

REGION 9

CAREER & EDUCATION OUTLOOK

MEAN HOURLY WAGES BY EDUCATION LEVEL



FASTEST GROWING OCCUPATIONS

BACHELOR'S DEGREE OR HIGHER

Occupational Title	Employment <sup>(1)</sup>			Ann Job Openings <sup>(2)</sup>			2015 \$ <sup>(3)</sup>		Career Preparation <sup>(4)</sup>			Top Skills <sup>(5)</sup>							
	2012 Est	2022 Proj	Annual Growth Rate (%)	New	Replace	Total	Mean Wage	Mean Salary	Educ	Work Exp	Job Training	(L-R in order of significance)							
Market Research Analysts & Marketing Specialists	290	390	3.4	10	5	15	23,91	49,738	BA	N	N	B7	B2	C1	B3	SY1	B9	B10	
Computer Systems Analysts	165	220	3.3	5	5	10	38.37	79,814	BA	N	N	B3	B2	B7	B9	SY2			
Software Developers, Applications	195	260	3.3	5	*	10	37.69	78,400	BA	N	N	C1	T7	SY2	SY1	SY3			
Physical Therapists	215	285	3.3	5	5	10	36.21	75,320	DP	N	N	B2	B9	B7	B3	SO6	R4		
Nurse Practitioners	190	240	2.6	5	5	10	43.89	91,288	MA	N	N	B2	B7	B8	B9	B3	B6	SO6	
Medical & Health Services Managers	450	555	2.4	10	10	20	39.29	81,730	BA	N	N	B7	B9	B2	B3	SY1			
Civil Engineers	230	285	2.4	5	5	10	36.47	75,851	BA	N	N	C1	B3	SY1	B5	T6	B7		
Cost Estimators	205	250	2.0	5	5	10	30.95	64,366	BA	N	N	B5	B3	B9	B2	SY1			
Social & Community Service Managers	290	345	1.9	5	5	10	23.24	48,337	BA	> 5	N	B2	B9	R4	SO1	B3	SY1	R3	
Accountants & Auditors	895	1,055	1.8	15	25	40	29.03	60,392	BA	N	N	B2	B5	B7	B10	B9			

SOME COLLEGE TO ASSOCIATE'S DEGREE

Diagnostic Medical Sonographers	160	235	4.7	10	*	10	28.05	58,344	AS	N	N	B9	B2	B7	SO6	B3	B6	B8	R4
Medical & Clinical Laboratory Technicians	205	270	3.2	5	5	10	16.08	33,448	AS	N	N	B2	B3	B7	B8	T5	B9		
Computer User Support Specialists	445	570	2.8	10	5	20	18.83	39,164	SC	N	M	B2	B9	B7	B3	B10			
Emergency Medical Technicians & Paramedics	170	210	2.6	5	5	10	0.00	N.A.	PS	N	N	B3	SO5	B2	SO6	B9			
Dental Hygienists	320	400	2.5	10	10	15	31.38	65,276	AS	N	N	B2	B9	B3	B7	SO6			
Licensed Practical & Licensed Vocational Nurses	385	475	2.3	10	10	20	18.72	38,933	PS	N	N	B2	B9	B3	B7	SO1	SO5		
Medical Assistants	505	615	2.2	10	10	20	13.00	27,045	PS	N	N	B2	B9	SO6	B6	B7			
Hairdressers, Hairstylists, & Cosmetologists	700	845	2.1	15	15	30	11.61	24,150	PS	N	N	B2	SO5	B3	B9	B1	SY1	SO6	
Radiologic Technologists	315	380	2.1	5	5	10	23.13	48,113	AS	N	N	B9	B2	T4	SO5	SO1	B6	T5	
Medical Records & Health Information Technicians	170	205	2.1	5	5	10	15.07	31,340	PS	N	N	B2	B7	B9	B3	B6	R4		

HIGH SCHOOL OR LOWER

Personal Care Aides	1,075	1,550	4.4	45	10	55	9.96	20,721	< HS	N	S	SO5	B2	SO6	B3	B9		
Home Health Aides	630	855	3.6	20	10	35	10.35	21,530	< HS	N	S	B2	SO5	B3	SO6	B6		
Medical Secretaries	785	1,060	3.5	30	10	35	13.19	27,446	HS	N	M	B2	SO5	B9	B7	SO1	B10	
Carpenters	910	1,195	3.1	30	10	40	20.58	42,816	HS	N	A	B3	T2	T5	B2	SO1	SY1	B5
Painters, Construction & Maintenance	345	450	3.0	10	5	15	21.63	44,981	< HS	N	M	B2	B3	SO6	B7	R4		
Dispatchers, Ex Police, Fire, & Ambulance	160	205	2.8	5	5	10	18.65	38,786	HS	N	M	B2	B9	SO1	B7	R4		
Industrial Machinery Mechanics	635	810	2.8	20	20	35	21.92	45,583	HS	N	L	T9	T1	T5	T11	T8		
Construction Laborers	800	990	2.4	20	15	35	14.65	30,478	< HS	N	S	B9	SO1	B2	B3	T4	T5	SO6
Computer-Controlled Machine Tool Operators, Metal & Plastic	295	365	2.4	5	10	15	17.67	36,762	HS	N	M	B6	T5	B3	T8	T4		
Cement Masons & Concrete Finishers	580	715	2.3	15	5	20	16.40	34,118	< HS	N	M	B6	B2	SO1	B3	SY1		
First-Line Supervisors of Construction Trades & Extraction Wkrs	555	675	2.3	10	5	20	32.65	67,906	HS	> 5	N	B2	SO1	B3	B9	R4		
First-Line Supvrs of Helpers, Laborers, & Material Movers, Hand	200	245	2.3	5	5	10	22.49	46,786	HS	< 5	N	B2	B3	B9	SO1	R3		

# OCCUPATIONS WITH THE MOST OPENINGS

## BACHELOR'S DEGREE OR HIGHER

Occupational Title	Employment <sup>[1]</sup>			Ann Job Openings <sup>[2]</sup>			\$ <sup>[3]</sup>		Career Preparation <sup>[4]</sup>			Top Skills <sup>[5]</sup>										
	2012 Est	2022 Proj	Annual Growth Rate (%)	New	Replace	Total	2015 Mean Wage	2015 Mean Salary	Educ	Work Exp	Job Training	(L-R in order of significance)										
General & Operations Managers	1,650	1,890	1.5	25	30	55	44,19	91,912	BA	< 5	N	B2	B7	B9	B3	B6						
Accountants & Auditors	895	1,055	1.8	15	25	40	29.03	60,392	BA	N	N	B2	B5	B7	B10	B9						
Elementary School Teachers, Ex Special Education	1,115	1,240	1.1	10	25	35	23.65	49,186	BA	N	I	SO2	B9	B4	B2	B1	B6	SO6				
Middle School Teachers, Ex Special & Career/Technical Educ	1,100	1,220	1.1	10	25	35	N.A.	N.A.	BA	N	I	SO2	B2	B7	B4	SO6	B10					
Secondary School Teachers, Ex Special & Career/Technical Educ	1,010	1,050	0.4	5	25	30	22.84	47,507	BA	N	I	SO2	B4	B9	B2	SO1	B3					
Coaches & Scouts	535	620	1.6	10	15	25	10.79	22,440	BA	N	N	SO2	B9	R3	SY1	B6						
Medical & Health Services Managers	450	555	2.4	10	10	20	39.29	81,730	BA	N	N	B7	B9	B2	B3	SY1						
Market Research Analysts & Marketing Specialists	290	390	3.4	10	5	15	23.91	49,738	BA	N	N	B7	B2	C1	B3	SY1	B9	B10				
Child, Family, & School Social Workers	450	515	1.6	5	10	15	21.20	44,099	BA	N	N	B2	B9	B7	SO6	B3	B6	SO5				
Financial Managers	410	465	1.3	5	10	15	44.96	93,515	BA	> 5	N	C1	B3	B2	B7	SY1	B9	B10				
Mechanical Engineers	360	400	1.1	5	10	15	33.17	68,997	BA	N	N	C1	B3	B2	SY1	B5	B7					
Substitute Teachers	670	710	0.7	5	10	15	13.00	27,049	BA	N	I	N.A.	N.A.	N.A.	N.A.	N.A.						

## SOME COLLEGE TO ASSOCIATE'S DEGREE

Registered Nurses	2,985	3,580	2.0	60	60	115	24.36	50,677	AS	N	N	SO6	B2	SO1	B9	B3	B7	SO5				
Heavy & Tractor-Trailer Truck Drivers	3,065	3,645	1.9	60	50	105	20.19	41,999	PS	N	S	T4	T5	B6	B2	B3	T8					
Nursing Assistants	1,655	1,880	1.4	20	30	55	11.62	24,179	PS	N	N	SO6	SO5	B2	B6	SO1						
Teacher Assistants	1,380	1,455	0.5	10	30	40	11.78	24,493	SC	N	N	B2	B9	SO1	B6	SO5	SO6					
Hairdressers, Hairstylists, & Cosmetologists	700	845	2.1	15	15	30	11.61	24,150	PS	N	N	B2	SO5	B3	B9	B1	SY1	SO6				
First-Line Supervisors of Production & Operating Workers	1,195	1,295	0.9	10	15	25	24.39	50,723	PS	< 5	N	B3	R4	B2	B9	SO1	R3	B9				
Computer User Support Specialists	445	570	2.8	10	5	20	18.83	39,164	SC	N	M	B2	B9	B7	B3	B10						
Licensed Practical & Licensed Vocational Nurses	385	475	2.3	10	10	20	18.72	38,933	PS	N	N	B2	B9	B3	B7	SO1	SO5					
Medical Assistants	505	615	2.2	10	10	20	13.00	27,045	PS	N	N	B2	B9	SO6	B6	B7						
Dental Hygienists	320	400	2.5	10	10	15	31.38	65,276	AS	N	N	B2	B9	B3	B7	SO6						
Preschool Teachers, Ex Special Education	430	475	1.2	5	10	15	13.28	27,613	AS	N	N	B9	B4	SO2	B2	SO1	SO6					

## HIGH SCHOOL OR LOWER

Retail Salespersons	5,040	5,510	0.9	45	170	220	12.49	25,978	< HS	N	S	B2	SO4	B9	SO6	SO3	SO6					
Combined Food Preparation & Serving Workers, Incl Fast Food	3,915	4,450	1.4	55	150	200	8.57	17,818	< HS	N	S	B2	SO5	B9	SO1	B6	SO6					
Cashiers	3,940	4,230	0.7	30	170	200	9.16	19,063	< HS	N	S	B2	SO5	B9	B5	SO6						
Waiters & Waitresses	2,670	2,825	0.6	15	130	145	9.67	20,118	< HS	N	S	B2	SO5	SO6	B9	SO1						
Laborers & Freight, Stock, & Material Movers, Hand	2,400	2,760	1.5	35	75	110	14.22	29,572	< HS	N	S	B2	B3	T5	SO1	B6	B7	B9				
Farmers, Ranchers, & Other Agricultural Managers	6,970	6,160	-1.2	0	110	110	N.A.	N.A.	HS	> 5	N	B3	B9	B2	SY1	B7	R4					
Customer Service Reps	2,295	2,705	1.8	40	60	105	11.87	24,700	HS	N	S	B2	B9	SO5	SO4	B7						
Janitors & Cleaners, Ex Maids & Housekeeping Cleaners	2,595	2,915	1.2	30	50	80	11.82	24,579	< HS	N	S	B3	B2	SO1	SO6	B9	R4					
Team Assemblers	2,570	2,890	1.2	30	40	75	14.74	30,656	HS	N	M	SO1	B2	B3	B9	B6	B7					
Office Clerks, General	2,590	2,805	0.8	20	55	75	14.54	30,248	HS	N	S	B2	B7	B9	SO6	R4	B10					

### 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; < HS = Less than high school; **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 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**: 2012-2022 Occupational Projections estimates based on 2012 annual industry employment data and 2013 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**: 2015 Iowa Wage Survey estimates (based on 2014 2<sup>nd</sup> quarter occupational wage data updated to 2015 2<sup>nd</sup> quarter using Employment Cost Index), Labor Market and Workforce Information Division, Iowa Workforce Development. This workforce product was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The product was created by the recipient and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership. This product is copyrighted by the institution that created it. Internal use by an organization and/or personal use by an individual for non-commercial purposes is permissible. All other uses require the prior authorization of the copyright owner. This publication was produced by the Labor Market and Workforce Information Division of Iowa Workforce Development. Revisions and/or corrections made when necessary. Inquiries may be directed to Brent Paulson at 515.281.3439 or Brent.Paulson@iwd.iowa.gov. Visit [www.iowalmi.gov](http://www.iowalmi.gov) to obtain the latest workforce data and trends including this document. Published 11/2015.