalent	None	Long-term on-the-job training	\$29.62 \$27.82
13-1031 13-1041	Claims Adjusters, Examiners, and Investigators Compliance Officers Cost Estimators Human Resources Specialists	High school diploma or equivalent Bachelor's degree Bachelor's degree Bachelor's degree	None None None None	Long-term on-the-job training Moderate-term on-the-job training Moderate-term on-the-job training	\$29.62 \$27.82 \$29.11
13-1031 13-1041 13-1051 13-1071	Claims Adjusters, Examiners, and Investigators Compliance Officers Cost Estimators	High school diploma or equivalent Bachelor's degree Bachelor's degree	None None None	Long-term on-the-job training Moderate-term on-the-job training Moderate-term on-the-job training None	\$29.62 \$27.82 \$29.11 \$23.35
13-1031 13-1041 13-1051 13-1071 13-1075	Claims Adjusters, Examiners, and Investigators Compliance Officers Cost Estimators Human Resources Specialists Labor Relations Specialists Logisticians	High school diploma or equivalent Bachelor's degree Bachelor's degree Bachelor's degree Bachelor's degree Bachelor's degree	None None None Less than 5 years None	Long-term on-the-job training Moderate-term on-the-job training Moderate-term on-the-job training None None	\$29.62 \$27.82 \$29.11 \$23.35 \$35.91
13-1031 13-1041 13-1051 13-1071 13-1075 13-1081	Claims Adjusters, Examiners, and Investigators Compliance Officers Cost Estimators Human Resources Specialists Labor Relations Specialists	High school diploma or equivalent Bachelor's degree Bachelor's degree Bachelor's degree Bachelor's degree Bachelor's degree Bachelor's degree	None None None None Less than 5 years	Long-term on-the-job training Moderate-term on-the-job training Moderate-term on-the-job training None None None	\$29.62 \$27.82 \$29.11 \$23.35 \$35.91 \$37.03
13-1031 13-1041 13-1051 13-1071 13-1075 13-1081 13-1111	Claims Adjusters, Examiners, and Investigators Compliance Officers Cost Estimators Human Resources Specialists Labor Relations Specialists Logisticians Management Analysts	High school diploma or equivalent Bachelor's degree	None None None Less than 5 years None Less than 5 years	Long-term on-the-job training Moderate-term on-the-job training Moderate-term on-the-job training None None None None None	\$29.62 \$27.82 \$29.11 \$23.35 \$35.91 \$37.03 \$38.17
13-1031 13-1041 13-1051 13-1071 13-1075 13-1081 13-1111 13-1131	Claims Adjusters, Examiners, and Investigators Compliance Officers Cost Estimators Human Resources Specialists Labor Relations Specialists Logisticians Management Analysts Fundraisers Training and Development Specialists	High school diploma or equivalent Bachelor's degree	None None None Less than 5 years None Less than 5 years None	Long-term on-the-job training Moderate-term on-the-job training Moderate-term on-the-job training None None None None None None None	\$29.62 \$27.82 \$29.11 \$23.35 \$35.91 \$37.03 \$38.17 \$23.35
13-1031 13-1041 13-1051 13-1071 13-1075 13-1081 13-1111 13-1131 13-1151	Claims Adjusters, Examiners, and Investigators Compliance Officers Cost Estimators Human Resources Specialists Labor Relations Specialists Logisticians Management Analysts Fundraisers Training and Development Specialists Market Research Analysts and Marketing Specialists	High school diploma or equivalent Bachelor's degree	None None None Less than 5 years None Less than 5 years None Less than 5 years	Long-term on-the-job training Moderate-term on-the-job training Moderate-term on-the-job training None None None None None None None None	\$29.62 \$27.82 \$29.11 \$23.35 \$35.91 \$37.03 \$38.17 \$23.35 \$18.63
13-1031 13-1041 13-1051 13-1071 13-1075 13-1081 13-1111 13-1131 13-1151 13-1161	Claims Adjusters, Examiners, and Investigators Compliance Officers Cost Estimators Human Resources Specialists Labor Relations Specialists Logisticians Management Analysts Fundraisers Training and Development Specialists	High school diploma or equivalent Bachelor's degree	None None Less than 5 years None	Long-term on-the-job training Moderate-term on-the-job training Moderate-term on-the-job training None None None None None None None None	\$29.62 \$27.82 \$29.11 \$23.35 \$35.91 \$37.03 \$38.17 \$23.35 \$18.63 \$27.26
13-1031 13-1041 13-1051 13-1071 13-1075 13-1081 13-1111 13-1131 13-1151 13-1161 13-1198	Claims Adjusters, Examiners, and Investigators Compliance Officers Cost Estimators Human Resources Specialists Labor Relations Specialists Logisticians Management Analysts Fundraisers Training and Development Specialists Market Research Analysts and Marketing Specialists Project Management Specialists and Business Operations Specialists, All Other	High school diploma or equivalent Bachelor's degree	None None Less than 5 years None None	Long-term on-the-job training Moderate-term on-the-job training Moderate-term on-the-job training None None None None None None None None	\$29.62 \$27.82 \$29.11 \$23.35 \$35.91 \$37.03 \$38.17 \$23.35 \$18.63 \$27.26 \$35.90 ^^^
13-1031 13-1041 13-1051 13-1071 13-1075 13-1081 13-1111 13-1131 13-1151 13-1161 13-1198 13-2011	Claims Adjusters, Examiners, and Investigators Compliance Officers Cost Estimators Human Resources Specialists Labor Relations Specialists Logisticians Management Analysts Fundraisers Training and Development Specialists Market Research Analysts and Marketing Specialists Project Management Specialists and Business Operations Specialists, All Other Accountants and Auditors	High school diploma or equivalent Bachelor's degree	None None None Less than 5 years None None None	Long-term on-the-job training Moderate-term on-the-job training Moderate-term on-the-job training None None None None None None None None	\$29.62 \$27.82 \$29.11 \$23.35 \$35.91 \$37.03 \$38.17 \$23.35 \$18.63 \$27.26 \$35.90 ^^^
13-1031 13-1041 13-1051 13-1071 13-1075 13-1081 13-1111 13-1131 13-1151 13-1161 13-1198 13-2011 13-2052	Claims Adjusters, Examiners, and Investigators Compliance Officers Cost Estimators Human Resources Specialists Labor Relations Specialists Logisticians Management Analysts Fundraisers Training and Development Specialists Market Research Analysts and Marketing Specialists Project Management Specialists and Business Operations Specialists, All Other Accountants and Auditors Personal Financial Advisors	High school diploma or equivalent Bachelor's degree	None None None Less than 5 years None None None None	Long-term on-the-job training Moderate-term on-the-job training Moderate-term on-the-job training None None None None None None None None	\$29.62 \$27.82 \$29.11 \$23.35 \$35.91 \$37.03 \$38.17 \$23.35 \$18.63 \$27.26 \$35.90 ^^^ \$30.04 \$28.61
13-1031 13-1041 13-1051 13-1071 13-1075 13-1081 13-1111 13-1131 13-1151 13-1161 13-1198 13-2011 13-2052 13-2072	Claims Adjusters, Examiners, and Investigators Compliance Officers Cost Estimators Human Resources Specialists Labor Relations Specialists Logisticians Management Analysts Fundraisers Training and Development Specialists Market Research Analysts and Marketing Specialists Project Management Specialists and Business Operations Specialists, All Other Accountants and Auditors Personal Financial Advisors Loan Officers	High school diploma or equivalent Bachelor's degree	None None None Less than 5 years None None None None	Long-term on-the-job training Moderate-term on-the-job training Moderate-term on-the-job training None None None None None None None None	\$29.62 \$27.82 \$29.11 \$23.35 \$35.91 \$37.03 \$38.17 \$23.35 \$18.63 \$27.26 \$35.90 ^^^ \$30.04 \$28.61
13-1031 13-1041 13-1051 13-1071 13-1075 13-1081 13-1111 13-1131 13-1151 13-1161 13-1198 13-2011 13-2052 13-2072	Claims Adjusters, Examiners, and Investigators Compliance Officers Cost Estimators Human Resources Specialists Labor Relations Specialists Logisticians Management Analysts Fundraisers Training and Development Specialists Market Research Analysts and Marketing Specialists Project Management Specialists and Business Operations Specialists, All Other Accountants and Auditors Personal Financial Advisors Loan Officers Financial and Investment Analysts, Financial Risk Specialists, and Financial	High school diploma or equivalent Bachelor's degree	None None None Less than 5 years None Less than 5 years None Less than 5 years None None None None None None Less than 5 years	Long-term on-the-job training Moderate-term on-the-job training Moderate-term on-the-job training None None None None None None None None	\$29.62 \$27.82 \$29.11 \$23.35 \$35.91 \$37.03 \$38.17 \$23.35 \$18.63 \$27.26 \$35.90 ^^^ \$30.04 \$28.61 \$23.76
13-1031 13-1041 13-1051 13-1071 13-1075 13-1081 13-1111 13-1131 13-1151 13-1161 13-1198 13-2011 13-2052 13-2072	Claims Adjusters, Examiners, and Investigators Compliance Officers Cost Estimators Human Resources Specialists Labor Relations Specialists Logisticians Management Analysts Fundraisers Training and Development Specialists Market Research Analysts and Marketing Specialists Project Management Specialists and Business Operations Specialists, All Other Accountants and Auditors Personal Financial Advisors Loan Officers Financial and Investment Analysts, Financial Risk Specialists, and Financial Specialists, All Other	High school diploma or equivalent Bachelor's degree	None None None Less than 5 years None Less than 5 years None Less than 5 years None None None None None None Less than 5 years	Long-term on-the-job training Moderate-term on-the-job training Moderate-term on-the-job training None None None None None None None None	\$29.62 \$27.82 \$29.11 \$23.35 \$35.91 \$37.03 \$38.17 \$23.35 \$18.63 \$27.26 \$35.90 ^^^ \$30.04 \$28.61 \$23.76
13-1031 13-1041 13-1051 13-1071 13-1075 13-1081 13-1111 13-1131 13-1151 13-1161 13-1198 13-2011 13-2052 13-2072 13-2098	Claims Adjusters, Examiners, and Investigators Compliance Officers Cost Estimators Human Resources Specialists Labor Relations Specialists Logisticians Management Analysts Fundraisers Training and Development Specialists Market Research Analysts and Marketing Specialists Project Management Specialists and Business Operations Specialists, All Other Accountants and Auditors Personal Financial Advisors Loan Officers Financial and Investment Analysts, Financial Risk Specialists, and Financial Specialists, All Other Computer and Mathematical Occupations	High school diploma or equivalent Bachelor's degree	None None None Less than 5 years None Less than 5 years None Less than 5 years None None None None None None None None	Long-term on-the-job training Moderate-term on-the-job training Moderate-term on-the-job training None None None None None None None None	\$29.62 \$27.82 \$29.11 \$23.35 \$35.91 \$37.03 \$38.17 \$23.35 \$18.63 \$27.26 \$35.90 ^^^ \$30.04 \$28.61 \$23.76
13-1031 13-1041 13-1051 13-1071 13-1075 13-1081 13-1111 13-1131 13-1151 13-1161 13-1198 13-2011 13-2052 13-2072 13-2098	Claims Adjusters, Examiners, and Investigators Compliance Officers Cost Estimators Human Resources Specialists Labor Relations Specialists Logisticians Management Analysts Fundraisers Training and Development Specialists Market Research Analysts and Marketing Specialists Project Management Specialists and Business Operations Specialists, All Other Accountants and Auditors Personal Financial Advisors Loan Officers Financial and Investment Analysts, Financial Risk Specialists, and Financial Specialists, All Other Computer and Mathematical Occupations Computer Systems Analysts	High school diploma or equivalent Bachelor's degree	None None None Less than 5 years None Less than 5 years None Less than 5 years None None None None None None None None	Long-term on-the-job training Moderate-term on-the-job training Moderate-term on-the-job training None None None None None None None None	\$29.62 \$27.82 \$29.11 \$23.35 \$35.91 \$37.03 \$38.17 \$23.35 \$18.63 \$27.26 \$35.90 ^^^ \$30.04 \$28.61 \$23.76
13-1031 13-1041 13-1051 13-1071 13-1075 13-1081 13-1111 13-1131 13-1151 13-1161 13-1198 13-2011 13-2052 13-2072 13-2098	Claims Adjusters, Examiners, and Investigators Compliance Officers Cost Estimators Human Resources Specialists Labor Relations Specialists Logisticians Management Analysts Fundraisers Training and Development Specialists Market Research Analysts and Marketing Specialists Project Management Specialists and Business Operations Specialists, All Other Accountants and Auditors Personal Financial Advisors Loan Officers Financial and Investment Analysts, Financial Risk Specialists, and Financial Specialists, All Other Computer and Mathematical Occupations Computer Systems Analysts Computer Network Support Specialists	High school diploma or equivalent Bachelor's degree	None None None Less than 5 years None Less than 5 years None Less than 5 years None None None None None None None None	Long-term on-the-job training Moderate-term on-the-job training Moderate-term on-the-job training None None None None None None None None	\$29.62 \$27.82 \$29.11 \$23.35 \$35.91 \$37.03 \$38.17 \$23.35 \$18.63 \$27.26 \$35.90 ^^^ \$30.04 \$28.61 \$23.76 \$35.21 ^^^ \$35.23 \$38.48 \$28.23

			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
15-1299	Computer Occupations, All Other	Bachelor's degree	None	None	\$28.57
17-0000	Architecture and Engineering Occupations	Dachelor's degree	None	None	\$36.21
17-2051	Civil Engineers	Bachelor's degree	None	None	\$37.23
17-2031	Electrical Engineers	Bachelor's degree	None	None	\$38.41
17-2071	Industrial Engineers	Bachelor's degree	None	None	\$45.23
17-2112	Mechanical Engineers	ĕ	None	None	\$36.17
17-2141	Architectural and Civil Drafters	Bachelor's degree	None	None	\$22.82
		Associate's degree	None	None	· ·
19-0000	Life, Physical, and Social Science Occupations	Dartandan mafaasiaaal daraa	Nana	lucka on alsing for a sint and a sint	\$31.13 † \$38.96 ^^^
19-3031	Clinical, Counseling, and School Psychologists	Doctoral or professional degree	None	Internship/residency	1
19-5011	Occupational Health and Safety Specialists	Bachelor's degree	None	None	\$37.03
21-0000	Community and Social Service Occupations				\$22.34
21-1012	Educational, Guidance, School, and Vocational Counselors	Master's degree	None	None	\$28.62
21-1015	Rehabilitation Counselors	Master's degree	None	None	\$17.48
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	\$22.47
21-1022	Healthcare Social Workers	Master's degree	None	Internship/residency	\$23.91
21-1023	Mental Health and Substance Abuse Social Workers	Master's degree	None	Internship/residency	\$22.60
21-1029	Social Workers, All Other	Bachelor's degree	None	None	\$22.96
21-1092	Probation Officers and Correctional Treatment Specialists	Bachelor's degree	None	Short-term on-the-job training	\$22.96
21-1093	Social and Human Service Assistants	High school diploma or equivalent	None	Short-term on-the-job training	\$16.86
21-2011	Clergy	Bachelor's degree	None	Moderate-term on-the-job training	\$23.16
23-0000	Legal Occupations				\$30.44
23-1011	Lawyers	Doctoral or professional degree	None	None	\$36.57
23-2011	Paralegals and Legal Assistants	Associate's degree	None	None	\$18.74
25-0000	Education, Training, and Library Occupations				\$28.26
25-1194	Vocational Education Teachers, Postsecondary	Bachelor's degree	Less than 5 years	None	\$37.09
25-1199	Postsecondary Teachers, All Other	Doctoral or professional degree	None	None	\$60,900 **
25-2011	Preschool Teachers, Except Special Education	Associate's degree	None	None	\$13.52
25-2012	Kindergarten Teachers, Except Special Education	Bachelor's degree	None	None	\$60,900 **
25-2021	Elementary School Teachers, Except Special Education	Bachelor's degree	None	None	\$74,080 **
25-2022	Middle School Teachers, Except Special and Career/Technical Education	Bachelor's degree	None	None	\$62,470 **
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's degree	None	None	\$73,750 **
25-2052	Special Education Teachers, Kindergarten and Elementary School	Bachelor's degree	None	None	\$72,400 **
25-2058	Special Education Teachers, Secondary School	Bachelor's degree	None	None	\$72,470 **
25-3021	Self-Enrichment Education Teachers	High school diploma or equivalent	Less than 5 years	None	\$13.72
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	\$21.94
25-4031	Library Technicians	Postsecondary non-degree award	None	None	\$14.49
25-9031	Instructional Coordinators	Master's degree	5 years or more	None	\$29.28
25-9045	Teaching Assistants, Except Postsecondary	Some college, no degree	None	None	\$28,190 **
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations				\$18.53
27-1024	Graphic Designers	Bachelor's degree	None	None	\$22.62
27-1026	Merchandise Displayers and Window Trimmers	High school diploma or equivalent	None	Short-term on-the-job training	\$14.65
_, 1020	merenance enaphyris and vinidow infilmers	o sanoor arpiorna or equivalent		short term on the job training	71.00

			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
27-2022	Coaches and Scouts	Bachelor's degree	None	None	\$30,470 **
27-2022	Musicians and Singers	No formal educational credential	None	Long-term on-the-job training	\$47.38 †
27-3031	Public Relations Specialists	Bachelor's degree	None	None	\$24.19
27-3031	Writers and Authors	Bachelor's degree	None	Long-term on-the-job training	\$24.06 †
29-0000	Healthcare Practitioners and Technical Occupations	bachelor's degree	None	Long-term on-the-job training	\$28.97
29-1051	Pharmacists	Doctoral or professional degree	None	None	\$60.68
29-1031	Physician Assistants	Master's degree	None	None	\$46.35
29-1071	Occupational Therapists	Master's degree	None	None	\$38.16
29-1122	Physical Therapists	Doctoral or professional degree	None	None	\$45.26
29-1125					\$45.26
	Respiratory Therapists	Associate's degree	None	None	
29-1127	Speech-Language Pathologists	Master's degree	None	Internship/residency	\$36.90
29-1141	Registered Nurses	Bachelor's degree	None	None	\$29.58
29-1171	Nurse Practitioners	Master's degree	None	None	\$47.97
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	\$29.27
29-2034	Radiologic Technologists	Associate's degree	None	None	\$27.83
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	\$14.02
29-2055	Surgical Technologists	Postsecondary non-degree award	None	None	\$21.62
29-2061	Licensed Practical and Licensed Vocational Nurses	Postsecondary non-degree award	None	None	\$22.14
29-2098	Medical Dosimetrists, Medical Records Specialists, and Health Technologists and				
	Technicians, All Other	Postsecondary non-degree award	None	None	\$26.19 ^^^
31-0000	Healthcare Support Occupations				\$13.70
31-1120	Home Health and Personal Care Aides	High school diploma or equivalent	None	Short-term on-the-job training	\$11.35
31-1131	Nursing Assistants	Postsecondary non-degree award	None	None	\$13.84
31-2011	Occupational Therapy Assistants	Associate's degree	None	None	\$28.28
31-2021	Physical Therapist Assistants	Associate's degree	None	None	\$28.28
31-9091	Dental Assistants	Postsecondary non-degree award	None	None	\$18.06
31-9092	Medical Assistants	Postsecondary non-degree award	None	None	\$16.73
31-9097	Phlebotomists	Postsecondary non-degree award	None	None	\$17.04
33-0000	Protective Service Occupations				\$19.25
33-2011	Firefighters	Postsecondary non-degree award	None	Long-term on-the-job training	\$18.74
33-3012	Correctional Officers and Jailers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.81
33-3051	Police and Sheriff's Patrol Officers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$28.53
33-9032	Security Guards	High school diploma or equivalent	None	Short-term on-the-job training	\$14.70
33-9098	School Bus Monitors and Protective Service Workers, All Other	High school diploma or equivalent	None	Short-term on-the-job training	\$15.11 ^^^
35-0000	Food Preparation and Serving Related Occupations				\$10.72
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	High school diploma or equivalent	Less than 5 years	None	\$17.08
35-2011	Cooks, Fast Food	No formal educational credential	None	Short-term on-the-job training	\$10.43
35-2012	Cooks, Institution and Cafeteria	No formal educational credential	None	Short-term on-the-job training	\$14.03
35-2014	Cooks, Restaurant	No formal educational credential	Less than 5 years	Moderate-term on-the-job training	\$13.54
35-2021	Food Preparation Workers	No formal educational credential	None	Short-term on-the-job training	\$11.38
35-3011	Bartenders	No formal educational credential	None	Short-term on-the-job training	\$9.90

			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
35-3023	Fast Food and Counter Workers	No formal educational credential	None	Short-term on-the-job training	\$10.50
35-3023	Waiters and Waitresses	No formal educational credential	None	Short-term on the job training Short-term on-the-job training	\$9.63
35-3041	Food Servers, Nonrestaurant	No formal educational credential	None	Short-term on the job training Short-term on-the-job training	\$11.08
35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	No formal educational credential	None	Short-term on-the-job training	\$10.74
35-9011	Dishwashers	No formal educational credential	None	Short-term on-the-job training	\$10.66
37-0000	Building and Grounds Cleaning and Maintenance Occupations	No formal educational credential	None	Short-term on-the-job training	\$10.00
37-0000	First-Line Supervisors of Housekeeping and Janitorial Workers	High school diploma or equivalent	Loss than E years	None	\$13.79
		High school diploma or equivalent	Less than 5 years	None	,
37-1012		High school diploma or equivalent	Less than 5 years	None	\$22.49
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	No formal educational credential	None	Short-term on-the-job training	\$13.55
37-2012	Maids and Housekeeping Cleaners	No formal educational credential	None	Short-term on-the-job training	\$11.34
37-3011	Landscaping and Groundskeeping Workers	No formal educational credential	None	Short-term on-the-job training	\$14.62
39-0000	Personal Care and Service Occupations				\$11.25
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 ^^^
39-3091	Amusement and Recreation Attendants	No formal educational credential	None	Short-term on-the-job training	\$9.61
39-5012	Hairdressers, Hairstylists, and Cosmetologists	Postsecondary non-degree award	None	None	\$13.18
39-9011	Childcare Workers	High school diploma or equivalent	None	Short-term on-the-job training	\$10.56
39-9032	Recreation Workers	High school diploma or equivalent	None	Short-term on-the-job training	\$11.92
39-9041	Residential Advisors	High school diploma or equivalent	None	Short-term on-the-job training	\$17.29
41-0000	Sales and Related Occupations				\$13.63
41-1011	First-Line Supervisors of Retail Sales Workers	High school diploma or equivalent	Less than 5 years	None	\$17.90
41-1012	First-Line Supervisors of Non-Retail Sales Workers	High school diploma or equivalent	Less than 5 years	None	\$35.94
41-2011	Cashiers	No formal educational credential	None	Short-term on-the-job training	\$10.63
41-2021	Counter and Rental Clerks	No formal educational credential	None	Short-term on-the-job training	\$13.86
41-2022	Parts Salespersons	No formal educational credential	None	Moderate-term on-the-job training	\$14.02
41-2031	Retail Salespersons	No formal educational credential	None	Short-term on-the-job training	\$11.60
41-3021	Insurance Sales Agents	High school diploma or equivalent	None	Moderate-term on-the-job training	\$23.47
41-3031	Securities, Commodities, and Financial Services Sales Agents	Bachelor's degree	None	Moderate-term on-the-job training	\$23.66
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial			, , , , , , , , , , , , , , , , , , ,	,
	Services, and Travel	High school diploma or equivalent	None	Moderate-term on-the-job training	\$23.15
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific				7-0.20
		Bachelor's degree	None	Moderate-term on-the-job training	\$35.87
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and	Ducine. C. C. deg. ec		moderate term on the jew truming	400.07
71 7012	Scientific Products	High school diploma or equivalent	None	Moderate-term on-the-job training	\$28.72
41-9022	Real Estate Sales Agents	High school diploma or equivalent	None	Moderate-term on-the-job training	\$16.98
41-9022	Telemarketers	No formal educational credential	None	Short-term on-the-job training	\$10.98
41 -9041	Office and Administrative Support Occupations	ivo formai educational credential	INOTIC	Short-term on-the-job training	\$17.56
43-1011	First-Line Supervisors of Office and Administrative Support Workers	High school diploma or equivalent	Less than 5 years	None	\$23.53
43-3011	Bill and Account Collectors	High school diploma or equivalent	None	Moderate-term on-the-job training	\$23.33
				, ,	•
43-3021	Billing and Posting Clerks	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.74
43-3031	Bookkeeping, Accounting, and Auditing Clerks	Some college, no degree	None	Moderate-term on-the-job training	\$17.90
43-3071	Tellers	High school diploma or equivalent	None	Short-term on-the-job training	\$14.10
43-4031	Court, Municipal, and License Clerks	High school diploma or equivalent	None	Long-term on-the-job training	\$17.72

			Work Experience in	Typical On-The-Job Training Needed	
soc		Typical Education	a Related	to Attain Competency in the	Median Wage
	Occupational Title	Needed for Entry	Occupation	Occupation	May 2021
43-4051	Customer Service Representatives	High school diploma or equivalent	None	Short-term on-the-job training	\$16.95
43-4061	Eligibility Interviewers, Government Programs	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.69
43-4081	Hotel, Motel, and Resort Desk Clerks	High school diploma or equivalent	None	Short-term on-the-job training	\$10.90
43-4111	Interviewers, Except Eligibility and Loan	High school diploma or equivalent	None	Short-term on the job training Short-term on-the-job training	\$16.89
43-4111	Library Assistants, Clerical	High school diploma or equivalent	None	Short-term on-the-job training	\$10.43
43-4121	Loan Interviewers and Clerks	High school diploma or equivalent	None	, ,	\$17.90
43-4151	Order Clerks		None	Short-term on-the-job training	\$17.48
		Some college, no degree		Short-term on-the-job training	•
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	Associate's degree	None	None	\$17.67
43-4171	Receptionists and Information Clerks	High school diploma or equivalent	None	Short-term on-the-job training	\$13.52
43-5031	Police, Fire, and Ambulance Dispatchers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$21.95
43-5032	Dispatchers, Except Police, Fire, and Ambulance	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.57
43-5052	Postal Service Mail Carriers	High school diploma or equivalent	None	Short-term on-the-job training	\$24.32
43-5061	Production, Planning, and Expediting Clerks	High school diploma or equivalent	None	Moderate-term on-the-job training	\$23.14
43-5071	Shipping, Receiving, and Traffic Clerks	High school diploma or equivalent	None	Short-term on-the-job training	\$17.06
43-6011	Executive Secretaries and Executive Administrative Assistants	High school diploma or equivalent	Less than 5 years	None	\$27.38
43-6012	Legal Secretaries	High school diploma or equivalent	None	Moderate-term on-the-job training	\$21.89
43-6013	Medical Secretaries	High school diploma or equivalent	None	Moderate-term on-the-job training	\$16.82
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	High school diploma or equivalent	None	Short-term on-the-job training	\$17.18
43-9041	Insurance Claims and Policy Processing Clerks	High school diploma or equivalent	None	Moderate-term on-the-job training	\$21.38
43-9061	Office Clerks, General	High school diploma or equivalent	None	Short-term on-the-job training	\$17.33
45-0000	Farming, Fishing, and Forestry Occupations				\$15.06 †
47-0000	Construction and Extraction Occupations				\$22.89
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	High school diploma or equivalent	5 years or more	None	\$29.99
47-2021	Brickmasons and Blockmasons	High school diploma or equivalent	None	Apprenticeship	\$28.03
47-2031	Carpenters	High school diploma or equivalent	None	Apprenticeship	\$22.07
47-2051	Cement Masons and Concrete Finishers	No formal educational credential	None	Moderate-term on-the-job training	\$23.10
47-2061	Construction Laborers	No formal educational credential	None	Short-term on-the-job training	\$21.22
47-2073	Operating Engineers and Other Construction Equipment Operators	High school diploma or equivalent	None	Moderate-term on-the-job training	\$27.29
47-2111	Electricians	High school diploma or equivalent	None	Apprenticeship	\$29.34
47-2141	Painters, Construction and Maintenance	No formal educational credential	None	Moderate-term on-the-job training	\$21.38
47-2152	Plumbers, Pipefitters, and Steamfitters	High school diploma or equivalent	None	Apprenticeship	\$28.07
47-2181	Roofers	No formal educational credential	None	Moderate-term on-the-job training	\$22.48
47-4051	Highway Maintenance Workers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$21.71
47-4071	Septic Tank Servicers and Sewer Pipe Cleaners	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.21
49-0000	Installation, Maintenance, and Repair Occupations	riight seriest diploma of equivalent	TTOTIC	inoderate term on the job training	\$22.59
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	High school diploma or equivalent	Less than 5 years	None	\$30.18
49-2011	Computer, Automated Teller, and Office Machine Repairers	Some college, no degree	None	Short-term on-the-job training	\$18.13
49-2011	Telecommunications Equipment Installers and Repairers, Except Line Installers	Postsecondary non-degree award	None	Moderate-term on-the-job training	\$29.20
49-3021	Automotive Body and Related Repairers	High school diploma or equivalent	None	Long-term on-the-job training	\$21.45
49-3023	Automotive Service Technicians and Mechanics	Postsecondary non-degree award	None	Short-term on-the-job training	\$17.82
49-3023	Bus and Truck Mechanics and Diesel Engine Specialists	High school diploma or equivalent	None	, ,	\$17.82
			1	Long-term on-the-job training	
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	High school diploma or equivalent	None	Long-term on-the-job training	\$27.80
49-3093	Tire Repairers and Changers	High school diploma or equivalent	None	Short-term on-the-job training	\$13.63

			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
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	Postsecondary non-degree award	None	Long-term on-the-job training	\$22.96
49-9041	Industrial Machinery Mechanics	High school diploma or equivalent	None	Long-term on-the-job training	\$26.95
49-9052	Telecommunications Line Installers and Repairers	High school diploma or equivalent	None	Long-term on-the-job training	\$22.80
49-9071	Maintenance and Repair Workers, General	High school diploma or equivalent	None	Moderate-term on-the-job training	\$21.25
49-9099	Installation, Maintenance, and Repair Workers, All Other	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.48
51-0000	Production Occupations			and the same of th	\$17.74
51-1011	First-Line Supervisors of Production and Operating Workers	High school diploma or equivalent	Less than 5 years	None	\$28.41
51-2028	Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders,	8 p	,		
01 2020	Tapers, and Finishers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.04
51-2041	Structural Metal Fabricators and Fitters	High school diploma or equivalent	None	Moderate-term on-the-job training	\$19.16
51-2090	Miscellaneous Assemblers and Fabricators	High school diploma or equivalent	None	Moderate-term on-the-job training	\$13.86
51-3011	Bakers	No formal educational credential	None	Long-term on-the-job training	\$12.83
51-3021	Butchers and Meat Cutters	No formal educational credential	None	Long-term on-the-job training	\$14.02
51-3092	Food Batchmakers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$13.99
51-4021	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and	riigii scriooi dipioriia oi equivalent	None	Moderate term on the job training	713.33
31-4021	Plastic	High school diploma or equivalent	None	Moderate-term on-the-job training	\$16.43
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and	riigii scriooi dipioiria or equivalent	None	Moderate-term on-the-job training	\$10.43
31-4031	Plastic	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.92
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and	rigii scriooi dipioiria di equivalent	None	Widderate-term on-the-job training	\$17.52
51-4033		High school diploma or oquivalent	None	Madarata tarm on the job training	¢14.46
51-4041	Tenders, Metal and Plastic	High school diploma or equivalent	None	Moderate-term on-the-job training	\$14.46
51-4041	Machinists Foundary Model and Covernology	High school diploma or equivalent	None	Long-term on-the-job training	\$18.52
	Foundry Mold and Coremakers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.35 †
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	High school diploma or equivalent	None	Madarata tarm on the job training	\$14.43
51-4111	Tool and Die Makers	Postsecondary non-degree award	None	Moderate-term on-the-job training	\$14.43
51-4111		,		Long-term on-the-job training	\$18.23
	Welders, Cutters, Solderers, and Brazers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.23
51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	· ·
51-4191	Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	High school diploma or equivalent	None	Moderate-term on-the-job training	\$22.73
51-4193	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	High school diploma or equivalent	None	Moderate-term on-the-job training	\$14.16
51-5112	Printing Press Operators	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.89
51-6011	Laundry and Dry-Cleaning Workers	No formal educational credential	None	Short-term on-the-job training	\$11.21
51-6031	Sewing Machine Operators	No formal educational credential	None	Short-term on-the-job training	\$11.24
51-7011	Cabinetmakers and Bench Carpenters	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.31
51-7042	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	High school diploma or equivalent	None	Moderate-term on-the-job training	\$14.43
51-8031	Water and Wastewater Treatment Plant and System Operators	High school diploma or equivalent	None	Long-term on-the-job training	\$22.58
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.06
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.92
51-9111	Packaging and Filling Machine Operators and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$14.48
51-9124	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.92
51-9161	Computer Numerically Controlled Tool Operators	High school diploma or equivalent	None	Moderate-term on-the-job training	\$18.20
51-9162	Computer Numerically Controlled Tool Programmers	Postsecondary non-degree award	None	Moderate-term on-the-job training	\$28.36
51-9196	Paper Goods Machine Setters, Operators, and Tenders	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.79
51-9198	HelpersProduction Workers	High school diploma or equivalent	None	Short-term on-the-job training	\$13.63

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
51-9199	Production Workers, All Other	High school diploma or equivalent	None	Moderate-term on-the-job training	\$17.63
53-0000	Transportation and Material Moving Occupations				\$16.49
53-1047	FirstLine Supervisors of Transportation & Material Moving Workers, Exc Aircraft				
	Cargo Handling Supervisor	High school diploma or equivalent	Less than 5 years	None	\$22.58
53-3031	Driver/Sales Workers	High school diploma or equivalent	None	Short-term on-the-job training	\$10.65
53-3032	Heavy and Tractor-Trailer Truck Drivers	Postsecondary non-degree award	None	Short-term on-the-job training	\$22.36
53-3033	Light Truck or Delivery Services Drivers	High school diploma or equivalent	None	Short-term on-the-job training	\$17.48
53-3058	Passenger Vehicle Drivers, Except Bus Drivers, Transit and Intercity	No formal educational credential	None	Short-term on-the-job training	\$18.05 ^^^
53-7021	Crane and Tower Operators	High school diploma or equivalent	Less than 5 years	Moderate-term on-the-job training	\$23.60
53-7051	Industrial Truck and Tractor Operators	No formal educational credential	None	Short-term on-the-job training	\$18.29
53-7061	Cleaners of Vehicles and Equipment	No formal educational credential	None	Short-term on-the-job training	\$13.88
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	No formal educational credential	None	Short-term on-the-job training	\$14.74
53-7064	Packers and Packagers, Hand	No formal educational credential	None	Short-term on-the-job training	\$13.43
53-7065	Stockers and Order Fillers	High school diploma or equivalent	None	Short-term on-the-job training	\$13.63
53-7081	Refuse and Recyclable Material Collectors	No formal educational credential	None	Short-term on-the-job training	\$17.56

^{*} 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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> Office of Workforce Development http://jfs.ohio.gov/owd/

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