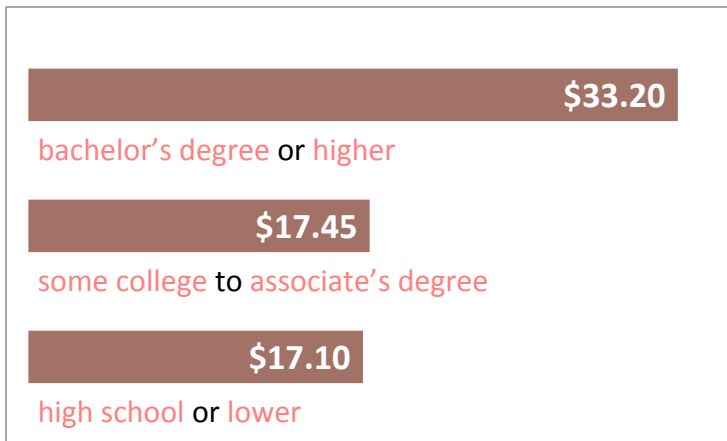


mean hourly wages by education level



fastest growing occupations

bachelor's degree or higher

Occupational Title	Employment ⁽¹⁾			Annual Job Openings ⁽²⁾			Wage ⁽³⁾		Career Preparation ⁽⁴⁾			Top Skills ⁽⁵⁾						
	2014 Estimated	2024 Projected	Annual Growth Rate (%)	New	Replace	Total	2016 Mean Wage	2016 Mean Salary	Educ	Work Exp	Job Training	(L-R in order of significance)						
Operations Research Analysts	725	1,020	4.1	30	15	40	35.35	73,529	BA	N	N	B3	B5	C1	B7	SY1	SY2	SY3
Information Security Analysts	1,775	2,480	3.9	70	25	95	35.53	73,912	BA	<5	N	B7	B3	C1	B9	B2	B10	
Interpreters & Translators	500	680	3.5	20	10	25	17.48	36,357	BA	N	S	B7	B9	B2	B6	B10		
Actuaries	525	680	3.0	15	15	30	46.91	97,578	BA	N	L	B5	B3	SY1	C1	B7		
Physical Therapists	1,720	2,220	2.9	50	45	95	37.58	78,159	DP	N	N	B2	B9	B7	B3	SO6	R4	
Occupational Therapists	895	1,150	2.8	25	15	45	35.23	73,268	MA	N	N	B2	B7	B9	B3	SO5	SO6	
Nurse Practitioners	835	1,070	2.8	25	20	45	45.34	94,309	MA	N	N	B2	B7	B8	B9	B3	B6	SO6
Computer Systems Analysts	5,305	6,790	2.8	150	70	215	38.25	79,561	BA	N	N	B3	B2	B7	B9	SV2		
Personal Financial Advisors	1,560	1,980	2.7	40	40	80	37.63	78,272	BA	N	L	B3	B9	B7	SY1	B10		
Optometrists	505	630	2.5	10	20	30	62.22	129,416	DP	N	N	B8	B2	B3	B9	SO1	B7	SO5

some college to associate's degree

Wind Turbine Service Technicians	255	560	12.0	30	5	35	26.41	54,931	SC	N	L	T9	T11	T1	B3	T5		
Occupational Therapy Assistants	360	520	4.3	15	10	25	25.83	53,717	AS	N	N	B7	B2	SY1	SO6	B9	R4	B10
Physical Therapist Assistants	805	1,115	3.9	30	25	55	22.10	45,966	AS	N	N	B9	B2	SO6	B6	SO1	B3	B7
Web Developers	960	1,265	3.2	30	10	40	29.33	61,013	AS	N	N	T7	B3	T6	B2	C1	B7	
Veterinary Technologists & Technicians	650	820	2.6	15	5	25	15.07	31,345	AS	N	N	B3	B6	B2	B9	SO5		
Diagnostic Medical Sonographers	555	695	2.4	15	10	25	29.86	62,106	AS	N	N	B9	B2	B7	SO6	B3	B6	B8
Massage Therapists	890	1,105	2.4	20	5	30	19.06	39,642	PS	N	N	B2	B9	SO5	B3	SO6		
Phlebotomists	470	575	2.2	10	10	20	14.03	29,185	PS	N	N	B1	SO5	SO6	B9	B3		
Computer User Support Specialists	4,810	5,735	1.9	90	60	155	20.76	43,172	SC	N	N	B2	B9	B7	B3	B10		
Heating, Air Conditioning, & Refrigeration Mechanics & Installers	3,315	3,940	1.9	60	50	115	23.80	49,499	PS	N	L	T3	T11	T9	T1	T5		

high school or lower

Home Health Aides	10,035	13,265	3.2	325	225	550	11.50	23,918	NE	N	S	B2	SO5	B3	SO6	B6		
Physical Therapist Aides	705	935	3.2	25	20	45	13.62	28,319	HS	N	S	B2	SO5	SO1	SO5	B9		
Industrial Machinery Mechanics	4,470	5,665	2.7	120	115	235	23.18	48,218	HS	N	L	T9	T1	T5	T11	T8		
Personal Care Aides	6,980	8,800	2.6	180	55	240	11.05	22,983	NE	N	S	SO5	B2	SO6	B3	B9		
Insulation Wkrs, Mechanical	390	485	2.4	10	15	25	19.32	40,186	HS	N	A	SO1	B3	B2	B6	SO6	B9	R4
Taxi Drivers & Chauffeurs	2,180	2,695	2.4	50	40	95	10.90	22,680	NE	N	S	B2	SO5	T4	B9	SO6	R4	
Millwrights	840	1,025	2.2	20	15	35	24.21	50,347	HS	N	A	T3	T1	T5	B3	T9	T11	
Opticians, Dispensing	925	1,130	2.2	20	25	45	14.61	30,396	HS	N	L	B9	B2	B7	B1	B3	SO5	SO6
Insurance Sales Agents	6,415	7,780	2.1	135	170	305	25.19	52,401	HS	N	M	B2	B7	B9	B10	B3	SO4	R4
Computer-Controlled Machine Tool Operators, Metal & Plastic	2,825	3,425	2.1	60	85	145	17.28	35,937	HS	N	M	B6	T5	B3	T8	T4		

occupations with the most openings

bachelor's degree or higher

Occupational Title	Employment ^[1]			Annual Job Openings ^[2]			\$ ^[3]		Career Preparation ^[4]			Top Skills ^[5]						
	2014 Estimated	2024 Projected	Annual Growth Rate (%)	New	Replace	Total	2016 Mean Wage	2016 Mean Salary	Educ	Work Exp	Job Training	(L-R in order of significance)						
Registered Nurses	32,025	37,260	1.6	525	755	1,280	26.46	55,044	BA	N	N	S06	B2	S01	B9	B3	B7	S05
Elementary School Teachers, Ex Special Education	21,910	23,555	0.8	165	485	650	24.61	51,182	BA	N	I	S02	B9	B4	B2	B1	B6	S06
Accountants & Auditors	13,020	15,110	1.6	210	345	555	30.25	62,910	BA	N	N	B2	B5	B7	B10	B9		
Secondary School Teachers, Ex Special & Career/Tech Education	14,070	15,130	0.8	105	335	440	24.67	51,305	BA	N	I	S02	B4	B9	B2	S01	B3	
General & Operations Managers	10,755	11,875	1.0	110	270	385	42.94	89,317	BA	> 5	N	B2	B7	B9	B3	B6		
Middle School Teachers, Ex Special & Career/Tech Education	11,340	12,200	0.8	85	250	335	26.50	55,127	BA	N	I	S02	B2	B7	B4	S06	B10	
Financial Managers	6,015	6,785	1.3	75	140	220	52.01	108,187	BA	> 5	N	C1	B3	B2	B7	SY1	B9	B10
Coaches & Scouts	5,295	5,690	0.7	40	180	220	13.46	28,004	BA	N	N	S02	B9	B3	SY1	B6		
Computer Systems Analysts	5,305	6,790	2.8	150	70	215	38.25	79,561	BA	N	N	B3	B2	B7	B9	SY2		
Medical & Health Services Managers	4,855	5,635	1.6	80	125	200	38.90	80,920	BA	< 5	N	B7	B9	B2	B3	SY1		

some college to associate's degree

Heavy & Tractor-Trailer Truck Drivers	42,755	48,650	1.4	590	725	1,315	19.52	40,600	PS	N	S	T4	T5	B6	B2	B3	T8		
Nursing Assistants	23,365	26,790	1.5	340	530	870	12.64	26,295	PS	N	N	S06	S05	B2	B6	S01			
Teacher Assistants	16,380	17,830	0.9	145	395	540	11.24	23,371	SC	N	N	B2	B9	S01	B6	S05	S06		
Automotive Service Technicians & Mechanics	9,820	10,675	0.9	85	265	350	18.64	38,780	PS	N	S	T1	T9	T11	T2	T8			
Hairdressers, Hairstylists, & Cosmetologists	7,970	8,905	1.2	95	205	300	12.42	25,843	PS	N	N	B2	S05	B3	B9	B1	SY1	S06	
Licensed Practical & Licensed Vocational Nurses	7,585	8,370	1.0	80	215	295	19.10	39,733	PS	N	N	B2	B9	B3	B7	S01	S05		
Bookkeeping, Accounting, & Auditing Clerks	24,445	23,035	-0.6	0	240	240	16.35	34,009	SC	N	M	B2	B7	B9	B3	B5	B6	R4	B10
Preschool Teachers, Ex Special Education	4,250	4,850	1.4	60	125	185	13.01	27,067	AS	N	N	B9	B4	S02	B2	S01	S06		
Computer User Support Specialists	4,810	5,735	1.9	90	60	155	20.76	43,172	SC	N	N	B2	B9	B7	B3	B10			
Medical Assistants	3,705	4,380	1.8	70	75	145	15.37	31,973	PS	N	N	B2	B9	S06	B6	B7			

high school or lower

Heavy & Tractor-Trailer Truck Drivers	42,755	48,650	1.4	590	725	1,315	19.52	40,600	PS	N	S	T4	T5	B6	B2	B3	T8		
Nursing Assistants	23,365	26,790	1.5	340	530	870	12.64	26,295	PS	N	N	S06	S05	B2	B6	S01			
Teacher Assistants	16,380	17,830	0.9	145	395	540	11.24	23,371	SC	N	N	B2	B9	S01	B6	S05	S06		
Automotive Service Technicians & Mechanics	9,820	10,675	0.9	85	265	350	18.64	38,780	PS	N	S	T1	T9	T11	T2	T8			
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Licensed Practical & Licensed Vocational Nurses	7,585	8,370	1.0	80	215	295	19.10	39,733	PS	N	N	B2	B9	B3	B7	S01	S05		
Bookkeeping, Accounting, & Auditing Clerks	24,445	23,035	-0.6	0	240	240	16.35	34,009	SC	N	M	B2	B7	B9	B3	B5	B6	R4	B10
Preschool Teachers, Ex Special Education	4,250	4,850	1.4	60	125	185	13.01	27,067	AS	N	N	B9	B4	S02	B2	S01	S06		
Computer User Support Specialists	4,810	5,735	1.9	90	60	155	20.76	43,172	SC	N	N	B2	B9	B7	B3	B10			
Medical Assistants	3,705	4,380	1.8	70	75	145	15.37	31,973	PS	N	N	B2	B9	S06	B6	B7			

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. **[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 five (or more if tied) 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**: 2014-2024 Occupational Projections estimates based on 2014 annual industry employment data and 2015 2nd 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**: 2016 Iowa Wage Survey estimates (based on 2015 2nd quarter occupational wage data updated to 2016 2nd quarter using Employment Cost Index), Labor Market and Workforce Information Division, Iowa Workforce Development.

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