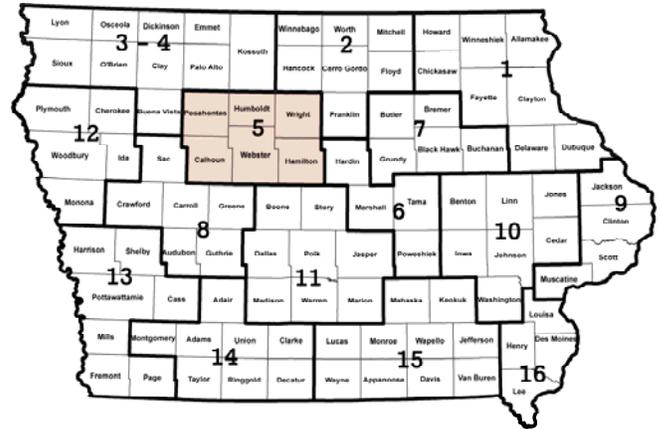
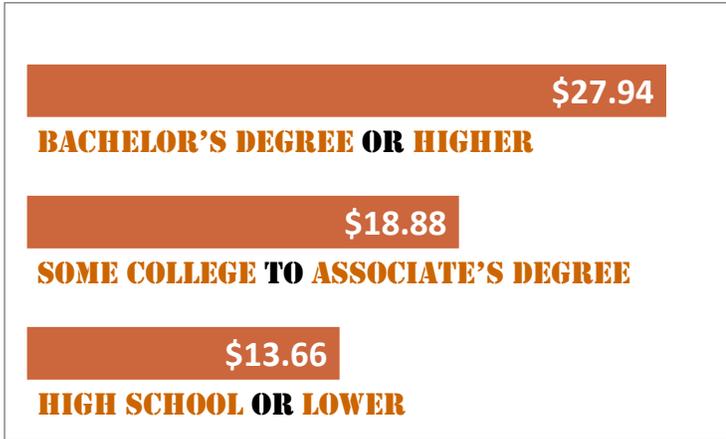


REGION 5

WORKFORCE
DEVELOPMENT

CAREER & EDUCATION OUTLOOK

MEAN HOURLY WAGES BY EDUCATION



FASTEST GROWING OCCUPATIONS

BACHELOR'S DEGREE OR HIGHER

Occupational Title	Employment ⁽¹⁾			Ann Job Openings ⁽²⁾			\$ ⁽³⁾		Career Prep ⁽⁴⁾			Top Skills ⁽⁶⁾							
	2012 Est	2022 Proj	Annual Growth Rate (%)	New	Replace	Total	2015 Mean Wage	2015 Mean Salary	Educ	Work Exp	Job Trng	(L-R in order of significance)							
General & Operations Managers	375	415	1.1	5	5	10	36.37	75,646	BA	< 5	N	B2	B7	B9	B3	B6			
Elementary School Teachers, Ex Special Educ	500	550	1.1	5	10	15	24.52	51,004	BA	N	I	SO2	B9	B4	B2	B1	B6	SO6	
Secondary School Teachers, Ex Special & Career/Technical Educ	250	265	0.4	*	5	10	22.15	46,078	BA	N	I	SO2	B4	B9	B2	SO1	B3		

SOME COLLEGE TO ASSOCIATE'S DEGREE

Licensed Practical & Licensed Vocational Nurses	265	325	2.3	5	5	10	17.92	37,283	AS	N	N	SO6	B2	SO1	B9	B3	B7	SO5	
Hairdressers, Hairstylists, & Cosmetologists	255	310	2.0	5	5	10	0.00	N.A.	SC	N	N	B2	B9	SO1	B6	SO5	SO6		
Heavy & Tractor-Trailer Truck Drivers	1,480	1,735	1.7	25	25	50	23.27	48,400	PS	N	N	B6	B9	B2	SO5	B3	SO6		
Registered Nurses	990	1,160	1.7	15	20	35	23.81	49,531	PS	N	N	B2	B9	B3	B7	SO1	SO5		
Nursing Assistants	880	990	1.3	10	15	30	11.67	24,268	PS	N	N	SO6	SO5	B2	B6	SO1			
Library Technicians	135	145	0.7	*	5	10	0.00	N.A.	PS	N	N	B2	SO5	B3	B9	B1	SY1	SO6	
Teacher Assistants	560	590	0.4	5	15	15	10.34	21,513	PS	N	S	T4	T5	B6	B2	B3	T8		

HIGH SCHOOL OR LOWER

Personal Care Aides	205	280	3.9	10	*	10	11.06	23,009	HS	< 5	N	B9	B2	SO1	SO5	R3	B6		
Carpenters	280	365	3.0	10	5	10	17.08	35,531	HS	N	S	B6	SO5	B9	B3	SO6			
Medical Secretaries	215	275	2.8	5	5	10	14.81	30,811	HS	< 5	N	B2	SO1	B3	B6	SO5	B9		
Childcare Workers	245	310	2.7	5	5	15	0.00	N.A.	HS	N	M	B9	B2	SO4	SO6	B3	SO3		
Home Health Aides	190	240	2.6	5	5	10	10.80	22,467	HS	< 5	N	B2	B9	SO1	SO6	B3	R3		
Construction Laborers	375	470	2.5	10	10	20	14.27	29,679	HS	N	M	B2	B7	B9	B3	B5	B6	R4	
Industrial Machinery Mechanics	340	425	2.5	10	10	20	21.45	44,606	HS	N	S	B2	B9	B3	B5	B7	SO5		
Food Servers, Nonrestaurant	160	200	2.2	5	5	10	8.80	18,300	HS	N	S	B2	B9	SO5	SO4	B7			
Electricians	385	460	1.9	10	5	15	18.70	38,904	HS	N	S	B9	B2	SO5	B7	SO1	SO6		
Landscaping & Groundskeeping Workers	300	355	1.8	5	10	15	0.00	N.A.	HS	N	M	B2	SO5	B9	B7	SO1	B10		

OCCUPATIONS WITH THE MOST OPENINGS

BACHELOR'S DEGREE OR HIGHER

Occupational Title	Employment ⁽¹⁾			Ann Job Openings ⁽²⁾			\$ ⁽³⁾		Career Preparation ⁽⁴⁾			Top Skills ⁽⁵⁾					
	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 Educ	500	550	1.1	5	10	15	24.52	51,004	BA	N	I	SO2 B9	B4	B2	B1	B6	SO6
General & Operations Managers	375	415	1.1	5	5	10	36.37	75,646	BA	< 5	N	B2	B7	B9	B3	B6	
Secondary School Teachers, Ex Special & Career/Technical Educ	250	265	0.4	*	5	10	22.15	46,078	BA	N	I	SO2 B4	B9	B2	SO1	B3	

SOME COLLEGE TO ASSOCIATE'S DEGREE

Heavy & Tractor-Trailer Truck Drivers	1,480	1,735	1.7	25	25	50	23.27	48,400	PS	N	N	B6	B9	B2	SO5 B3	SO6	
Registered Nurses	990	1,160	1.7	15	20	35	23.81	49,531	PS	N	N	B2	B9	B3	B7	SO1 SO5	
Nursing Assistants	880	990	1.3	10	15	30	11.67	24,268	PS	N	N	SO6 SO5	B2	B6	SO1		
Teacher Assistants	560	590	0.4	5	15	15	10.34	21,513	PS	N	S	T4	T5	B6	B2	B3	T8
Licensed Practical & Licensed Vocational Nurses	265	325	2.3	5	5	10	17.92	37,283	AS	N	N	SO6 B2	SO1 B9	B3	B7	SO5	
Hairdressers, Hairstylists, & Cosmetologists	255	310	2.0	5	5	10	N.A.	N.A.	SC	N	N	B2	B9	SO1 B6	SO5 SO6		
Library Technicians	135	145	0.7	*	5	10	N.A.	N.A.	PS	N	N	B2	SO5	B3	B9	B1	SY1 SO6

HIGH SCHOOL OR LOWER

Cashiers	1,245	1,320	0.6	5	55	60	8.91	18,523	< HS	N	S	B2	SO5	B9	B5	SO6			
Farmers, Ranchers, & Other Agricultural Managers	3,535	3,250	-0.8	0	55	55	N.A.	N.A.	HS	> 5	N	B3	B9	B2	SY1 B7	R4			
Retail Salespersons	1,115	1,190	0.7	5	40	45	11.87	24,686	< HS	N	S	B2	SO5	SO6 R4	B3	B6	B9		
Combined Food Preparation & Serving Workers, Incl Fast Food	625	715	1.4	10	25	35	8.37	17,419	HS	N	L	T1	T9	T11	T2	T8			
Laborers & Freight, Stock, & Material Movers, Hand	865	955	1.0	10	25	35	13.11	27,271	< HS	N	S	B2	SO5	B3	SO6 B6				
Waiters & Waitresses	675	710	0.5	5	30	35	8.17	16,992	< HS	N	S	B9	B2	SO5 SO6 SO1	R4				
Office Clerks, General	935	1,015	0.9	10	20	30	13.91	28,930	< HS	< 5	M	SO1 B6	B2	B3	SY1 T8	B9			
Secretaries & Admin Assistants, Ex Legal, Medical, & Executive	1,020	1,140	1.2	10	10	25	13.78	28,665	HS	N	M	T5	T4	B6	B7	B2	T8		
Construction Laborers	375	470	2.5	10	10	20	14.27	29,679	HS	N	M	B2	B7	B9	B3	B5	B6	R4	B10
Industrial Machinery Mechanics	340	425	2.5	10	10	20	21.45	44,606	HS	N	S	B2	B9	B3	B5	B7	SO5		
Maids & Housekeeping Cleaners	490	575	1.7	10	10	20	9.76	20,307	HS	N	S	B9	B2	R4	SO5 B10				
Janitors & Cleaners, Ex Maids & Housekeeping Cleaners	620	695	1.2	10	10	20	11.97	24,891	HS	N	M	SO1 B2	B3	B9	B6	B7			
Sales Reps, Wholesale & Mfg, Ex Technical & Scientific Products	670	725	0.8	5	15	20	27.14	56,454	< HS	N	S	B2	B6	B9	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 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**: 2015 Iowa Wage Survey estimates (based on 2014 2nd quarter occupational wage data updated to 2015 2nd 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 to obtain the latest workforce data and trends including this document. Published 11/2015.