

## In-Demand Occupations Report - 12/10/2019

**Occupations with State Annual Earnings ≥ \$14.10 per hour, Annual Growth in Jobs ≥ the Area Average and/or Total Annual Job Openings ≥ the Area Average and JobsOhio Industry Cluster In-Demand Occupations and 2nd Tier Methodology for Forecasted Jobs**

Ref. No.	Ext. SOC	Occupation Title	Job Family	Projections		Education Level <sup>1</sup>	On-the-Job Training <sup>2</sup>	Relevant Work Experience	Total Annual Openings	Growth	Methodology			OMJ	
				Starting Wage	Median Wage						Base	JobsOhio	2nd Tier	4-Year No. Postings	No. of Employers
1	13-2011.00	Accountants and Auditors	Business & Financial Operations Occupations	\$45,290	\$66,412	Bachelor's degree	None	None	4,493	253	X			14,176	570
2	15-2011.00	Actuaries	Computer & Mathematical Occupations	\$62,670	\$96,206	Bachelor's degree	Long-term on-the-job training	None	99	25		X		2,038	23
3	11-3011.00	Administrative Services Managers	Management Occupations	\$58,950	\$87,292	Bachelor's degree	None	Less than 5 years	884	72	X			248	99
4	17-2011.00	Aerospace Engineers	Architecture & Engineering Occupations	\$79,350	\$112,970	Bachelor's degree	None	None	330	30			X	705	65
5	49-3011.00	Aircraft Mechanics and Service Technicians	Installation, Maintenance, & Repair Occupations	\$38,820	\$61,073	Certificate/ Some college	None	None	372	44	X			153	27
6	13-2021.00	Appraisers and Assessors of Real Estate	Business & Financial Operations Occupations	\$29,300	\$57,924	Bachelor's degree	Long-term on-the-job training	None	198	41	X			121	15
7	11-9041.00	Architectural and Engineering Managers	Management Occupations	\$93,980	\$132,125	Bachelor's degree	None	5 years or more	503	40	X			1,341	241
8	51-2099.00	Assemblers and Fabricators, All Other <sup>4</sup>	Production Occupations	-	\$30,690	High school diploma	Moderate-term on-the-job training	None	2,726	-504	X			-	-
9	27-4011.00	Audio and Video Equipment Technicians	Arts, Design, Entertainment, Sports, & Media Occupations	\$21,960	\$38,134	Certificate/ Some college	Short-term on-the-job training	None	137	12			X	82	42
10	49-3021.00	Automotive Body and Related Repairers	Installation, Maintenance, & Repair Occupations	\$28,780	\$39,487	High school diploma	Long-term on-the-job training	None	646	26	X			157	16
11	49-3023.00	Automotive Service Technicians and Mechanics	Installation, Maintenance, & Repair Occupations	\$23,620	\$38,515	Certificate/ Some college	Short-term on-the-job training	None	2,655	35	X			1,757	74
12	51-3011.00	Bakers	Production Occupations	\$20,620	\$26,513	Less than high school	Long-term on-the-job training	None	906	14			X	8	6
13	43-3011.00	Bill and Account Collectors	Office & Administrative Support Occupations	\$25,710	\$35,437	High school diploma	Moderate-term on-the-job training	None	1,356	-42	X			2,785	200
14	43-3021.00	Billing and Posting Clerks and Machine Operators	Office & Administrative Support Occupations	\$28,280	\$37,810	High school diploma	Moderate-term on-the-job training	None	2,475	240	X			1,234	108
15	43-3031.00	Bookkeeping, Accounting, and Auditing Clerks	Office & Administrative Support Occupations	\$26,750	\$39,687	Certificate/ Some college	Moderate-term on-the-job training	None	6,928	-233	X			3,916	454
16	47-2021.00	Brickmasons and Blockmasons	Construction & Extraction Occupations	\$38,780	\$56,939	High school diploma	Apprenticeship	None	398	39	X			6	2
17	49-3031.00	Bus & Truck Mechanics & Diesel Engine Spec.	Installation, Maintenance, & Repair Occupations	\$32,200	\$47,430	High school diploma	Long-term on-the-job training	None	1,186	70	X			3,032	123
18	53-3022.00	Bus Drivers, School	Transportation & Material Moving Occupations	\$21,440	\$30,689	High school diploma	Short-term on-the-job training	None	1,464	103	X			265	27
19	15-1199.08	Business Intelligence Analysts* <sup>3</sup>	Computer & Mathematical Occupations	\$45,130	\$84,573	Bachelor's degree	None	None	489	50			X	27,832	437
20	13-1199.00	Business Operations Specialists, All Other <sup>3</sup>	Business & Financial Operations Occupations	\$40,610	\$67,746	Bachelor's degree	None	None	3,401	250	X			592	76
21	51-3021.00	Butchers and Meat Cutters	Production Occupations	\$24,900	\$36,230	Less than high school	Long-term on-the-job training	None	640	23	X			106	7
22	51-7011.00	Cabinetmakers and Bench Carpenters	Production Occupations	\$25,040	\$36,241	High school diploma	Moderate-term on-the-job training	None	511	17			X	6	4
23	47-2031.00	Carpenters	Construction & Extraction Occupations	\$31,690	\$47,533	High school diploma	Apprenticeship	None	2,805	191	X			47	22
24	47-2051.00	Cement Masons and Concrete Finishers	Construction & Extraction Occupations	\$31,350	\$47,574	Less than high school	Moderate-term on-the-job training	None	579	52	X			-	-
25	35-1011.00	Chefs and Head Cooks	Food Preparation & Serving Related Occupations	\$23,050	\$41,983	High school diploma	None	5 years or more	601	29	X			140	20
26	17-2041.00	Chemical Engineers	Architecture & Engineering Occupations	\$59,970	\$96,196	Bachelor's degree	None	None	102	9			X	337	59
27	51-9011.00	Chemical Equipment Operators/Tenders	Production Occupations	\$30,460	\$48,853	High school diploma	Moderate-term on-the-job training	None	554	-28			X	7	5
28	51-8091.00	Chemical Plant and System Operators	Production Occupations	\$41,410	\$63,434	High school diploma	Moderate-term on-the-job training	None	224	-23			X	172	39
29	19-2031.00	Chemists	Life, Physical, & Social Science Occupations	\$46,780	\$69,084	Bachelor's degree	None	None	390	20			X	880	77
30	21-1021.00	Child, Family, and School Social Workers	Community & Social Service Occupations	\$31,100	\$43,723	Bachelor's degree	None	None	1,222	167	X			198	35
31	17-2051.00	Civil Engineers	Architecture & Engineering Occupations	\$53,870	\$80,219	Bachelor's degree	None	None	653	61	X			846	80
32	13-1031.00	Claims Adjusters, Examiners, and Investigators	Business & Financial Operations Occupations	\$41,980	\$66,792	High school diploma	Long-term on-the-job training	None	881	-27	X			2,692	82
33	21-2011.00	Clergy	Community & Social Service Occupations	\$29,320	\$46,025	Bachelor's degree	Moderate-term on-the-job training	None	2,168	77	X			186	22
34	19-3031.00	Clinical, Counseling, and School Psychologists	Life, Physical, & Social Science Occupations	\$45,750	\$74,641	Doctoral/ Professional degree	Internship/residency	None	326	54	X			254	18
35	51-9121.00	Coating/Painting/Spraying Machine Setters, O/T	Production Occupations	\$26,020	\$36,354	High school diploma	Moderate-term on-the-job training	None	675	-7			X	127	26
36	13-1141.00	Compensation, Benefits, and Job Analysis Specialists	Business & Financial Operations Occupations	\$39,280	\$60,051	Bachelor's degree	None	Less than 5 years	314	45	X			1,330	176
37	13-1041.00	Compl. Off., ex. Agric, Con, Hlth/Safety, & Trans.	Business & Financial Operations Occupations	\$38,850	\$63,699	Bachelor's degree	Moderate-term on-the-job training	None	645	54	X			740	165
38	11-3021.00	Computer and Information Systems Managers	Management Occupations	\$84,570	\$128,189	Bachelor's degree	None	5 years or more	1,058	62	X			7,432	286
39	15-1143.00	Computer Network Architects	Computer & Mathematical Occupations	\$62,560	\$98,795	Bachelor's degree	None	5 years or more	339	-7			X	1,295	140
40	15-1152.00	Computer Network Support Specialists	Computer & Mathematical Occupations	\$38,350	\$58,747	Associate's degree	None	None	776	45	X			206	48
41	15-1199.00	Computer Occupations, All Other <sup>3</sup>	Computer & Mathematical Occupations	\$45,130	\$84,573	Bachelor's degree	None	None	489	50	X			27,832	437
42	15-1131.00	Computer Programmers	Computer & Mathematical Occupations	\$43,610	\$74,488	Bachelor's degree	None	None	241	-93			X	4,524	281
43	15-1121.00	Computer Systems Analysts	Computer & Mathematical Occupations	\$60,630	\$86,074	Bachelor's degree	None	None	1,867	42	X			15,531	434
44	15-1199.02	Computer Systems Engineers/Architects* <sup>3</sup>	Computer & Mathematical Occupations	\$45,130	\$84,573	Bachelor's degree	None	None	489	50			X	27,832	437
45	15-1151.00	Computer User Support Specialists	Computer & Mathematical Occupations	\$31,180	\$48,246	Certificate/ Some college	None	None	1,440	70	X			13,387	567
46	51-4011.00	Computer-Controlled Machine Tool Oper., M/P	Production Occupations	\$30,010	\$41,630	High school diploma	Moderate-term on-the-job training	None	1,325	13	X			819	119
47	47-2061.00	Construction Laborers	Construction & Extraction Occupations	\$27,040	\$41,088	Less than high school	Short-term on-the-job training	None	5,142	392	X			310	46
48	11-9021.00	Construction Managers	Management Occupations	\$63,620	\$93,643	Bachelor's degree	Moderate-term on-the-job training	None	1,204	134	X			682	107
49	35-2012.00	Cooks, Institution and Cafeteria	Food Preparation & Serving Related Occupations	\$23,350	\$27,398	Less than high school	Short-term on-the-job training	None	2,591	72			X	1,579	49
50	13-1051.00	Cost Estimators	Business & Financial Operations Occupations	\$39,580	\$62,312	Bachelor's degree	Moderate-term on-the-job training	None	1,211	93	X			253	63
51	43-4051.00	Customer Service Representatives	Office & Administrative Support Occupations	\$23,680	\$34,715	High school diploma	Short-term on-the-job training	None	11,757	218	X			23,162	553
52	51-4031.00	Cutting/Punching/Press Machine S/O/T, M/P	Production Occupations	\$24,690	\$34,953	High school diploma	Moderate-term on-the-job training	None	1,773	-128	X			239	54
53	15-1141.00	Database Administrators	Computer & Mathematical Occupations	\$52,810	\$92,092	Bachelor's degree	None	None	309	28			X	2,653	193
54	31-9091.00	Dental Assistants	Healthcare Support Occupations	\$27,730	\$38,532	Certificate/ Some college	None	None	1,326	117	X			347	14
55	29-2021.00	Dental Hygienists	Healthcare Practitioners & Technical Occupations	\$54,320	\$70,763	Associate's degree	None	None	578	89	X			123	13
56	29-1021.00	Dentists, General	Healthcare Practitioners & Technical Occupations	\$94,910	\$192,811	Doctoral/ Professional degree	None	None	158	48	X			56	6
57	29-2032.00	Diagnostic Medical Sonographers	Healthcare Practitioners & Technical Occupations	\$52,100	\$65,922	Associate's degree	None	None	165	43	X			1,423	56
58	43-5032.00	Dispatchers, Except Police, Fire, and Ambulance	Office & Administrative Support Occupations	\$25,410	\$42,297	High school diploma	Moderate-term on-the-job training	None	644	-18	X			420	75
59	11-9031.00	Education Admin., Pre & Child Care Center/Prog.	Management Occupations	\$29,950	\$45,151	Bachelor's degree	None	Less than 5 years	258	46	X			16	11
60	17-3023.00	Electrical and Electronic Engineering Technicians	Architecture & Engineering Occupations	\$39,150	\$62,984	Associate's degree	None	None	203	-3			X	1,328	204
61	51-2022.00	Electrical and Electronic Equipment Assemblers <sup>4</sup>	Production Occupations	-	\$32,530	High school diploma	Moderate-term on-the-job training	None	847	-191	X			727	80
62	17-2071.00	Electrical Engineers	Architecture & Engineering Occupations	\$56,130	\$85,756	Bachelor's degree	None	None	446	41	X			4,151	230
63	49-2094.00	Electrical/Electronics Repair, Comm/Indus Equip.	Installation, Maintenance, & Repair Occupations	\$39,990	\$59,098	Certificate/ Some college	Long-term on-the-job training	None	200	0			X	298	62
64	47-2111.00	Electricians	Construction & Extraction Occupations	\$31,870	\$53,629	High school diploma	Apprenticeship	None	2,983	198	X			832	138
65	17-3024.00	Electro-Mechanical Technicians	Architecture & Engineering Occupations	\$39,800	\$57,550	Associate's degree	None	None	35	0			X	88	40
66	17-2072.00	Electronics Engineers, Except Computer	Architecture & Engineering Occupations	\$59,560	\$97,936	Bachelor's degree	None	None	258	17			X	578	115

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Ref. No.	Ext. SOC	Occupation Title	Job Family	Projections			Education Level <sup>1</sup>	On-the-Job Training <sup>2</sup>	Relevant Work Experience	Total Annual Openings	Growth	Methodology			OMJ	
				Starting Wage	Median Wage							Base	JobsOhio	2nd Tier		4-Year No. Postings
67	29-2041.00	Emergency Medical Technicians and Paramedics	Healthcare Practitioners & Technical Occupations	\$22,010	\$30,909		Certificate/ Some college	None	None	818	130	X			1,500	44
68	13-1199.01	Energy Auditors* <sup>3</sup>	Business & Financial Operations Occupations	\$40,610	\$67,746		Bachelor's degree	None	None	3,401	250			X	592	76
69	17-2199.00	Engineers, All Other <sup>3</sup>	Architecture & Engineering Occupations	\$52,550	\$91,478		Bachelor's degree	None	None	527	45	X			360	120
70	19-4091.00	Environ. Science & Protection Tech., inc. Health	Life, Physical, & Social Science Occupations	\$28,590	\$45,278		Associate's degree	None	None	203	15			X	960	130
71	43-6011.00	Executive Secretaries and Administrative Assistants	Office & Administrative Support Occupations	\$39,700	\$57,916		High school diploma	None	Less than 5 years	1,659	-425	X			6,137	457
72	51-9041.00	Extrud/Form/Pressing/Compacting Mach. S/O/T	Production Occupations	\$25,640	\$33,582		High school diploma	Moderate-term on-the-job training	None	723	-69	X			17	13
73	11-9013.00	Farmers, Ranchers, and Other Agricultural Managers	Management Occupations	\$51,380	\$74,057		High school diploma	None	5 years or more	5,852	-28	X			24	5
74	13-2051.00	Financial Analysts	Business & Financial Operations Occupations	\$51,430	\$73,903		Bachelor's degree	None	None	914	108	X			5,245	268
75	13-2061.00	Financial Examiners	Business & Financial Operations Occupations	\$49,370	\$74,139		Bachelor's degree	Long-term on-the-job training	None	317	46	X			1,117	65
76	11-3031.00	Financial Managers	Management Occupations	\$73,450	\$121,356		Bachelor's degree	None	5 years or more	2,052	362	X			14,142	395
77	13-2099.01	Financial Quantitative Analysts* <sup>3</sup>	Business & Financial Operations Occupations	\$49,110	\$77,750		Bachelor's degree	Moderate-term on-the-job training	None	567	64			X	125	33
78	13-2099.00	Financial Specialists, All Other <sup>3</sup>	Business & Financial Operations Occupations	\$49,110	\$77,750		Bachelor's degree	Moderate-term on-the-job training	None	567	64	X			125	33
79	41-1012.00	First-Line Sup./Mgrs of Non-Retail Sales Workers	Sales & Related Occupations	\$41,780	\$71,996		High school diploma	None	Less than 5 years	1,242	47	X			4,638	324
80	47-1011.00	First-Line Sup/Mgrs of Con. Trades/Extract. Work	Construction & Extraction Occupations	\$43,180	\$66,489		High school diploma	None	5 years or more	1,748	152	X			462	121
81	43-1011.00	First-Line Sup/Mgrs of Office & Admin. Support	Office & Administrative Support Occupations	\$37,200	\$55,636		High school diploma	None	Less than 5 years	4,529	64	X			17,943	576
82	39-1021.00	First-Line Sup/Mgrs of Personal Serv. Workers	Personal Care & Service Occupations	\$24,590	\$36,708		High school diploma	None	Less than 5 years	911	101	X			160	16
83	41-1011.00	First-Line Superv./Mgrs of Retail Sales Workers	Sales & Related Occupations	\$24,910	\$39,424		High school diploma	None	Less than 5 years	5,793	135	X			19,810	200
84	53-1031.00	FL Sup/Mgr of Trans/Mat.-Mov. Mach & Veh Op <sup>4</sup>	Transportation & Material Moving Occupations	-	\$53,810		High school diploma	None	Less than 5 years	777	39	X			6,284	370
85	35-1012.00	FL Sup/Mgrs of Food Prep. & Serving Workers	Food Preparation & Serving Related Occupations	\$22,520	\$31,276		High school diploma	None	Less than 5 years	5,036	51	X			6,915	104
86	53-1021.00	FL Sup/Mgrs of Help/Labor/Mat. Movers, Hand <sup>4</sup>	Transportation & Material Moving Occupations	-	\$53,810		High school diploma	None	Less than 5 years	782	47	X			199	57
87	37-1011.00	FL Sup/Mgrs of Housekeeping & Janitorial Workers	Building & Grounds Cleaning & Maintenance Occupations	\$28,310	\$42,463		High school diploma	None	Less than 5 years	843	50	X			404	53
88	37-1012.00	FL Sup/Mgrs of Lndscap./Lawn Ser/Groundskp	Building & Grounds Cleaning & Maintenance Occupations	\$31,960	\$46,612		High school diploma	None	Less than 5 years	673	53	X			144	8
89	49-1011.00	FL Sup/Mgrs of Mechanics/Installers/Repairers	Installation, Maintenance, & Repair Occupations	\$41,110	\$64,666		High school diploma	None	Less than 5 years	1,499	66	X			4,991	446
90	51-1011.00	FL Sup/Mgrs of Production/Operating Workers	Production Occupations	\$40,100	\$61,517		High school diploma	None	Less than 5 years	2,898	-28	X			13,616	635
91	51-3092.00	Food Batchmakers	Production Occupations	\$23,810	\$33,922		High school diploma	Moderate-term on-the-job training	None	868	21	X			42	16
92	11-9051.00	Food Service Managers	Management Occupations	\$32,630	\$52,005		High school diploma	None	Less than 5 years	1,266	36	X			1,169	53
93	13-1131.00	Fundraisers	Business & Financial Operations Occupations	\$31,710	\$55,458		Bachelor's degree	None	None	521	39	X			55	20
94	11-1021.00	General and Operations Managers	Management Occupations	\$50,180	\$98,760		Bachelor's degree	None	5 years or more	5,791	360	X			9,309	430
95	47-2121.00	Glaziers	Construction & Extraction Occupations	\$30,360	\$43,904		High school diploma	Apprenticeship	None	183	12			X	-	-
96	27-1024.00	Graphic Designers	Arts, Design, Entertainment, Sports, & Media Occupations	\$30,260	\$47,837		Bachelor's degree	None	None	837	26	X			1,062	190
97	51-4033.00	Grind/Lapping/Polish/Buff Mach Tool S/O/T, M/P	Production Occupations	\$23,910	\$34,303		High school diploma	Moderate-term on-the-job training	None	621	-71	X			105	23
98	17-2111.00	Health & Safety Engineers, ex. Mining Safety	Architecture & Engineering Occupations	\$63,010	\$90,034		Bachelor's degree	None	None	36	2			X	1,883	279
99	29-2099.00	Health Technologists and Technicians, All Other <sup>3</sup>	Healthcare Practitioners & Technical Occupations	\$29,720	\$40,269		Certificate/ Some college	None	None	343	54	X			827	49
100	31-9099.00	Healthcare Support Workers, All Other <sup>3</sup>	Healthcare Support Occupations	\$22,960	\$39,520		High school diploma	None	None	581	50	X			71	15
101	49-9021.00	Heating, AC, & Refrigeration Mechanics/Installers	Installation, Maintenance, & Repair Occupations	\$30,970	\$47,972		Certificate/ Some college	Long-term on-the-job training	None	1,377	177	X			194	61
102	51-9198.00	Helpers-Production Workers	Production Occupations	\$21,760	\$30,882		High school diploma	Short-term on-the-job training	None	2,974	142	X			2,200	291
103	13-1071.00	Human Resource Specialists	Business & Financial Operations Occupations	\$38,200	\$59,424		Bachelor's degree	None	None	2,079	127	X			3,559	365
104	43-4161.00	Human Resources Assis., ex. Payroll & Timekp	Office & Administrative Support Occupations	\$29,590	\$39,955		Associate's degree	None	None	485	-12			X	1,325	289
105	17-3026.00	Industrial Engineering Technicians	Architecture & Engineering Occupations	\$38,840	\$56,096		Associate's degree	None	None	275	2			X	1,689	260
106	17-2112.00	Industrial Engineers	Architecture & Engineering Occupations	\$58,460	\$82,573		Bachelor's degree	None	None	1,102	126	X			18,379	555
107	49-9041.00	Industrial Machinery Mechanics	Installation, Maintenance, & Repair Occupations	\$35,520	\$52,865		High school diploma	Long-term on-the-job training	None	1,861	137	X			1,469	257
108	11-3051.00	Industrial Production Managers	Management Occupations	\$64,770	\$102,510		Bachelor's degree	None	5 years or more	738	-13	X			1,133	239
109	53-7051.00	Industrial Truck and Tractor Operators	Transportation & Material Moving Occupations	\$25,790	\$35,257		Less than high school	Short-term on-the-job training	None	2,532	77	X			1,622	158
110	15-1122.00	Information Security Analysts	Computer & Mathematical Occupations	\$59,300	\$91,467		Bachelor's degree	None	Less than 5 years	292	75	X			5,055	189
111	15-1199.09	Information Technology Project Managers* <sup>3</sup>	Computer & Mathematical Occupations	\$45,130	\$84,573		Bachelor's degree	None	None	489	50			X	27,832	437
112	51-9061.00	Inspectors, Testers, Sorters, Samplers, and Weighers	Production Occupations	\$26,370	\$39,672		High school diploma	Moderate-term on-the-job training	None	3,014	-421	X			1,775	234
113	49-9099.00	Installation, Maintenance, and Repair Workers, All Other <sup>3</sup>	Installation, Maintenance, & Repair Occupations	\$25,430	\$39,333		High school diploma	Moderate-term on-the-job training	None	592	33	X			2	2
114	43-9041.00	Insurance Claims and Policy Processing Clerks	Office & Administrative Support Occupations	\$28,290	\$39,543		High school diploma	Moderate-term on-the-job training	None	2,304	201	X			439	49
115	41-3021.00	Insurance Sales Agents	Sales & Related Occupations	\$28,440	\$49,303		High school diploma	Moderate-term on-the-job training	None	2,281	201	X			5,009	102
116	43-4111.00	Interviewers, Except Eligibility and Loan	Office & Administrative Support Occupations	\$25,220	\$32,383		High school diploma	Short-term on-the-job training	None	1,060	16	X			2,248	85
117	53-7062.00	Laborers/Freight/Stock/Material Movers, Hand	Transportation & Material Moving Occupations	\$20,850	\$29,596		Less than high school	Short-term on-the-job training	None	16,347	761	X			7,048	279
118	37-3011.00	Landscaping and Groundskeeping Workers	Building & Grounds Cleaning & Maintenance Occupations	\$20,250	\$28,670		Less than high school	Short-term on-the-job training	None	5,908	333			X	428	50
119	23-1011.00	Lawyers	Legal Occupations	\$57,470	\$100,842		Doctoral/ Professional degree	None	None	862	22	X			1,697	151
120	29-2061.00	Licensed Practical and Licensed Vocational Nurses	Healthcare Practitioners & Technical Occupations	\$34,220	\$44,285		Certificate/ Some college	None	None	3,334	382	X			7,897	87
121	43-4131.00	Loan Interviewers and Clerks	Office & Administrative Support Occupations	\$25,560	\$38,769		High school diploma	Short-term on-the-job training	None	1,257	130	X			947	58
122	13-2072.00	Loan Officers	Business & Financial Operations Occupations	\$37,250	\$66,556		Bachelor's degree	Moderate-term on-the-job training	None	1,158	123	X			8,095	70
123	13-1081.00	Logisticians	Business & Financial Operations Occupations	\$50,900	\$74,519		Bachelor's degree	None	None	614	33	X			2,242	239
124	53-7063.00	Machine Feeders and Offbearers	Transportation & Material Moving Occupations	\$20,240	\$32,468		Less than high school	Short-term on-the-job training	None	520	-9			X	62	23
125	51-4041.00	Machinists	Production Occupations	\$29,610	\$42,650		High school diploma	Long-term on-the-job training	None	2,854	56	X			1,400	187
126	49-9071.00	Maintenance and Repair Workers, General	Installation, Maintenance, & Repair Occupations	\$27,040	\$40,767		High school diploma	Moderate-term on-the-job training	None	5,895	320	X			8,047	604
127	49-9043.00	Maintenance Workers, Machinery	Installation, Maintenance, & Repair Occupations	\$30,430	\$46,836		High school diploma	Long-term on-the-job training	None	278	14			X	7	4
128	13-1111.00	Management Analysts	Business & Financial Operations Occupations	\$46,500	\$79,873		Bachelor's degree	None	Less than 5 years	2,219	291	X			16,941	367
129	11-9199.00	Managers, All Other <sup>3</sup>	Management Occupations	\$63,160	\$100,277		Bachelor's degree	None	Less than 5 years	1,896	169	X			1,621	192
130	17-2199.04	Manufacturing Engineers* <sup>3</sup>	Architecture & Engineering Occupations	\$52,550	\$91,478		Bachelor's degree	None	None	527	45			X	360	120
131	13-1161.00	Market Research Analysts and Marketing Specialists	Business & Financial Operations Occupations	\$38,110	\$61,593		Bachelor's degree	None	None	2,766	434	X			8,314	366

## In-Demand Occupations Report - 12/10/2019

Occupations with State Annual Earnings ≥ \$14.10 per hour, Annual Growth in Jobs ≥ the Area Average and/or Total Annual Job Openings ≥ the Area Average and JobsOhio Industry Cluster In-Demand Occupations and 2nd Tier Methodology for Forecasted Jobs															
Ref. No.	Ext. SOC	Occupation Title	Job Family	Projections			On-the-Job Training <sup>2</sup>	Relevant Work Experience	Total Annual Openings	Growth	Methodology			OMJ	
				Starting Wage	Median Wage	Education Level <sup>1</sup>					Base	JobsOhio	2nd Tier	4-Year No. Postings	No. of Employers
132	11-2021.00	Marketing Managers	Management Occupations	\$76,580	\$125,610	Bachelor's degree	None	5 years or more	532	44	X			14,429	478
133	31-9011.00	Massage Therapists	Healthcare Support Occupations	\$20,730	\$38,230	Certificate/ Some college	None	None	450	85	X			67	11
134	17-3027.00	Mechanical Engineering Technicians	Architecture & Engineering Occupations	\$40,570	\$55,185	Associate's degree	None	None	218	16		X		145	49
135	17-2141.00	Mechanical Engineers	Architecture & Engineering Occupations	\$56,120	\$79,268	Bachelor's degree	None	None	1,165	181	X			4,355	275
136	29-2012.00	Medical and Clinical Laboratory Technicians <sup>4</sup>	Healthcare Practitioners & Technical Occupations	-	\$51,770	Associate's degree	None	None	464	60	X			2,811	79
137	29-2011.00	Medical and Clinical Laboratory Technologists <sup>4</sup>	Healthcare Practitioners & Technical Occupations	-	\$51,770	Bachelor's degree	None	None	504	66	X			2,637	77
138	11-9111.00	Medical and Health Services Managers	Management Occupations	\$65,100	\$93,817	Bachelor's degree	None	Less than 5 years	1,570	253	X			13,146	163
139	21-1022.00	Medical and Public Health Social Workers	Community & Social Service Occupations	\$38,520	\$54,786	Master's degree	Internship/residency	None	1,174	153	X			2,443	69
140	31-9092.00	Medical Assistants	Healthcare Support Occupations	\$25,160	\$33,028	Certificate/ Some college	None	None	3,146	464	X			13,477	107
141	29-2071.00	Medical Records and Health Information Technicians	Healthcare Practitioners & Technical Occupations	\$28,530	\$40,754	Certificate/ Some college	None	None	718	127	X			5,718	125
142	19-1042.00	Medical Scientists, Except Epidemiologists	Life, Physical, & Social Science Occupations	\$49,060	\$69,442	Doctoral/ Professional degree	None	None	426	52	X			3,870	70
143	43-6013.00	Medical Secretaries	Office & Administrative Support Occupations	\$25,390	\$34,962	High school diploma	Moderate-term on-the-job training	None	5,278	654	X			9,304	109
144	21-1023.00	Mental Health and Substance Abuse Social Workers	Community & Social Service Occupations	\$30,400	\$41,184	Master's degree	Internship/residency	None	641	84	X			2,742	65
145	21-1014.00	Mental Health Counselors <sup>4</sup>	Community & Social Service Occupations	-	\$43,300	Master's degree	Internship/residency	None	700	112	X			218	29
146	49-9044.00	Millwrights	Installation, Maintenance, & Repair Occupations	\$42,180	\$60,388	High school diploma	Apprenticeship	None	245	27		X		21	4
147	51-9023.00	Mixing/Blending Machine Setters/Operators/Tenders	Production Occupations	\$26,640	\$38,394	High school diploma	Moderate-term on-the-job training	None	791	-38	X			340	43
148	51-4072.00	Molding/Coremaking/Casting Mach. S/O/T, M/P	Production Occupations	\$23,730	\$30,759	High school diploma	Moderate-term on-the-job training	None	1,411	-236	X			233	47
149	51-4081.00	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	Production Occupations	\$25,370	\$35,828	High school diploma	Moderate-term on-the-job training	None	1,427	-38	X			42	20
150	27-2042.00	Musicians and Singers <sup>3</sup>	Arts, Design, Entertainment, Sports, & Media Occupations	\$49,629	\$49,629	Less than high school	Long-term on-the-job training	None	629	11	X			10	6
151	11-9121.00	Natural Sciences Managers	Management Occupations	\$81,150	\$124,048	Bachelor's degree	None	5 years or more	113	16		X		1,764	78
152	15-1142.00	Network and Comp. Systems Architects and Admins	Computer & Mathematical Occupations	\$51,350	\$76,954	Bachelor's degree	None	None	861	4	X			9,202	423
153	51-4012.00	Numerical Tool and Process Control Programmers	Production Occupations	\$36,170	\$50,512	Certificate/ Some college	Moderate-term on-the-job training	None	247	34		X		91	29
154	29-1171.00	Nurse Practitioners	Healthcare Practitioners & Technical Occupations	\$86,580	\$103,380	Master's degree	None	None	574	201	X			1,324	68
155	31-1014.00	Nursing Assistants	Healthcare Support Occupations	\$22,010	\$28,190	Certificate/ Some college	None	None	8,184	358			X	12,848	76
156	31-2011.00	Occupational Therapist Assistants	Healthcare Support Occupations	\$47,770	\$61,583	Associate's degree	None	None	576	95	X			1,116	45
157	29-1122.00	Occupational Therapists	Healthcare Practitioners & Technical Occupations	\$62,350	\$86,299	Master's degree	None	None	367	104	X			2,717	55
158	43-9199.00	Office and Administrative Support Workers, All Other <sup>2</sup>	Office & Administrative Support Occupations	\$25,110	\$40,144	High school diploma	Short-term on-the-job training	None	690	64	X			-	-
159	43-9061.00	Office Clerks, General	Office & Administrative Support Occupations	\$21,410	\$33,766	High school diploma	Short-term on-the-job training	None	10,498	-287	X			3,697	327
160	47-2073.00	Operating Engineers & Other Con. Equip. Op.	Construction & Extraction Occupations	\$38,810	\$54,544	High school diploma	Moderate-term on-the-job training	None	1,780	87	X			97	23
161	15-2031.00	Operations Research Analysts	Computer & Mathematical Occupations	\$55,870	\$81,437	Bachelor's degree	None	None	346	94	X			3,959	290
162	29-2057.00	Ophthalmic Medical Technicians	Healthcare Practitioners & Technical Occupations	\$27,060	\$37,275	Certificate/ Some college	None	None	156	18		X		56	10
163	29-2099.05	Ophthalmic Medical Technologists <sup>3</sup>	Healthcare Practitioners & Technical Occupations	\$29,720	\$40,269	Certificate/ Some college	None	None	343	54		X		827	49
164	29-2081.00	Opticians, Dispensing	Healthcare Practitioners & Technical Occupations	\$28,970	\$40,795	High school diploma	Long-term on-the-job training	None	263	37	X			39	11
165	43-4151.00	Order Clerks	Office & Administrative Support Occupations	\$23,450	\$32,208	High school diploma	Short-term on-the-job training	None	1,073	-43	X			342	107
166	51-9111.00	Packaging and Filling Machine Operators/Tenders	Production Occupations	\$22,760	\$32,016	High school diploma	Moderate-term on-the-job training	None	2,089	29	X			2,260	149
167	47-2141.00	Painters, Construction and Maintenance	Construction & Extraction Occupations	\$27,740	\$41,396	Less than high school	Moderate-term on-the-job training	None	848	41	X			49	32
168	23-2011.00	Paralegals and Legal Assistants	Legal Occupations	\$31,400	\$46,384	Associate's degree	None	None	872	45	X			489	115
169	41-2022.00	Parts Salespersons	Sales & Related Occupations	\$19,650	\$29,100	Less than high school	Moderate-term on-the-job training	None	1,320	19		X		1,200	17
170	13-2052.00	Personal Financial Advisors	Business & Financial Operations Occupations	\$43,300	\$76,441	Bachelor's degree	Long-term on-the-job training	None	780	164	X			1,690	45
171	29-1051.00	Pharmacists	Healthcare Practitioners & Technical Occupations	\$82,460	\$124,628	Doctoral/ Professional degree	None	None	628	72	X			6,727	78
172	29-2052.00	Pharmacy Technicians	Healthcare Practitioners & Technical Occupations	\$21,710	\$29,998	High school diploma	Moderate-term on-the-job training	None	1,516	184	X			5,221	98
173	31-9097.00	Phlebotomists	Healthcare Support Occupations	\$26,500	\$35,311	Certificate/ Some college	None	None	722	112	X			1,968	47
174	31-2021.00	Physical Therapist Assistants	Healthcare Support Occupations	\$45,850	\$60,676	Associate's degree	None	None	1,005	171	X			1,407	47
175	29-1123.00	Physical Therapists	Healthcare Practitioners & Technical Occupations	\$65,800	\$89,011	Doctoral/ Professional degree	None	None	537	175	X			3,627	69
176	29-1071.00	Physician Assistants	Healthcare Practitioners & Technical Occupations	\$78,810	\$108,426	Master's degree	None	None	294	99	X			1,384	71
177	29-1069.00	Physicians and Surgeons, All Other <sup>4</sup>	Healthcare Practitioners & Technical Occupations	\$91,560	\$206,920	Doctoral/ Professional degree	Internship/residency	None	534	117	X			457	58
178	47-2152.00	Plumbers, Pipefitters, and Steamfitters	Construction & Extraction Occupations	\$34,190	\$56,877	High school diploma	Apprenticeship	None	2,019	238	X			158	23
179	25-2011.00	Preschool Teachers, Except Special Education	Education, Training, & Library Occupations	\$19,800	\$26,897	Associate's degree	None	None	1,572	228		X		167	12
180	51-5112.00	Printing Press Operators and Job Printers	Production Occupations	\$24,490	\$36,818	High school diploma	Moderate-term on-the-job training	None	793	-102	X			277	66
181	51-9199.00	Production Workers, All Other <sup>3</sup>	Production Occupations	\$21,060	\$30,882	High school diploma	Moderate-term on-the-job training	None	2,168	78	X			15	3
182	43-5061.00	Production, Planning, and Expediting Clerks	Office & Administrative Support Occupations	\$31,600	\$48,240	High school diploma	Moderate-term on-the-job training	None	1,485	45	X			2,499	354
183	11-9141.00	Property, Real Estate & Community Assn Mgrs	Management Occupations	\$34,690	\$53,167	High school diploma	None	Less than 5 years	799	94	X			789	79
184	27-3031.00	Public Relations Specialists	Arts, Design, Entertainment, Sports, & Media Occupations	\$36,870	\$60,272	Bachelor's degree	None	None	764	50	X			2,573	272
185	13-1023.00	Purchasing Agents, ex. Whole., Retail, & Farm <sup>4</sup>	Business & Financial Operations Occupations	-	\$62,120	Bachelor's degree	Moderate-term on-the-job training	None	1,013	-75	X			3,248	385
186	11-3061.00	Purchasing Managers	Management Occupations	\$78,330	\$120,041	Bachelor's degree	None	5 years or more	220	16		X		3,182	283
187	29-2099.06	Radiologic Technicians <sup>3</sup>	Healthcare Practitioners & Technical Occupations	\$29,720	\$40,269	Certificate/ Some college	None	None	343	54		X		827	49
188	29-2034.00	Radiologic Technologists	Healthcare Practitioners & Technical Occupations	\$43,220	\$57,795	Associate's degree	None	None	552	81	X			3,641	67
189	41-9022.00	Real Estate Sales Agents	Sales & Related Occupations	\$23,450	\$36,365	High school diploma	Moderate-term on-the-job training	None	1,581	137	X			164	31
190	43-4171.00	Receptionists and Information Clerks	Office & Administrative Support Occupations	\$20,170	\$27,473	High school diploma	Short-term on-the-job training	None	3,394	12		X		2,107	188
191	53-7081.00	Refuse and Recyclable Material Collectors	Transportation & Material Moving Occupations	\$23,950	\$38,827	Less than high school	Short-term on-the-job training	None	1,009	98	X			32	5
192	29-1141.00	Registered Nurses	Healthcare Practitioners & Technical Occupations	\$65,780	\$65,707	Bachelor's degree	None	None	8,848	1839	X			38,406	175
193	21-1015.00	Rehabilitation Counselors	Community & Social Service Occupations	\$24,240	\$35,289	Master's degree	None	None	618	79	X			25	14
194	39-9041.00	Residential Advisors	Personal Care & Service Occupations	\$21,420	\$28,274	High school diploma	Short-term on-the-job training	None	616	62		X		3	3
195	29-1126.00	Respiratory Therapists	Healthcare Practitioners & Technical Occupations	\$44,680	\$57,754	Associate's degree	None	None	504	164	X			2,593	55
196	17-2199.08	Robotics Engineers <sup>3</sup>	Architecture & Engineering Occupations	\$52,550	\$91,478	Bachelor's degree	None	None	527	45		X		360	120

### In-Demand Occupations Report - 12/10/2019

Occupations with State Annual Earnings ≥ \$14.10 per hour, Annual Growth in Jobs ≥ the Area Average and/or Total Annual Job Openings ≥ the Area Average and JobsOhio Industry Cluster In-Demand Occupations and 2nd Tier Methodology for Forecasted Jobs															
Ref. No.	Ext. SOC	Occupation Title	Job Family	Projections				Methodology				OMJ			
				Starting Wage	Median Wage	Education Level <sup>1</sup>	On-the-Job Training <sup>2</sup>	Relevant Work Experience	Total Annual Openings	Growth	Base	JobsOhio	2nd Tier	4-Year No. Postings	No. of Employers
197	47-2181.00	Roofers	Construction & Extraction Occupations	\$27,840	\$39,875	Less than high school	Moderate-term on-the-job training	None	644	60	X			-	-
198	41-9031.00	Sales Engineers	Sales & Related Occupations	\$57,640	\$89,646	Bachelor's degree	Moderate-term on-the-job training	None	377	5			X	1,579	152
199	11-2022.00	Sales Managers	Management Occupations	\$74,180	\$124,459	Bachelor's degree	None	Less than 5 years	1,072	52	X			7,183	385
200	41-4011.00	Sales Rep., Wholesale & Mfg. Tech./Sci. Prod.	Sales & Related Occupations	\$41,320	\$77,948	Bachelor's degree	Moderate-term on-the-job training	None	1,999	37	X			4,519	237
201	41-4012.00	Sales Rep., Wholesale/Mfg. ex. Tech./Sci. Prod.	Sales & Related Occupations	\$34,440	\$59,327	High school diploma	Moderate-term on-the-job training	None	5,121	67	X			9,344	345
202	41-3099.00	Sales Representatives, Services, All Other <sup>3</sup>	Sales & Related Occupations	\$27,850	\$52,437	High school diploma	Moderate-term on-the-job training	None	4,263	181	X			10	5
203	15-1199.10	Search Marketing Strategists* <sup>1</sup>	Computer & Mathematical Occupations	\$45,130	\$84,573	Bachelor's degree	None	None	489	50			X	27,832	437
204	43-6014.00	Secretaries, Except Legal, Medical, and Executive	Office & Administrative Support Occupations	\$24,260	\$36,675	High school diploma	Short-term on-the-job training	None	7,758	-729	X			2,054	322
205	41-3031.00	Securities/Commodities/Fin. Serv. Sales Agents	Sales & Related Occupations	\$34,530	\$59,554	Bachelor's degree	Moderate-term on-the-job training	None	1,103	77	X			14,651	150
206	33-9032.00	Security Guards	Protective Service Occupations	\$20,060	\$27,314	High school diploma	Short-term on-the-job training	None	4,474	145			X	2,316	104
207	25-3021.00	Self-Enrichment Education Teachers	Education, Training, & Library Occupations	\$21,960	\$35,647	High school diploma	None	Less than 5 years	1,371	158	X			33	9
208	43-5071.00	Shipping, Receiving, and Traffic Clerks	Office & Administrative Support Occupations	\$24,210	\$33,642	High school diploma	Short-term on-the-job training	None	3,323	-35	X			1,864	237
209	11-9151.00	Social and Community Service Managers	Management Occupations	\$47,010	\$69,875	Bachelor's degree	None	Less than 5 years	505	80	X			498	67
210	21-1093.00	Social and Human Service Assistants	Community & Social Service Occupations	\$22,840	\$33,099	High school diploma	Short-term on-the-job training	None	2,233	215	X			5,201	114
211	15-1132.00	Software Developers, Applications	Computer & Mathematical Occupations	\$58,530	\$93,422	Bachelor's degree	None	None	3,011	615	X			16,015	338
212	15-1133.00	Software Developers, Systems Software	Computer & Mathematical Occupations	\$68,820	\$101,149	Bachelor's degree	None	None	378	9		X		1,314	127
213	15-1199.01	Software Quality Assurance Engineers and Testers** <sup>3</sup>	Computer & Mathematical Occupations	\$45,130	\$84,573	Bachelor's degree	None	None	489	50			X	27,832	437
214	17-2199.11	Solar Energy Systems Engineers** <sup>3</sup>	Architecture & Engineering Occupations	\$52,550	\$91,478	Bachelor's degree	None	None	527	45			X	360	120
215	29-1127.00	Speech-Language Pathologists	Healthcare Practitioners & Technical Occupations	\$50,080	\$76,136	Master's degree	Internship/residency	None	375	90	X			1,728	46
216	47-2221.00	Structural Iron and Steel Workers	Construction & Extraction Occupations	\$44,950	\$62,048	High school diploma	Apprenticeship	None	383	38	X			-	-
217	21-1011.00	Substance Abuse & Behavioral Dis. Counselors*	Community & Social Service Occupations	-	\$43,300	Bachelor's degree	None	None	395	51	X			201	31
218	29-2055.00	Surgical Technologists	Healthcare Practitioners & Technical Occupations	\$32,090	\$46,987	Certificate/ Some college	None	None	363	36	X			2,303	58
219	51-2092.00	Team Assemblers*	Production Occupations	-	\$30,690	High school diploma	Moderate-term on-the-job training	None	4,125	-444	X			391	71
220	49-2022.00	Telecomm. Equip. Install/Repair, ex. Line Install	Installation, Maintenance, & Repair Occupations	\$33,680	\$52,394	Certificate/ Some college	Moderate-term on-the-job training	None	856	-62	X			270	36
221	43-3071.00	Tellers	Office & Administrative Support Occupations	\$21,970	\$29,237	High school diploma	Short-term on-the-job training	None	1,939	-186			X	12,074	67
222	51-4111.00	Tool and Die Makers	Production Occupations	\$36,640	\$51,357	Certificate/ Some college	Long-term on-the-job training	None	653	-55	X			284	62
223	13-1151.00	Training and Development Specialists	Business & Financial Operations Occupations	\$34,990	\$57,976	Bachelor's degree	None	Less than 5 years	1,007	83	X			3,662	338
224	11-3071.00	Transportation, Storage, and Distribution Managers	Management Occupations	\$60,350	\$91,577	High school diploma	None	5 years or more	460	41	X			1,414	259
225	53-3032.00	Truck Drivers, Heavy and Tractor-Trailer	Transportation & Material Moving Occupations	\$31,310	\$44,717	Certificate/ Some college	Short-term on-the-job training	None	8,465	301	X			12,921	177
226	53-3033.00	Truck Drivers, Light or Delivery Services	Transportation & Material Moving Occupations	\$20,010	\$31,001	High school diploma	Short-term on-the-job training	None	4,232	157	X			6,556	151
227	15-1134.00	Web Developers	Computer & Mathematical Occupations	\$36,100	\$63,608	Associate's degree	None	-	294	23		X		8,011	277
228	51-4121.00	Welders, Cutters, Solderers, and Brazers	Production Occupations	\$29,950	\$40,589	High school diploma	Moderate-term on-the-job training	None	1,972	52	X			457	96
229	51-4122.00	Welding/Soldering/Brazing Machine Setters, O/T	Production Occupations	\$28,710	\$39,383	High school diploma	Moderate-term on-the-job training	None	287	-28		X		49	21



Methodology Total	175	16	38	223
<b>In-Demand Occupations Total</b>	<b>229</b>	<b>229</b>	<b>229</b>	<b>229</b>
Percent	76.42%	6.99%	16.59%	97.38%

Occupations with Annual Earnings ≥ \$14.10 per hour, Job Growth Count ≥ the Area Average (36 jobs), And/Or Total Annual Openings ≥ the Area Average (584 jobs)

Regional jobs forecasted may not total to the state due to various statewide only forecasted data.

Data across all tables may not be comparable due to differences in reporting periods, data source and data compression and rounding

\*The openings and growth numbers for this occupation represent an occupational category that includes, but is larger than the specific occupational title listed

<sup>1</sup>Typical education level needed to enter the occupation, using the US Bureau of Labor Statistics (BLS) education and training classification system

<sup>2</sup>Typical on-the-job training needed to attain competency in the occupation (<https://www.bls.gov/emp/documentation/education/tech.htm>)

<sup>3</sup>Wage was calculated by multiplying the hourly wage by 2.080 to approximate an annual wage