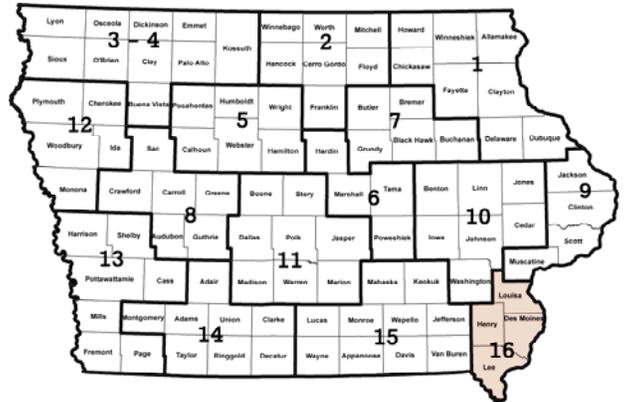


REGION 16

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>			\$ <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)						
Elem School Teachers, Ex Special	685	760	1.09	10	15	25	22.28	46,351	BA	N	I	SO2	B9	B4	B2	B1	B6	SO6
Accountants & Auditors	290	320	1.03	5	10	10	28.00	58,239	BA	N	N	B2	B5	B7	B10	B9		
General & Operations Managers	435	475	0.92	5	10	10	39.95	83,099	BA	< 5	N	B2	B7	B9	B3	B6		
Mechanical Engineers	200	210	0.50	*	5	10	37.53	78,063	BA	N	N	C1	B3	B2	SY1	B5	B7	
Sec Sch Teach, Ex Spec/Career/Tech	360	380	0.42	*	10	10	20.71	43,075	BA	N	I	SO2	B4	B9	B2	SO1	B3	

SOME COLLEGE TO ASSOCIATE'S DEGREE

Heat/A C/Refrig Mechanics	145	180	2.41	5	5	10	N.A.	N.A.	PS	N	L	T3	T11	T9	T1	T5		
Hairdressers/Stylists/Cosmetologists	235	285	2.34	5	5	10	12.91	26,852	PS	N	N	B2	SO5	B3	B9	B1	SY1	SO6
Heavy & Tractor-Trailer Truck Drivers	1,525	1,870	2.26	35	25	60	15.47	32,188	PS	N	S	T4	T5	B6	B2	B3	T8	
Licensed Practical/Vocational Nurses	395	480	2.03	10	10	20	17.36	36,105	PS	N	N	B2	B9	B3	B7	SO1	SO5	
Medical Assistants	230	275	1.96	5	5	10	13.99	29,091	PS	N	N	B2	B9	SO6	B6	B7		
Registered Nurses	1,085	1,245	1.47	15	20	35	26.21	54,519	AS	N	N	SO6	B2	SO1	B9	B3	B7	SO5
Nursing Assistants	1,015	1,155	1.38	15	20	35	11.36	23,619	PS	N	N	SO6	SO5	B2	B6	SO1		
Teacher Assistants	795	835	0.50	5	20	20	9.90	20,590	SC	N	N	B2	B9	SO1	B6	SO5	SO6	
First-Line Supvs of Prod/Oper Wkrs	465	480	0.32	*	5	10	24.12	50,176	PS	< 5	N	B3	R4	B2	B9	SO1	R3	B9

HIGH SCHOOL OR LOWER

Home Health Aides	350	505	4.43	15	5	25	10.03	20,868	< HS	N	S	B2	SO5	B3	SO6	B6		
Personal Care Aides	350	470	3.43	10	*	15	9.88	20,555	< HS	N	S	SO5	B2	SO6	B3	B9		
Carpenters	345	450	3.04	10	5	15	N.A.	N.A.	HS	N	A	B3	T2	T5	B2	SO1	SY1	B5
Construction Laborers	265	340	2.83	5	5	15	15.92	33,114	< HS	N	S	B9	SO1	B2	B3	T4	T5	SO6
Weld/Solder/Braze Machine Operators	190	240	2.63	5	5	10	19.71	40,988	HS	N	M	T5	B2	B3	B6	T4	B9	
Food Servers, Nonrestaurant	145	180	2.41	5	5	10	9.01	18,739	< HS	N	S	B2	SO5	SO6	B9	SO1		
Plumbers, Pipefitters, & Steamfitters	275	340	2.36	5	5	10	N.A.	N.A.	HS	N	A	SO1	R4	B3	T5	B2	SY1	B6
Sheet Metal Wkrs	250	305	2.20	5	5	10	26.70	55,531	HS	N	A	B3	SY1	R4	B5	B2	SO1	B6
Industrial Machinery Mechanics	300	365	2.17	5	10	15	22.32	46,426	HS	N	L	T9	T1	T5	T11	T8		
Helpers--Production Wkrs	340	405	1.91	5	5	10	13.94	28,986	< HS	N	S	B2	B3	B6	B7	SO6	B9	
Childcare Wkrs	550	650	1.91	10	15	25	8.54	17,756	HS	N	S	B6	SO5	B9	B3	SO6		

# 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	2014 Mean Wage	2014 Mean Salary	Educ	Work Exp	Job Training	(L-R in order of significance)						
Elem School Teachers, Ex Special	685	760	1.09	10	15	25	22.28	46,351	BA	N	I	SO2	B9	B4	B2	B1	B6	SO6
Accountants & Auditors	290	320	1.03	5	10	10	28.00	58,239	BA	N	N	B2	B5	B7	B10	B9		
General & Operations Mgrs	435	475	0.92	5	10	10	39.95	83,099	BA	< 5	N	B2	B7	B9	B3	B6		
Mechanical Engineers	200	210	0.50	*	5	10	37.53	78,063	BA	N	N	C1	B3	B2	SY1	B5	B7	
Sec School Teachers, Ex Spec/Career/Tech	360	380	0.42	*	10	10	20.71	43,075	BA	N	I	SO2	B4	B9	B2	SO1	B3	

## SOME COLLEGE TO ASSOCIATE'S DEGREE

Heavy & Tractor-Trailer Truck Drivers	1,525	1,870	2.26	35	25	60	15.47	32,188	PS	N	S	T4	T5	B6	B2	B3	T8	
Registered Nurses	1,085	1,245	1.47	15	20	35	26.21	54,519	AS	N	N	SO6	B2	SO1	B9	B3	B7	SO5
Nursing Assistants	1,015	1,155	1.38	15	20	35	11.36	23,619	PS	N	N	SO6	SO5	B2	B6	SO1		
Licensed Practical/Vocational Nurses	395	480	2.03	10	10	20	17.36	36,105	PS	N	N	B2	B9	B3	B7	SO1	SO5	
Teacher Assistants	795	835	0.50	5	20	20	9.90	20,590	SC	N	N	B2	B9	SO1	B6	SO5	SO6	
Heat/A C/Refrigeration Mechanics	145	180	2.41	5	5	10	N.A.	N.A.	PS	N	L	T3	T11	T9	T1	T5		
Hairdressers/Hairstylists/Cosmetologists	235	285	2.34	5	5	10	12.91	26,852	PS	N	N	B2	SO5	B3	B9	B1	SY1	SO6
Medical Assistants	230	275	1.96	5	5	10	13.99	29,091	PS	N	N	B2	B9	SO6	B6	B7		
First-Line Supervisors of Production/Operating Workers	465	480	0.32	*	5	10	24.12	50,176	PS	< 5	N	B3	R4	B2	B9	SO1	R3	B9

## HIGH SCHOOL OR LOWER

Cashiers	1,720	1,840	0.67	10	75	85	9.02	18,759	< HS	N	S	B2	SO5	B9	B5	SO6		
Laborers & Freight/Stock/Mat Movers, Hand	1,360	1,550	1.40	20	40	60	13.80	28,706	< HS	N	S	B2	B3	T5	SO1	B6	B7	B9
Retail Salespersons	1,260	1,365	0.79	10	45	55	12.35	25,681	< HS	N	S	B2	SO4	B9	SO6	SO3	SO6	
Waiters & Waitresses	910	965	0.55	5	45	50	8.21	17,070	< HS	N	S	B2	SO5	SO6	B9	SO1		
Farmers, Ranchers, & Other Agricultural Managers	3,200	2,855	-1.08	0	50	50	N.A.	N.A.	HS	> 5	N	B3	B9	B2	SY1	B7	R4	
Comb Food Prep/Service Workers, Incl Fast Food	840	965	1.49	10	30	45	8.34	17,353	< HS	N	S	B2	SO5	B9	SO1	B6	SO6	
Home Health Aides	350	505	4.43	15	5	25	10.03	20,868	< HS	N	S	B2	SO5	B3	SO6	B6		
Childcare Workers	550	650	1.91	10	15	25	8.54	17,756	HS	N	S	B6	SO5	B9	B3	SO6		
Maids & Housekeeping Cleaners	735	845	1.50	10	15	25	9.46	19,685	< HS	N	S	B2	SO5	SO6	R4	B3	B6	B9
Office Clerks, General	980	1,045	0.61	5	20	25	13.15	27,351	HS	N	S	B2	B7	B9	SO6	R4	B10	
Stock Clerks & Order Fillers	785	790	0.06	0	25	25	11.43	23,771	< HS	N	S	B9	B2	SO5	SO6	SO1	R4	

### 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**: 2014 Iowa Wage Survey estimates (based on 2013 2<sup>nd</sup> quarter occupational wage data updated from 2014 2<sup>nd</sup> quarter using Employment Cost Index), Labor Market and Workforce Information Division, Iowa Workforce Development.

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 <http://iwin.iowaworkforce.org/> to obtain the latest workforce data and trends including this document under the **Publications** tab. Published 10/2014.