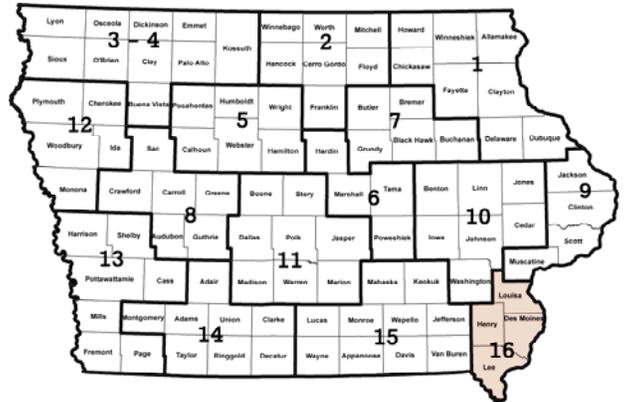
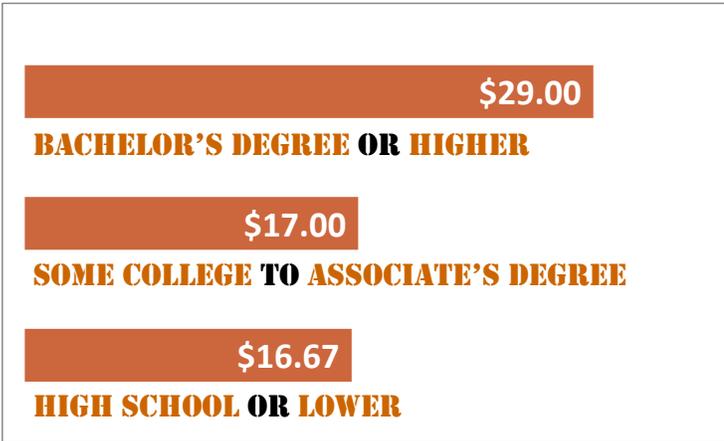


REGION 16

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	2015 Mean Wage	2015 Mean Salary	Educ	Work Exp	Job Training	(L-R in order of significance)						
Elementary School Teachers, Ex Special Education	685	760	1.1	10	15	25	23.69	49,283	BA	N	I	SO2	B9	B4	B2	B1	B6	SO6
Accountants & Auditors	290	320	1.0	5	10	10	25.25	52,525	BA	N	N	B2	B5	B7	B10	B9		
General & Operations Managers	435	475	0.9	5	10	10	40.32	83,876	BA	< 5	N	B2	B7	B9	B3	B6		
Mechanical Engineers	200	210	0.5	*	5	10	39.69	82,548	BA	N	N	C1	B3	B2	SY1	B5	B7	
Secondary School Teachers, Ex Special & Career/Technical Educ	360	380	0.4	*	10	10	22.47	46,744	BA	N	I	SO2	B4	B9	B2	SO1	B3	

SOME COLLEGE TO ASSOCIATE'S DEGREE

Heating, AC, & Refrigeration Mechanics & Installers	145	180	2.4	5	5	10	N.A.	N.A.	PS	N	L	T3	T11	T9	T1	T5		
Hairdressers, Hairstylists, & Cosmetologists	235	285	2.3	5	5	10	13.10	27,258	PS	N	N	B2	SO5	B3	B9	B1	SY1	SO6
Heavy & Tractor-Trailer Truck Drivers	1,525	1,870	2.3	35	25	60	15.97	33,222	PS	N	S	T4	T5	B6	B2	B3	T8	
Licensed Practical & Licensed Vocational Nurses	395	480	2.0	10	10	20	17.45	36,303	PS	N	N	B2	B9	B3	B7	SO1	SO5	
Medical Assistants	230	275	2.0	5	5	10	14.11	29,341	PS	N	N	B2	B9	SO6	B6	B7		
Registered Nurses	1,085	1,245	1.5	15	20	35	27.06	56,286	AS	N	N	SO6	B2	SO1	B9	B3	B7	SO5
Nursing Assistants	1,015	1,155	1.4	15	20	35	11.46	23,846	PS	N	N	SO6	SO5	B2	B6	SO1		
Teacher Assistants	795	835	0.5	5	20	20	9.69	20,147	SC	N	N	B2	B9	SO1	B6	SO5	SO6	
First-Line Supervisors of Production & Operating Workers	465	480	0.3	*	5	10	24.51	50,987	PS	< 5	N	B3	R4	B2	B9	SO1	R3	B9

HIGH SCHOOL OR LOWER

Home Health Aides	350	505	4.4	15	5	25	10.17	21,159	< HS	N	S	B2	SO5	B3	SO6	B6					
Personal Care Aides	350	470	3.4	10	*	15	10.33	21,492	< HS	N	S	SO5	B2	SO6	B3	B9					
Carpenters	345	450	3.0	10	5	15	0.00	N.A.	HS	N	A	B3	T2	T5	B2	SO1	SY1	B5	B6	T8	R4
Construction Laborers	265	340	2.8	5	5	15	16.31	33,931	< HS	N	S	B9	SO1	B2	B3	T4	T5	SO6			
Weld/Solder/Braze Machine Setters, Operators, & Tenders	190	240	2.6	5	5	10	20.05	41,695	HS	N	M	T5	B2	B3	B6	T4	B9				
Food Servers, Nonrestaurant	145	180	2.4	5	5	10	N.A.	N.A.	< HS	N	S	B2	SO5	SO6	B9	SO1					
Plumbers, Pipefitters, & Steamfitters	275	340	2.4	5	5	10	N.A.	N.A.	HS	N	A	SO1	R4	B3	T5	B2	SY1	B6	B9		
Sheet Metal Workers	250	305	2.2	5	5	10	N.A.	N.A.	HS	N	A	B3	SY1	R4	B5	B2	SO1	B6	B7	B9	
Industrial Machinery Mechanics	300	365	2.2	5	10	15	21.87	45,497	HS	N	L	T9	T1	T5	T11	T8					
Helpers--Production Workers	340	405	1.9	5	5	10	16.36	34,031	< HS	N	S	B2	B9	B6	B7	SO6	B9				
Childcare Workers	550	650	1.9	10	15	25	8.54	17,753	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	2015 Mean Wage	2015 Mean Salary	Educ	Work Exp	Job Training	(L-R in order of significance)						
Elementary School Teachers, Ex Special Education	685	760	1.1	10	15	25	23.69	49,283	BA	N	I	SO2	B9	B4	B2	B1	B6	SO6
Accountants & Auditors	290	320	1.0	5	10	10	25.25	52,525	BA	N	N	B2	B5	B7	B10	B9		
General & Operations Managers	435	475	0.9	5	10	10	40.32	83,876	BA	< 5	N	B2	B7	B9	B3	B6		
Mechanical Engineers	200	210	0.5	*	5	10	39.69	82,548	BA	N	N	C1	B3	B2	SY1	B5	B7	
Secondary School Teachers, Ex Special & Career/Technical Educ	360	380	0.4	*	10	10	22.47	46,744	BA	N	I	SO2	B4	B9	B2	SO1	B3	

## SOME COLLEGE TO ASSOCIATE'S DEGREE

Heavy & Tractor-Trailer Truck Drivers	1,525	1,870	2.3	35	25	60	15.97	33,222	PS	N	S	T4	T5	B6	B2	B3	T8	
Registered Nurses	1,085	1,245	1.5	15	20	35	27.06	56,286	AS	N	N	SO6	B2	SO1	B9	B3	B7	SO5
Nursing Assistants	1,015	1,155	1.4	15	20	35	11.46	23,846	PS	N	N	SO6	SO5	B2	B6	SO1		
Licensed Practical & Licensed Vocational Nurses	395	480	2.0	10	10	20	17.45	36,303	PS	N	N	B2	B9	B3	B7	SO1	SO5	
Teacher Assistants	795	835	0.5	5	20	20	9.69	20,147	SC	N	N	B2	B9	SO1	B6	SO5	SO6	
Heating, AC, & Refrigeration Mechanics & Installers	145	180	2.4	5	5	10	N.A.	N.A.	PS	N	L	T3	T11	T9	T1	T5		
Hairdressers, Hairstylists, & Cosmetologists	235	285	2.3	5	5	10	13.10	27,258	PS	N	N	B2	SO5	B3	B9	B1	SY1	SO6
Medical Assistants	230	275	2.0	5	5	10	14.11	29,341	PS	N	N	B2	B9	SO6	B6	B7		
First-Line Supervisors of Production & Operating Workers	465	480	0.3	*	5	10	24.51	50,987	PS	< 5	N	B3	R4	B2	B9	SO1	R3	B9

## HIGH SCHOOL OR LOWER

Cashiers	1,720	1,840	0.7	10	75	85	9.02	18,758	< HS	N	S	B2	SO5	B9	B5	SO6		
Laborers & Freight, Stock, & Material Movers, Hand	1,360	1,550	1.4	20	40	60	13.58	28,253	< HS	N	S	B2	B3	T5	SO1	B6	B7	B9
Retail Salespersons	1,260	1,365	0.8	10	45	55	12.18	25,343	< HS	N	S	B2	SO4	B9	SO6	SO3	SO6	
Waiters & Waitresses	910	965	0.5	5	45	50	10.16	21,132	< HS	N	S	B2	SO5	SO6	B9	SO1		
Farmers, Ranchers, & Other Agricultural Managers	3,200	2,855	-1.1	0	50	50	41.45	86,213	HS	> 5	N	B3	B9	B2	SY1	B7	R4	
Combined Food Preparation & Serving Workers, Incl Fast Food	840	965	1.5	10	30	45	8.31	17,280	< HS	N	S	B2	SO5	B9	SO1	B6	SO6	
Home Health Aides	350	505	4.4	15	5	25	10.17	21,159	< HS	N	S	B2	SO5	B3	SO6	B6		
Childcare Workers	550	650	1.9	10	15	25	8.54	17,753	HS	N	S	B6	SO5	B9	B3	SO6		
Maids & Housekeeping Cleaners	735	845	1.5	10	15	25	9.59	19,947	< HS	N	S	B2	SO5	SO6	R4	B3	B6	B9
Office Clerks, General	980	1,045	0.6	5	20	25	12.62	26,242	HS	N	S	B2	B7	B9	SO6	R4	B10	
Stock Clerks & Order Fillers	785	790	0.1	0	25	25	11.93	24,825	< 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 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.