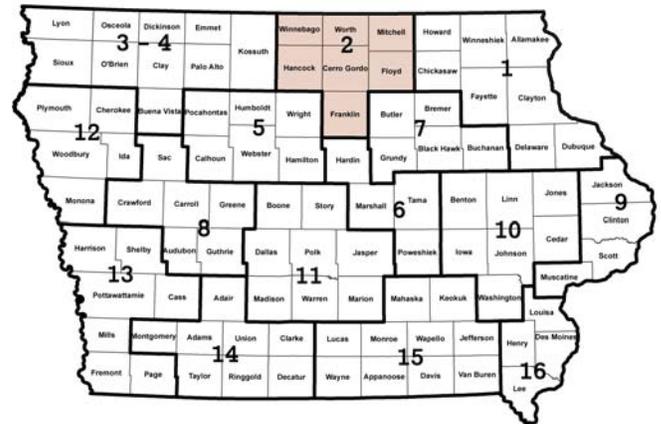
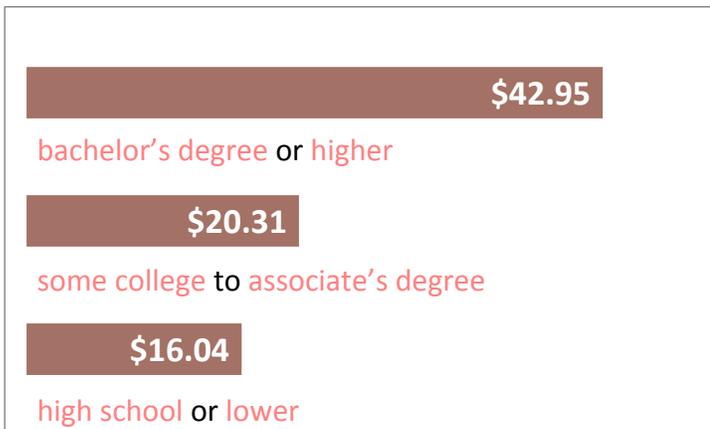


## mean hourly wages by education level



## fastest growing occupations

### bachelor's degree or higher

Occupational Title	Employment <sup>[1]</sup>			Annual Job Separations/Opening <sup>[2]</sup>				\$ <sup>[3]</sup>		Career Preparation <sup>[4]</sup>			Top Skills <sup>[5]</sup>										
	2016 Estimated	2026 Projected	Annual Growth Rate (%)	Exits [a]	Transfers [b]	New (Growth) [c]	Total [a+b+c]	2019 Mean Wage	2019 Mean Salary	Educ	Work Exp	Job Training	(L-R in order of significance)										
Software Developers, Applications	105	135	2.9	*	5	5	10	33.31	69,291	BA	N	N	T7	SY2	SY3	SY1	C1	B3	T6	B9	B2	B7	
Chemists	60	75	2.5	*	5	*	10	32.28	67,151	BA	N	N	B8	B3	B7	B2	B5	C1	B10	B9	B1	T8	
Industrial Engineers	85	110	2.4	*	5	*	10	35.81	74,489	BA	N	N	B7	B2	C1	B3	B10	B9	B6	SY1	B1	B1	SO1
Market Research Analysts & Marketing Specialists	120	145	2.1	5	10	5	15	28.09	58,421	BA	N	N	B3	B7	B10	B2	C1	B9	SY1	B1	B5	B6	
Medical & Health Services Mgrs	170	210	2.1	5	10	5	20	42.37	88,133	BA	< 5	N	B9	B3	B2	SO1	SY1	B7	R4	B10	B1	SO6	
Financial Mgrs	165	195	1.8	5	10	5	15	46.18	96,050	BA	> 5	N	B3	SY1	C1	R1	B7	B9	B2	B5	B10	SO1	
Loan Officers	105	120	1.4	5	5	*	10	37.34	77,662	BA	N	M	B2	B9	SY1	B7	B3	SO5	SO6	B10	B1	C1	
Educual, Guidance, School, & Vocational Counselors	80	90	1.3	5	5	*	10	24.65	51,266	MA	N	N	B2	SO6	B9	B7	SO5	B3	B10	B1	C1	SO1	
Management Analysts	85	90	1.2	5	5	*	10	37.29	77,566	BA	< 5	N	B2	B3	B7	SY1	B9	SY3	B10	C1	B6	SO6	
Securities/Commodities/Fin Svcs Sales Agents	85	95	1.2	*	5	*	10	N.A.	N.A.	BA	N	M	B2	B3	SO4	B7	B9	SY1	B1	B10	C1	SO5	

### some college to associate's degree

Wind Turbine Service Technicians	115	185	6.1	5	10	5	20	31.83	66,204	PS	N	L	T9	T11	T1	B3	T5	C1	B2	B6	B7	B9
Physical Therapist Assistants	60	80	3.3	5	5	*	10	23.13	48,116	AS	N	N	B2	B6	SO6	B9	SO5	SO1	B3	B7	B1	SO2
Medical Assistants	210	260	2.4	10	15	5	30	14.94	31,075	PS	N	N	B9	B2	B7	SO6	B6	C1	SO1	B10	SO5	B1
Heating/ACRefrigeration Mechanics	70	85	2.1	*	5	*	10	24.63	51,237	PS	N	L	T1	T3	T8	T11	T5	T9	B2	B3	T4	B7
Computer User Support Specialists	145	165	1.7	5	10	*	15	21.82	45,378	SC	N	N	B2	B7	B9	C1	B3	B10	SY1	B1	SY2	SO2
Dental Assistants	185	215	1.6	10	10	5	25	18.23	37,915	PS	N	N	B2	B7	B9	B3	SO5	B1	B6	SO6	C1	SO1
Dental Hygienists	130	150	1.5	5	5	*	10	32.73	68,080	AS	N	N	B9	B2	B3	SY1	B6	SO5	SO6	B10	B1	SO1
Hairdressers, Hairstylists, & Cosmetologists	230	255	1.1	15	10	5	30	N.A.	N.A.	PS	N	N	B2	B9	SO5	B3	B1	SY1	SO6	C1	B6	B7
Preschool Teachers, Ex Special Educ	165	180	0.9	10	10	*	20	14.30	29,749	AS	N	N	B9	B4	SO2	B2	SO1	SO6	B3	B6	B7	SO5
Heavy & Tractor-Trailer Truck Drivers	1,550	1,690	0.9	70	100	15	185	19.20	39,937	PS	N	S	T4	T5	R4	B3	B6	B7	B9	T11	B2	C1

### high school or lower

Home Health Aides	580	725	2.5	40	35	15	90	N.A.	N.A.	HS	N	S	B2	SO5	SO6	B3	B6	B7	SO2	SO4	B9	R4
Personal Care Aides	940	1,140	2.1	85	60	20	165	12.50	26,009	HS	N	S	SO5	SO6	B2	B9	B6	SO1	B3	SO2	SY1	R4
Medical Secretaries	210	250	1.9	10	10	5	30	16.79	34,928	HS	N	M	B9	B2	SO5	B7	SO1	SO6	R4	B10	C1	B3
Chemical Equipment Operators & Tenders	115	130	1.7	5	10	*	15	N.A.	N.A.	HS	N	M	T4	T5	B6	B2	B3	SY1	B7	C1	B9	B1
Insurance Claims & Policy Processing Clerks	90	100	1.7	5	5	*	10	19.56	40,686	HS	N	M	B2	B7	B9	B3	B10	SO5	SO6	B1	C1	SY1
Woodworking Machine Operators, Ex Sawing	130	150	1.5	5	10	*	15	N.A.	N.A.	HS	N	M	T5	T4	T8	B6	B3	T1	B9	T11	B2	T2
Construction Laborers	600	690	1.5	20	40	10	75	18.65	38,800	< HS	N	S	B2	SO1	T5	B7	SO6	B9	C1	B3	T4	B6
Plumbers, Pipefitters, & Steamfitters	175	200	1.4	5	15	*	20	N.A.	N.A.	HS	N	A	B3	B2	SY1	C1	T5	T8	T9	B9	T11	B1
Cement Masons & Concrete Finishers	180	205	1.4	5	15	5	25	18.90	39,308	< HS	N	M	B6	SO1	T8	B9	R4	B2	C1	B3	SY1	T4
First-Line Svups of Const Trades & Extraction Wkrs	145	160	1.4	5	10	*	15	28.59	59,466	HS	> 5	N	B2	SO1	B3	B9	R3	B7	R4	B6	SO6	SO4
Insurance Sales Agents	220	250	1.4	10	15	5	25	22.56	46,922	HS	N	M	B7	B2	B9	B3	SO4	B10	R4	SO5	SO3	SO6

# occupations with the most openings



## bachelor's degree or higher

Occupational Title	Employment <sup>[1]</sup>			Annual Job Separations/Opening <sup>[2]</sup>				\$ <sup>[3]</sup>		Career Preparation <sup>[4]</sup>			Top Skills <sup>[5]</sup>									
	2016 Estimated	2026 Projected	Annual Growth Rate (%)	Exits	Transfers	New (Growth)	Total	2019 Mean Wage	2019 Mean Salary	Educ	Work Exp	Job Training	(L-R in order of significance)									
				[a]	[b]	[c]	[a+b+c]															
Registered Nurses	1,040	1,140	1.0	30	25	10	65	28.91	60,135	BA	N	N	B2	SO6	SO5	B9	SO1	B3	B7	SY1	B6	B10
General & Operations Mgrs	525	570	0.8	10	35	5	50	39.07	81,258	BA	> 5	N	B2	SO1	B6	SO6	B9	B3	B7	R4	SO3	B1
Substitute Teachers	305	335	1.0	20	15	5	40	N.A.	N.A.	BA	N	N	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Accountants & Auditors	405	435	0.7	10	25	5	40	26.74	55,628	BA	N	N	B2	B3	B5	B7	B9	B10	SY1	B6	C1	SY2
Middle School Teachers	460	490	0.7	15	20	5	35	N.A.	N.A.	BA	N	N	SO2	B9	B2	B4	B7	SO6	B10	B6	R4	B1
Elementary School Teachers, Ex Special Educ	450	480	0.6	15	15	5	35	89.64	57,371	BA	N	N	SO2	B9	B2	B2	B3	B7	SO1	B6	SO6	B10
Medical & Health Services Mgrs	170	210	2.1	5	10	5	20	42.37	88,133	BA	< 5	N	B9	B3	B2	SO1	SY1	B7	R4	B10	B1	SO6
Market Research Analysts/Specialists	120	145	2.1	5	10	5	15	28.09	58,421	BA	N	N	B3	B7	B10	B2	C1	B9	SY1	B1	B5	B6
Financial Mgrs	165	195	1.8	5	10	5	15	46.18	96,050	BA	> 5	N	B3	SY1	C1	R1	B7	B9	B2	B5	B10	SO1
Human Resources Specialists	120	125	0.8	5	10	*	15	27.32	56,833	BA	N	N	B2	B9	B7	B3	B10	SO1	SY1	SO6	B1	B6
Child, Family, & School Social Wrks	125	135	0.8	5	10	*	15	18.00	37,447	BA	N	N	B2	B9	B3	SO6	SY1	B7	SO5	C1	B6	SO1
Industrial Production Mgrs	165	175	0.6	5	10	*	15	42.99	89,413	BA	> 5	N	B3	B6	B9	SO1	R4	B2	SY1	B7	R3	B1

## some college to associate's degree

Heavy & Tractor-Trailer Truck Drivers	1,550	1,690	0.9	70	100	15	185	19.20	39,937	PS	N	S	T4	T5	R4	B3	B6	B7	B9	T11	B2	C1
Nursing Assistants	1,065	1,115	0.5	65	55	5	125	15.50	32,237	PS	N	N	SO5	B2	SO6	SO1	B6	B9	C1	B7	SY1	R4
Bookkeeping, Accounting, & Auditing Clerks	850	815	-0.4	50	40	-5	90	16.60	34,519	SC	N	M	B5	B2	B3	B7	B9	B10	B6	R4	C1	SO1
Teacher Assistants	530	560	0.7	30	25	5	60	37.07	23,726	SC	N	N	B2	B9	SO2	SO6	SO1	B4	B7	B1	B3	SO4
Automotive Service Technicians & Mechanics	395	425	0.8	15	25	5	40	19.08	39,696	PS	N	S	T9	T1	T5	T11	B3	T4	T8	T2	C1	B2
Medical Assistants	210	260	2.4	10	15	5	30	14.94	31,075	PS	N	N	B9	B2	B7	SO6	B6	C1	SO1	B10	SO5	B1
Hairdressers, Hairstylists, & Cosmetologists	230	255	1.1	15	10	5	30	N.A.	N.A.	PS	N	N	B2	B9	SO5	B3	B1	SY1	SO6	C1	B6	B7
Dental Assistants	185	215	1.6	10	10	5	25	18.23	37,915	PS	N	N	B2	B7	B9	B3	SO5	B1	B6	SO6	C1	SO1
Licensed Practical & Licensed Vocational Nurses	335	330	-0.1	10	10	0	25	20.45	42,532	PS	N	N	SO5	B2	SO1	B6	B7	SO6	B9	R4	B3	SY1
Wind Turbine Service Technicians	115	185	6.1	5	10	5	20	31.83	66,204	PS	N	L	T9	T11	T1	B3	T5	C1	B2	B6	B7	B9
Preschool Teachers, Ex Special Educ	165	180	0.9	10	10	*	20	14.30	29,749	AS	N	N	B9	B4	SO2	B2	SO1	SO6	B3	B6	B7	SO5

## high school or lower

Team Assemblers	3,165	3,185	0.1	135	230	*	370	15.51	32,270	HS	N	M	SO1	B6	T8	B2	B3	B9	R4	R3	T5	B7
Cashiers	1,665	1,700	0.2	160	155	5	315	10.29	21,395	< HS	N	S	SO5	B2	B9	B5	SO6	SO1	B3	SY1	B6	B7
Farmers, Ranchers, & Other Agricultural Mgrs	4,180	4,180	0.0	245	60	0	305	N.A.	N.A.	HS	> 5	N	B3	SY1	B9	SO1	B6	B2	R4	C1	T5	SO4
Combined Food Prep/Serving Wrks, Incl Fast Food	1,350	1,525	1.3	125	135	20	280	10.18	21,183	< HS	N	S	B2	SO5	B9	SO1	B6	SO6	SY1	B3	SO2	B4
Laborers & Freight/Stock/Material Movers, Hand	1,380	1,485	0.8	70	125	10	205	17.00	35,359	< HS	N	S	SO1	B3	T4	B2	T5	B7	B9	B6	SY1	R4
Retail Salespersons	1,245	1,280	0.3	80	100	5	185	12.75	26,516	< HS	N	S	SO4	B2	SO5	B9	SO3	SO6	B3	B1	SO1	B6
Personal Care Aides	940	1,140	2.1	85	60	20	165	12.50	26,009	HS	N	S	SO5	SO6	B2	B9	B6	SO1	B3	SO2	SY1	R4
Office Clerks, General	1,130	1,120	-0.1	65	65	*	130	14.79	30,773	HS	N	S	B2	B7	B9	B10	SO1	B3	SO5	SO6	R4	B6
Waiters & Waitresses	610	640	0.5	45	70	5	120	10.46	21,759	< HS	N	S	B2	SO5	B9	SO6	SO1	B6	B1	C1	B3	SY1
Secretaries & Admin Assts, Ex Legal/Med/Exec	1,065	975	-0.8	55	55	-10	100	16.15	33,599	HS	N	S	B10	B2	B7	B9	R4	SO5	SO1	B3	SY1	B6

### Legend:

Occupations were selected based on their education level, annual growth rate, total annual openings, and wages (residual or undefined occupations were not included).

**[1] Employment** includes: **Estimated** = Estimation of labor force by occupation (rounded); **Projected** = Projection of future labor force by occupation (rounded); and **Annual Growth Rate (%)** = Ten year growth rate (not shown) divided by ten. **[2] Annual Job Openings** include: **New Jobs/Replacements** = Ten year projection (not shown) divided by ten (rounded) and **Total Openings** = Annual New Jobs plus Annual Replacements (rounded). \* = Employment data suppression (Occupational employment data may not add up or equal occupational group totals due to rounding and/or suppression of occupations with less than twenty rounded total annual openings.). **[3] Mean (Average) Wage & Salary (\$)** = Dividing the estimated total pay for an occupation by its weighted employment. Pay provided in wage (hourly) and salary (annual) formats; Missing pay data may be derived from calculation or proration of reported wage/salary data if available (i.e., legislator pay based on 4-months service, education and coaching pay based on 12-months service); Occupations with limited or no compensation data (which inhibits either wage or salary calculated derivations) are subsequently omitted from any methodological calculations. N.A. = Not Available. Due to occupational code realignment some occupations will have the same wage structure. These include: 13-1020 (13-1021, 13-1022, 13-1023), 15-2090 (15-2091, 15-2099), 21-1018 (21-1011, 21-1014), 29-2010 (29-2011, 29-2012), 39-1010 (39-1011, 39-1012), 39-7010 (39-7011, 39-7012), 47-4090 (47-4091, 47-4099), 51-2028 (51-2022, 51-2023), 51-2098 (51-2092, 51-2099), 53-1048 (53-1021, 53-1031)

**[4] Career Preparation** determined by the U.S. Department of Labor's Bureau of Labor Statistics (BLS). Alternative employment pathways may exist as well as differing educational, training, or licensing requirements per state. Iowa requirements are used in this publication when available. Career Preparation areas/levels include: **Education** (typical education level needed to enter an occupation): DP = Doctoral or Professional degree; MA = Master's degree; BA = Bachelor's degree; AS = Associate's degree; PS = Postsecondary non-degree award; SC = Some college, no degree; HS = High school diploma or equivalent; NE = No formal Educational credential; **Work Experience** (typical work experience level commonly considered necessary for entry into an occupation, or substitutable for formal types of training): > 5 = 5 years or more; < 5 = Less than 5 years; N = None; and **Job Training** (typical on-the-job training level needed to attain occupational competency): I = Internship/residency; A = Apprenticeship; L = Long-term on-the-job training; M = Moderate-term on-the-job training; S = Short-term on-the-job training; None = N. **[5] Top Skills** refers to the the top ten most important skills for a particular occupation as identified by sampled workers' questionnaire responses conducted by occupational analysts of the U.S. Department of Labor's Occupational Information Network (O\*NET). These include: **Basic Skills**: B1 = Active Learning; B2 = Active Listening; B3 = Critical Thinking; B4 = Learning Strategies; B5 = Mathematics; B6 = Monitoring; B7 = Reading Comprehension; B8 = Science; B9 = Speaking; B10 = Writing; **Complex Problem Solving Skills**: C1 = Complex Problem Solving; **Resource Management Skills**: R1 = Management of Financial Resources; R2 = Management of Material Resources; R3 = Management of Personnel Resources; R4 = Time Management; **Social Skills**: SO1 = Coordination; SO2 = Instructing; SO3 = Negotiation; SO4 = Persuasion; SO5 = Service Orientation; SO6 = Social Perceptiveness; **Systems Skills**: SY1 = Judgment and Decision Making; SY2 = Systems Analysis; SY3 = Systems Evaluation; and **Technical Skills**: T1 = Equipment Maintenance; T2 = Equipment Selection; T3 = Installation; T4 = Operation and Control; T5 = Operation Monitoring; T6 = Operations Analysis; T7 = Programming; T8 = Quality Control Analysis; T9 = Repairing; T10 = Technology Design; T11 = Troubleshooting. N.A. = Not Available.

### Sources:

**Education/Work Experience/Job Training:** Bureau of Labor Statistics, U.S. Department of Labor; **Employment:** 2016-2026 Occupational Projections estimates based on 2016 annual industry employment data and 2017 2<sup>nd</sup> quarter occupational staffing pattern data, Labor Market and Workforce Information Division, Iowa Workforce Development; **Skills:** Occupational Information Network (O\*NET), Employment and Training Administration, U.S. Department of Labor; **Wages:** 2019 Iowa Wage Survey estimates (based on 2018 2<sup>nd</sup> quarter occupational wage data updated to 2019 2<sup>nd</sup> quarter using Employment Cost Index), Labor Market and Workforce Information Division, Iowa Workforce Development.

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