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Iowa Workforce Development

Educational Workforce Tools

*Strategic
Workforce Initiatives*

Paula © IWD
presented to IACMIR

INTRODUCTION

Iowa Labor Market Information (LMI) includes employment and unemployment levels; wages; labor availability; and other data related to labor market conditions. This publication contains the following labor market information available from Iowa Workforce Development (IWD):

- **Regional Profiles** – IWD has 16 regional workforce development partnerships throughout Iowa to meet workforce and workplace needs. A regional profile gives the latest information about jobs and workers in the area.
<http://www.iowaworkforce.org/lmi/publications/regionprofiles/index.html>
- **Local Employment Dynamics (LED) Program** – State/federal partnership with U.S. Census Bureau and IWD provides new demographic employment information – Quarterly Workforce Indicators (QWI). QWI measure the performance of the local economy just as national economic indicators measure the performance of the overall economy.
<http://www.iowaworkforce.org/lmi/empstat/ledindex.html>
- **Iowa Wage Survey** – Estimates are based on May 2004 wages which have been updated to the second quarter of 2005 using the Employment Cost Index.
<http://www.iowaworkforce.org/lmi/occupations/wages/index.htm>
- **Iowa Job Outlook** – Summary of information about Iowa's job market and economy from 2002 to 2012.
<http://www.iowaworkforce.org/lmi/occupations/outlook/index.html>
- **Iowa Statewide Occupational Projections** – Projections of occupations from 2002 to 2012.
<http://www.iowaworkforce.org/lmi/occupations/projections/index.html>
- **Statewide Job Applicants/Opening**s – Quarterly publication containing data tables on job applicants and job openings.
<http://www.iowaworkforce.org/lmi/publications/applicants/index.html>
- **Laborshed Studies** – Laborshed studies provide community economic developers and existing or prospective employers a flexible tool to understand the local labor market and make informed expansion and site selection decisions.
<http://www.iowaworkforce.org/lmi/labsur/index.html>

Other labor market information and economic trend data can be found at:
<http://www.iowaworkforce.org/lmi/> or by contacting your local Iowa Workforce Development Center.

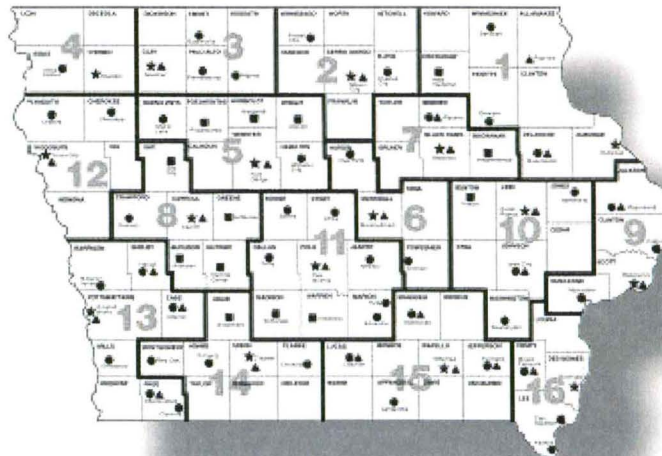
Regional Profiles

A blueprint, a map, a design, a plan...you need one for most successful ventures. This regional profile will give you the latest information about jobs and workers in your labor area.

Who can use this information? Anyone who needs reliable and up-to-date facts and figures on the labor market can benefit. It can give you the extra edge if you are:

- Assisting new and expanding businesses
- Applying for grants
- Setting pay scales for employees
- Tracking demographic and economic trends
- Responding to plant closings
- Determining the local labor supply
- Identifying training needs
- Planning career and much more!

<http://www.iowaworkforce.org/lmi/publications/regionprofiles/index.html>



2005 ANNUAL PROFILE

REGION 1

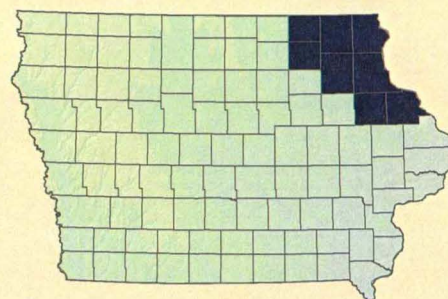
IOWA WORKFORCE DEVELOPMENT

Executive Summary

As of 2004, Iowa Workforce Development's (IWD) Region 1 largest private industry was Manufacturing, representing 18.9 percent (17,809) of the region's total covered employment of 94,704. The region's total employment increased by 1.14 percent since 2003 and the average annual wage increased by 4.36 percent to \$28,814 for all industries. The Construction sector posted the largest employment percentage increase of 3.19 percent (149) during 2004.

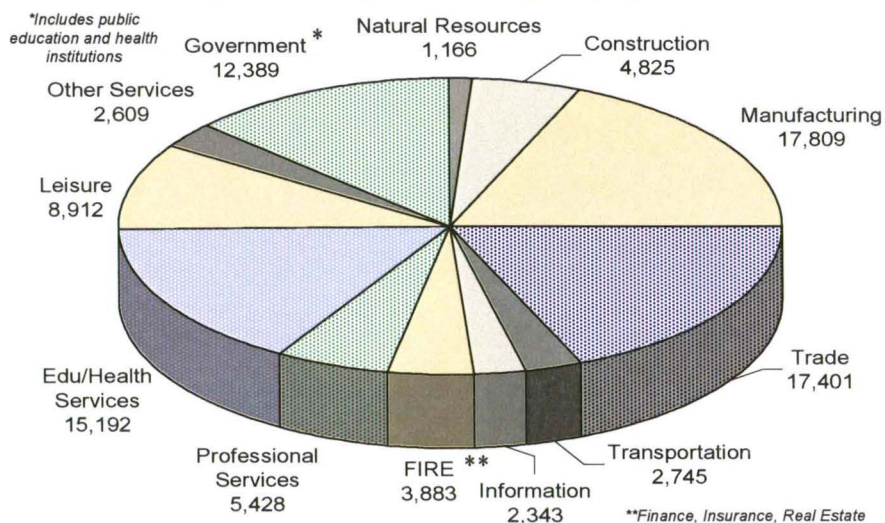
IWD's Region 1 average weekly wage for all industries was \$554 for 2004. This was an increase of 4.33 percent since 2003. The highest average weekly wage for a private sector was in Manufacturing, averaging \$741 with gross total wages of \$686.0 million. Between 2003 and 2004, the Transportation & Utilities sector had the largest percentage increase in average weekly wage of 6.84 percent (\$47).

STATE OF IOWA



IWD Region 1

2004 Industry Breakout by Employment



Source: Quarterly Census of Employment and Wages, www.iowaworkforce.org/lmi/empstat

Ten Largest Employers by Employment

Based on Annual 2004 Employment by Private Industry

Rank	Name of Company	Industry
1	Deere & Co	Manufacturing
2	Mercy Medical Center	Health Services
3	Featherlite Manufacturing Co	Manufacturing
4	Eagle Window & Door Inc	Manufacturing
5	Wal-Mart Stores	Retail Trade
6	Medical Associates PC	Health Services
7	Finley Hospital	Health Services
8	Agriprocessors	Manufacturing
9	Luther College	Educational Services
10	Hy-Vee Food Stores	Retail Trade

Source: Quarterly Census of Employment and Wages, www.iowaworkforce.org/lmi/empstat

QUICK FACTS

Counties Included in Iowa Workforce Development's Region 1

Allamakee	Dubuque
Chickasaw	Fayette
Clayton	Howard
Delaware	Winneshiek

2004 Covered Employment (QCEW)

		%
Total Employment	94,704	6.7 ¹
Average Weekly Wage	\$554	89.8 ²
Largest Private Sector:		
Manufacturing	17,809	8.0 ³

¹ Percent is based on statewide covered employment of 1,422,323

² Percent is based on statewide average weekly wage of \$617

³ Percent is based on statewide covered employment in specified sector

Census Statistics

IWD Region 1 Population (2005)	206,941
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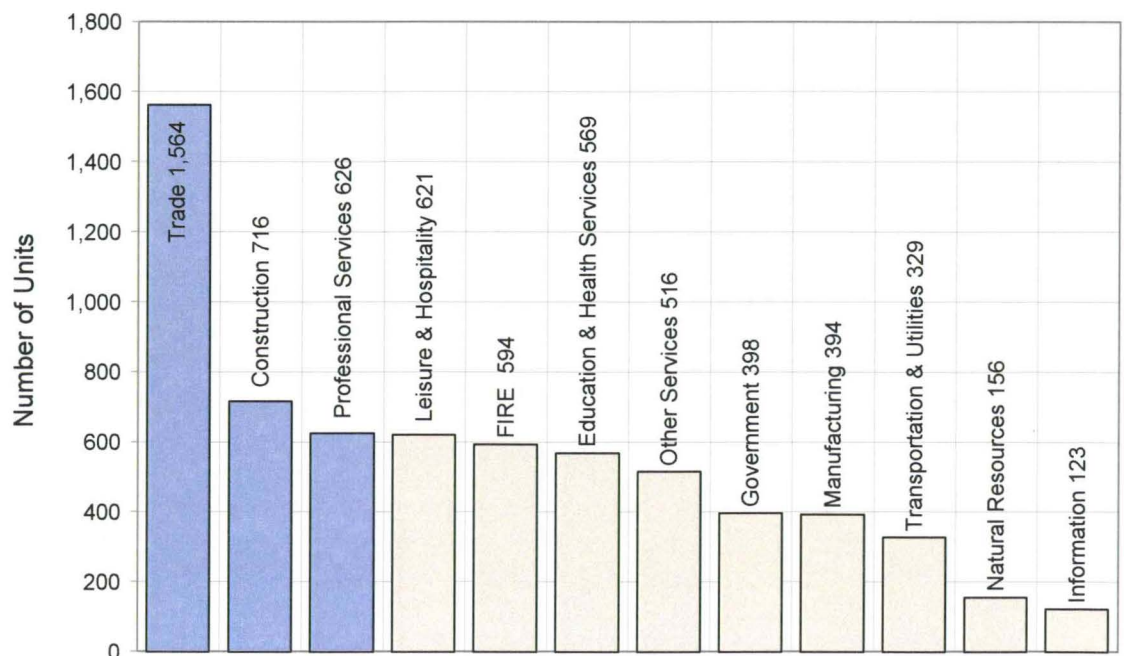
2005 IOWA WORKFORCE DEVELOPMENT REGION 1 PROFILE

2003 - 2004 Covered Employment and Reporting Units by Industry A Unit is Defined as a Worksite

Reporting Units				Employment		
2003	2004	% Change		2003	2004	% Change
6,526	6,603	1.18%	Total All Industries	93,640	94,704	1.14%
6,128	6,205	1.26%	Private Business	81,273	82,315	1.28%
147	156	6.12%	Ag/Natural Resources & Mining	1,147	1,166	1.66%
699	716	2.43%	Construction	4,676	4,825	3.19%
395	394	-0.25%	Manufacturing	17,647	17,809	0.92%
1,567	1,564	-0.19%	Trade	17,194	17,401	1.20%
499	519	4.01%	Wholesale Trade	5,108	5,147	0.76%
1,068	1,045	-2.15%	Retail Trade	12,085	12,255	1.41%
327	329	0.61%	Transportation & Utilities	2,731	2,745	0.51%
118	123	4.24%	Information	2,262	2,343	3.58%
574	594	3.48%	Finance, Insurance, and Real Estate	3,787	3,883	2.53%
598	626	4.68%	Professional & Business Services	5,342	5,428	1.61%
559	569	1.79%	Education & Health Services	15,017	15,192	1.17%
617	621	0.65%	Leisure & Hospitality	8,904	8,912	0.09%
528	516	-2.27%	Other Services	2,568	2,609	1.60%
398	398	0.00%	Government	12,367	12,389	0.18%
75	75	0.00%	State	570	596	4.56%
253	250	-1.19%	Local	10,958	10,994	0.33%
71	73	2.82%	Federal	838	800	-4.53%

Source: Quarterly Census of Employment and Wages, www.iowaworkforce.org/lmi/empstat

Reporting Units by Industry in 2004 A Unit is Defined as a Worksite



Trade - Wholesale & Retail Trade
F.I.R.E. - Finance, Insurance, & Real Estate

Natural Resources - Agriculture, Natural Resources, & Mining

Source: Quarterly Census of Employment and Wages, www.iowaworkforce.org/lmi/empstat

QUICK FACTS

IWD Region 1's
Greatest Number of
Worksites

Wholesale & Retail
Trade
1,564

Construction
716

Professional Services
626

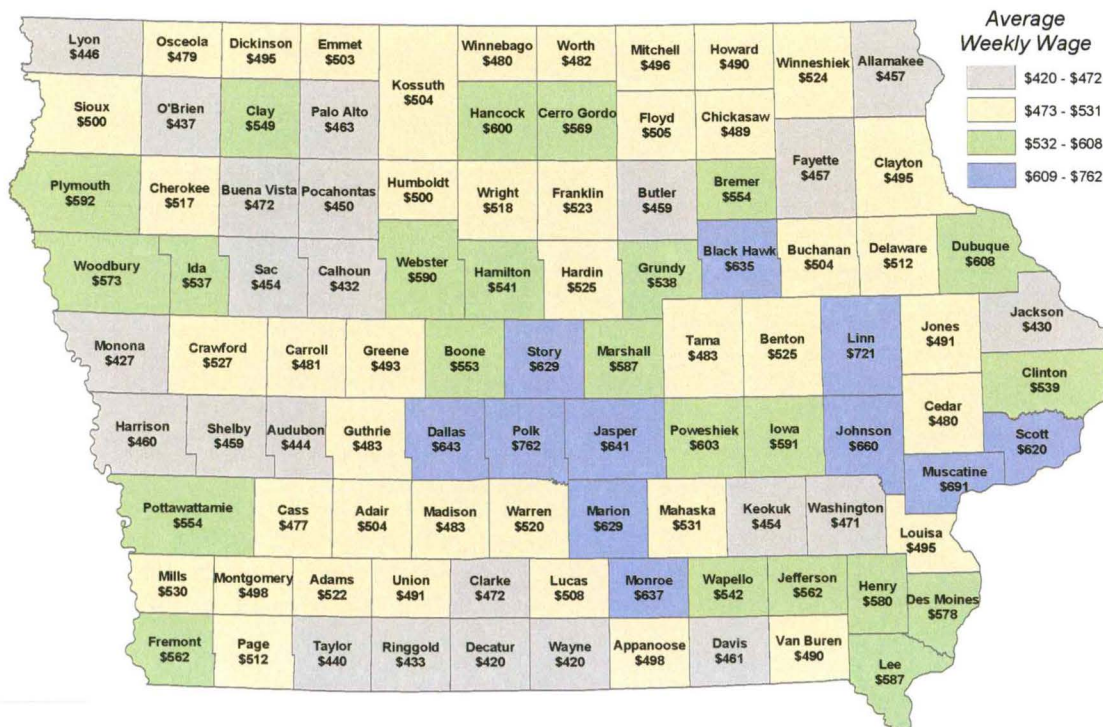
2005 IOWA WORKFORCE DEVELOPMENT REGION 1 PROFILE

2003—2004 Average Annual and Weekly Wage by Industry

Average Annual Wage				Average Weekly Wage		
2003	2004	% Change		2003	2004	% Change
\$ 27,611	\$ 28,814	4.36%	Total All Industries	\$ 531	\$ 554	4.33%
\$ 27,670	\$ 28,880	4.37%	Private Business	\$ 532	\$ 555	4.32%
\$ 23,722	\$ 23,541	-0.76%	Ag/Natural Resources & Mining	\$ 456	\$ 453	-0.66%
\$ 34,717	\$ 36,091	3.96%	Construction	\$ 668	\$ 694	3.89%
\$ 36,623	\$ 38,518	5.17%	Manufacturing	\$ 704	\$ 741	5.26%
\$ 23,249	\$ 23,961	3.06%	Trade	\$ 447	\$ 461	3.13%
\$ 32,423	\$ 33,895	4.54%	Wholesale Trade	\$ 624	\$ 652	4.49%
\$ 19,374	\$ 19,788	2.14%	Retail Trade	\$ 373	\$ 381	2.14%
\$ 35,722	\$ 38,154	6.81%	Transportation & Utilities	\$ 687	\$ 734	6.84%
\$ 36,175	\$ 36,848	1.86%	Information	\$ 696	\$ 709	1.87%
\$ 33,560	\$ 34,940	4.11%	Finance, Insurance, Real Estate	\$ 645	\$ 672	4.19%
\$ 27,492	\$ 29,024	5.57%	Professional & Business Services	\$ 529	\$ 558	5.48%
\$ 27,781	\$ 29,000	4.39%	Education & Health Services	\$ 534	\$ 558	4.49%
\$ 10,867	\$ 11,063	1.80%	Leisure & Hospitality	\$ 209	\$ 213	1.91%
\$ 17,914	\$ 18,888	5.44%	Other Services	\$ 345	\$ 363	5.22%
\$ 27,219	\$ 28,377	4.25%	Government	\$ 523	\$ 546	4.40%
\$ 39,860	\$ 41,332	3.69%	State	\$ 767	\$ 795	3.65%
\$ 25,692	\$ 26,736	4.06%	Local	\$ 494	\$ 514	4.05%
\$ 38,618	\$ 41,240	6.79%	Federal	\$ 743	\$ 793	6.73%

Source: Quarterly Census of Employment and Wages, www.iowaworkforce.org/lmi/empstat

Average Weekly Wage for All Industries by County Annual 2004



QUICK FACTS

Average Weekly Wage Comparisons

IWD Region 1
\$554

Rank
Among All 16
IWD Regions
-8-

Statewide
\$617

Nation
\$757

Source: Quarterly Census of Employment and Wages, www.iowaworkforce.org/lmi/empstat

2005 IOWA WORKFORCE DEVELOPMENT REGION 1 PROFILE

QUICK FACTS

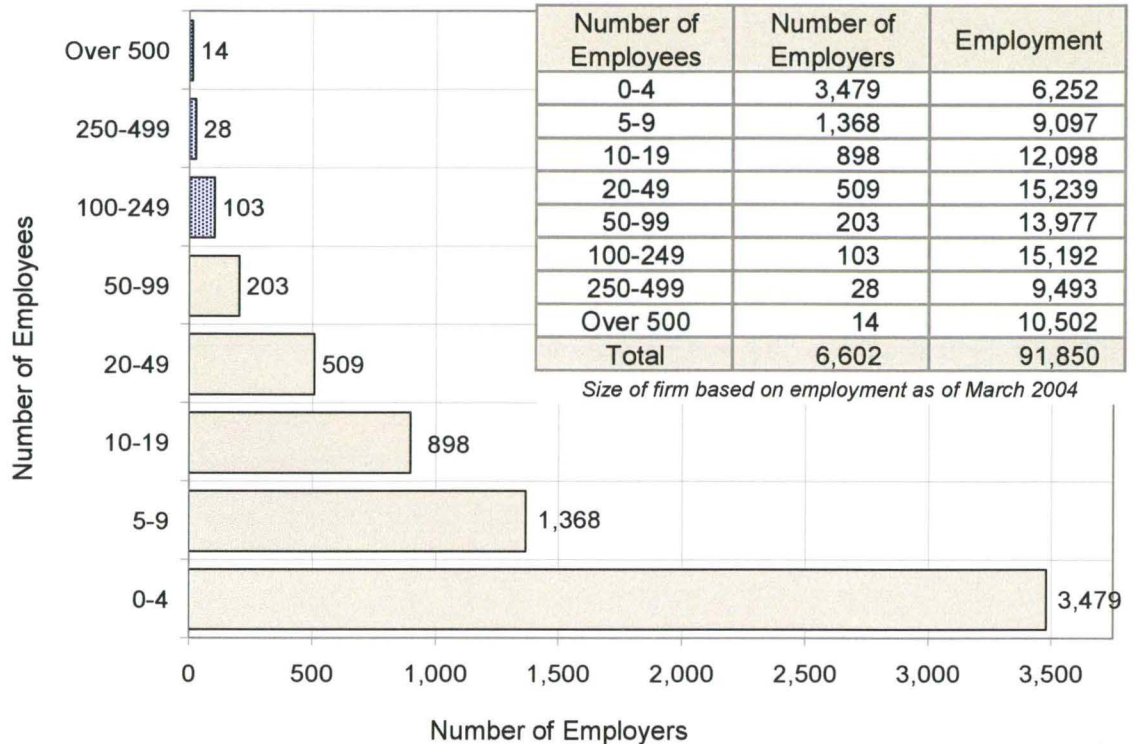
Size of Firm

Fourteen firms in Region 1 employ 500 or more workers, totaling 10,502 employees, which accounts for 11 percent of total employment in the region.

Firms that employ less than 50 workers represent over 46 percent of all establishments region-wide.

Size of Firm Based on Employment

March 2004



Source: Quarterly Census of Employment and Wages, www.iowaworkforce.org/lmi/empstat

Local Employment Dynamics (LED) - Quarterly Workforce Indicators

2nd Quarter 2004 and Average of 3rd Quarter 2003 - 2nd Quarter 2004

QUICK FACTS

Quarterly Workforce Indicators Definitions

Total Employment
Number of workers who are employed by the same employer in both the current and previous quarter

New Hires
Total number of accessions that were also not employed by that employer during the previous four quarters

For additional definitions see source information below the LED tables

Quarterly Workforce Indicators	Region 1 - (Q2)	Region 1 (Avg: 4 prior quarters)
Total Employment	93,177	92,343
Net Job Flows	2,811	-701
Job Creation	7,577	4,622
New Hires	12,973	11,282
Separations	15,397	15,317
Turnover	8.50%	9.00%
Average Monthly Earnings	\$2,635.00	\$2,478.00
Average New Hire Earnings	\$1,775.00	\$1,522.50

Quarterly Workforce Indicators	Iowa (Q2)	Iowa (Avg:4 Prior qtrs)
Total Employment	1,418,114	1,400,733
Net Job Flows	33,208	-13051
Job Creation	108,759	69,820
New Hires	233,363	205,991
Separations	266,065	267,834
Turnover	9.60%	10.00%
Average Monthly Earnings	\$2,914.00	\$2,777.50
Average New Hire Earnings	\$2,017.00	\$1,747.50

Source: Local Employment Dynamics, www.iowaworkforce.org/lmi/empstat/ledindex.html. For definitions of the Quarterly Workforce Indicators, visit <http://lehd.dsd.census.gov/led/datatools/qwiapp.html> and select the 'i' icon in front of the indicator of interest.

2005 IOWA WORKFORCE DEVELOPMENT REGION 1 PROFILE

Employment and Unemployment Statistics Annual 2005

County	Labor Force	Number Unemployed	Unemployment Rate	Number Employed
Allamakee	8,120	450	5.6	7,670
Chickasaw	6,370	360	5.7	6,000
Clayton	9,730	670	6.9	9,050
Delaware	10,690	510	4.8	10,180
Dubuque	51,300	2,400	4.6	48,900
Fayette	11,290	600	5.3	10,690
Howard	5,330	250	4.7	5,080
Winneshiek	12,310	550	4.5	11,760
Total	115,140	5,790	Average 5.0	109,330

Note: The unemployment rate is widely recognized as an important economic indicator that is used to gauge the vitality of the labor market. The release of the monthly unemployment rate causes markets to react and analysts to speculate on the health of the economy. A low jobless rate indicates a strong economy where job seekers can find employment quickly, whereas a high rate may indicate a weaker economy. On the other hand, businesses can find

Source: Local Area Unemployment Statistics (LAUS), www.iowaworkforce.org/lmi/pressrelease/index.html

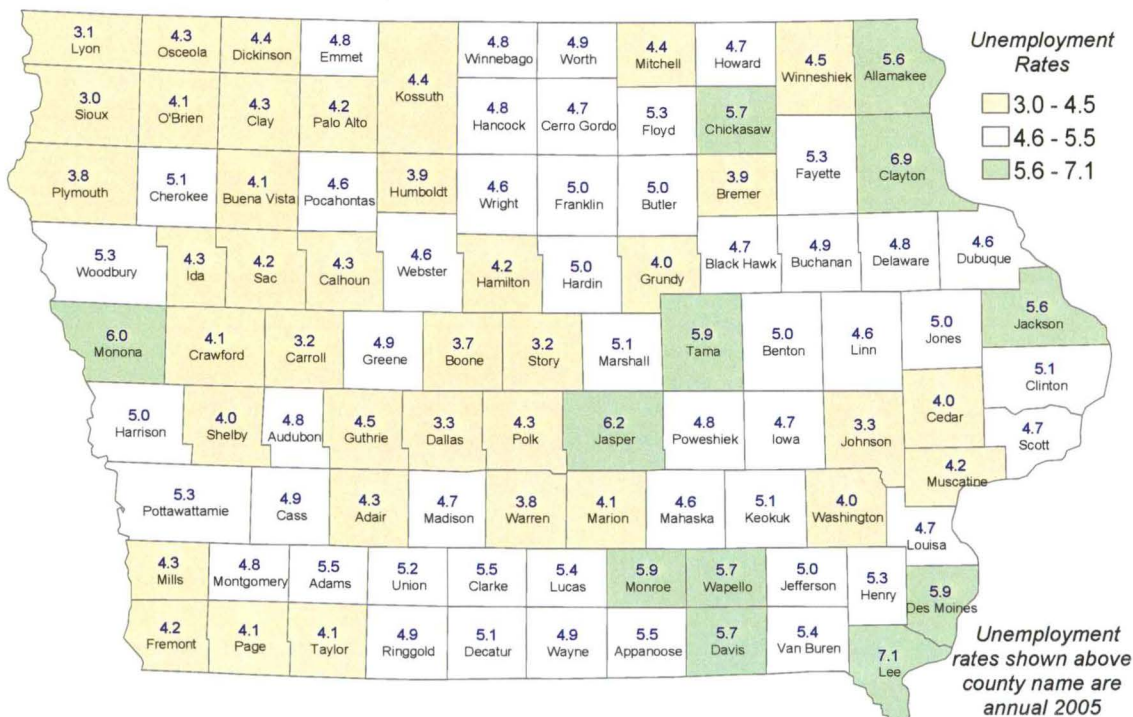
QUICK FACTS

Labor Force 2005

Unemployment averaged 5.0 percent in region 1 for 2005. The region's jobless rate translated into 5,790 unemployed persons.

The unemployment rate for region 1 was considerably higher than the statewide average of 4.6 percent.

Unemployment Rates per Iowa Counties 2005 Annual Average



QUICK FACTS

County Unemployment Rates

Lee County had the highest jobless rate in the state in 2005 at 7.1 percent.

Sioux County had the lowest jobless rate in the state in 2005 at 3.0 percent.

Source: Local Area Unemployment Statistics (LAUS), www.iowaworkforce.org/lmi/laborforce/index.html

2005 IOWA WORKFORCE DEVELOPMENT REGION 1 PROFILE

2005 Iowa Wage Survey Highest Wage Rates by Educational Attainment

Occupational Title	Employment	Average Hourly Wage	Entry Wage*	Experienced Wage**	Average Annual Wage
Requires Bachelor Degree or higher					
Chief Executives	160	\$60.55	\$26.26	\$77.68	\$125,927
Veterinarians	90	\$46.90	\$30.15	\$55.28	\$97,566
Engineering Managers	90	\$44.94	\$29.77	\$52.52	\$93,477
Pharmacists	180	\$43.72	\$34.04	\$48.56	\$90,934
General and Operations Managers	760	\$41.21	\$20.22	\$51.70	\$85,719
Sales Managers	100	\$35.37	\$23.48	\$41.31	\$73,571
Financial Managers	170	\$34.55	\$21.58	\$41.04	\$71,866
Marketing Managers	50	\$32.90	\$18.81	\$39.94	\$68,430

Requires Postsecondary Degree/Education					
Transportation, Storage, and Distribution Managers	50	\$28.66	\$17.33	\$34.33	\$59,617
Dental Hygienists	110	\$23.59	\$21.11	\$24.84	\$49,072
Postmasters and Mail Superintendents	70	\$23.18	\$18.70	\$25.42	\$48,220
Electrical Power-Line Installers and Repairers	70	\$21.33	\$16.67	\$23.66	\$44,362
Purchasing Agents and Buyers, Farm Products	50	\$21.32	\$15.18	\$24.39	\$44,344
Self-Enrichment Education Teachers	90	\$19.67	\$16.84	\$21.10	\$40,921
Computer Support Specialists	280	\$19.19	\$13.12	\$22.23	\$39,920
Brickmasons and Blockmasons	210	\$19.19	\$13.17	\$22.20	\$39,919

Requires High School Diploma or Equivalent					
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	160	\$24.19	\$14.99	\$28.79	\$50,317
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	1050	\$20.87	\$11.56	\$25.54	\$43,426
Sheet Metal Workers	120	\$19.97	\$13.69	\$23.11	\$41,532
Operating Engineers and Other Construction Equipment Operators	760	\$18.32	\$14.63	\$20.17	\$38,119
Highway Maintenance Workers	210	\$16.50	\$14.74	\$17.38	\$34,315
Drywall and Ceiling Tile Installers	70	\$16.49	\$11.93	\$18.77	\$34,300
Truck Drivers, Heavy and Tractor-Trailer	2090	\$15.65	\$10.86	\$18.04	\$32,545
Eligibility Interviewers, Government Programs	70	\$14.92	\$9.11	\$17.83	\$31,047

Requires less than High School Diploma or Equivalent					
Postal Service Mail Carriers	300	\$20.92	\$16.13	\$23.31	\$43,509
Postal Service Mail Sorters, Processors, and Processing Machine Operators	130	\$17.43	\$10.69	\$20.80	\$36,258
Court, Municipal, and License Clerks	60	\$16.14	\$12.09	\$18.16	\$33,560
Production, Planning, and Expediting Clerks	230	\$14.80	\$10.87	\$16.76	\$30,792
Driver/Sales Workers	250	\$14.20	\$9.26	\$16.67	\$29,533
Human Resources Assistants, Except Payroll and Timekeeping	70	\$13.72	\$9.84	\$15.66	\$28,546
Packaging and Filling Machine Operators and Tenders	330	\$12.81	\$9.63	\$14.39	\$26,639
Payroll and Timekeeping Clerks	170	\$12.70	\$9.87	\$14.12	\$26,420

Note: Occupational wage data are used to identify wage trends, compare wages between areas, evaluate pay structures, and make career decisions. Occupational wages are an important aspect of the region's economy in terms of the price paid for certain skills.

**-Entry Wage is defined as "the average of the lowest third of reported wages for the occupation".*

***-Experienced Wage is defined as "the average of upper two-thirds of reported wages for the occupation".*

Source: 2005 Iowa Wage Survey, 2nd Qtr. <http://www.iowaworkforce.org/lmi/occupations/wages/index.htm>

2005 IOWA WORKFORCE DEVELOPMENT REGION 1 PROFILE

Top 20 Growing Industries by Employment 2002 - 2012

Industry Description	NAICS Code	2002 Estimated Employment	2012 Projected Employment	Total Growth	Percent Change
Professional, Scientific, and Technical Services	541	2,330	3,444	1,114	47.81%
Nursing and Residential Care Facilities	623	4,126	5,119	993	24.07%
Educational Services	611	11,337	12,282	945	8.34%
Administrative and Support Services	561	2,438	3,284	846	34.70%
Transportation Equipment Manufacturing	336	2,278	3,019	741	32.53%
Self Employed and Unpaid Family Workers	671	9,605	10,312	707	7.36%
Wood Product Manufacturing	321	1,499	2,172	673	44.90%
Ambulatory Health Care Services	621	3,511	3,992	481	13.70%
Social Assistance	624	996	1,427	431	43.27%
Truck Transportation	484	1,348	1,754	406	30.12%
Hospitals	622	3,656	3,986	330	9.03%
Building Material and Garden Equipment	444	1,558	1,844	286	18.36%
Fabricated Metal Manufacturing	332	3,401	3,680	279	8.20%
Amusement, Gambling, and Recreation Industries	713	1,954	2,230	276	14.12%
General Merchandise Stores	452	2,062	2,326	264	12.80%
Publishing Industries	511	1,292	1,543	251	19.43%
Motor Vehicle and Parts Dealers	441	1,515	1,749	234	15.45%
Specialty Trade Contractors	238	2,413	2,589	176	7.29%
Food Services and Drinking Places	722	5,376	5,550	174	3.24%
Plastics and Rubber Products	326	849	1,014	165	19.43%

Source: Long-Term Industry Projections

Fastest Growing Occupations 2002 - 2012

Occupation Title	2002 Estimated Employment	2012 Estimated Employment	Annual Growth Rate (%)
Computer Software Engineers, Applications	50	80	6.0
Financial Analysts	270	410	5.2
Computer Software Engineers, Systems Software	50	80	5.0
Network Systems & Data Communications Analysts	50	75	5.0
Legal Secretaries	100	140	4.5
Tax Preparers	160	230	4.4
Pharmacists	95	140	4.2
Network & Computer Systems Administrators	100	140	4.0
Medical Records & Health Information Technicians	190	265	3.9
Home Health Aides	320	435	3.6
Self-Enrichment Education Teachers	115	160	3.5
Civil Engineers	60	85	3.3
HVAC Mechanics & Installers	75	95	3.3

Note: When reviewing the fastest growing occupations care must be taken to look at the employment levels and the annual growth rate. It is possible for an occupation to have a small employment level and at the same time experience a high annual growth rate.

Source: Iowa Job Outlook 2012 Region 1, www.iowaworkforce.org/lmi/occupations/outlook/joboutlook01.pdf

QUICK FACTS

Post-secondary education or above is the most significant source of education or training in 85 percent of the occupations.

One-third of the occupations are in the computer and mathematical science groups.

By 2012, eight of the occupations will have estimated employment above 100.

2005 IOWA WORKFORCE DEVELOPMENT REGION 1 PROFILE

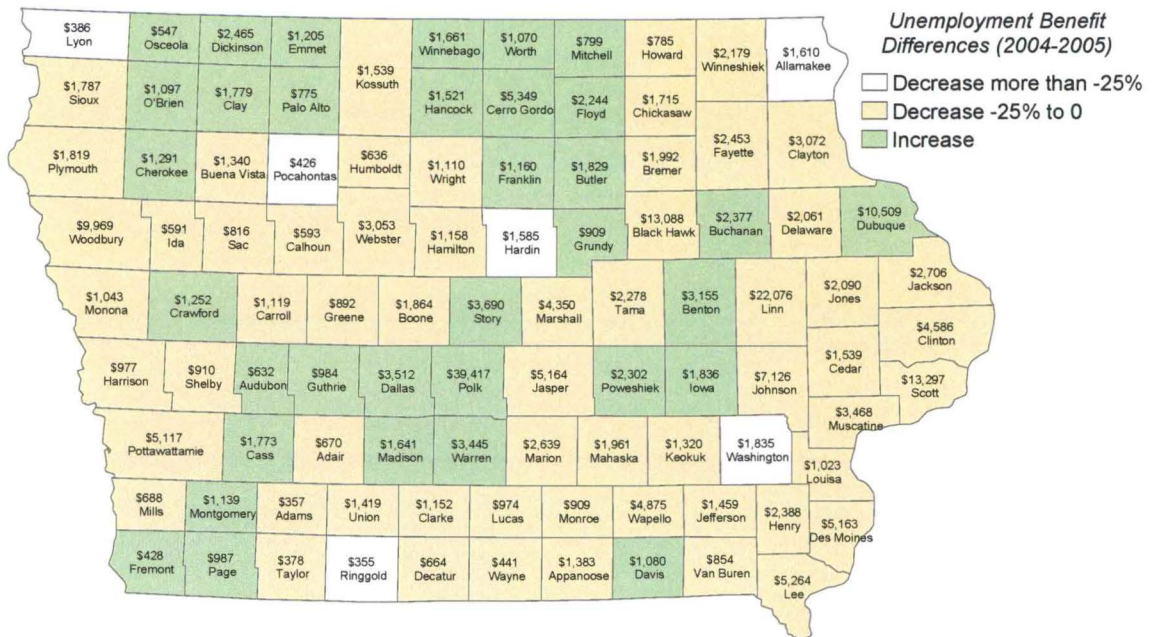
QUICK FACTS

Annual 2005 UI Benefits

UI Benefits for Iowa decreased from \$318 million in 2004 to \$302 million in 2005, a decrease of 5 percent.

UI Benefits in Region 1 decreased from \$26.3 million in 2004 to \$24.4 million in 2005, a decrease of 9 percent.

Total Unemployment Insurance (UI) Benefit Payouts Annual 2005



Note: Dollar values are in thousands. Total UI Benefit payouts include benefits paid under the Iowa unemployment insurance program and federal benefits paid under the unemployment compensation for federal employees and service personnel programs. Benefit payout is based on claimant's county of residence. Figures do not include the Temporary Emergency Unemployment Compensation program (TEUC).

Source: Unemployment Insurance Statistical Data, www.iowaworkforce.org/lmi/uistats/index.html

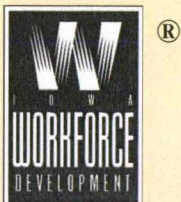
CONTACT INFO

Iowa Workforce Development,
Policy and Information Division

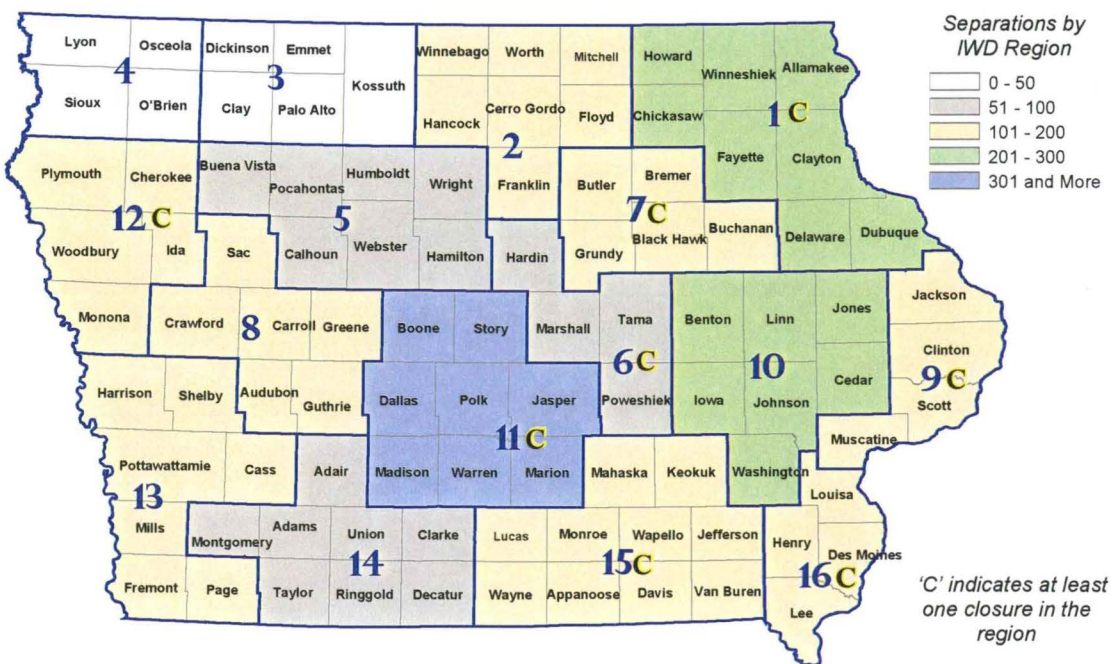
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Equal opportunity employer/program.
Auxiliary aids and services are available upon request to individuals with disabilities.

TTY 515-281-4748;
1-800-831-1399



Iowa Mass Layoff Statistics by IWD Region Annual 2005



Note: Separations refer to the number of workers affected by closure or layoff incidents of 20 or more workers lasting at least 30 days as reported by the employer

Source: Iowa Mass Layoff Statistics, www.iowaworkforce.org/trends/masslayoffs.html

Local Employment Dynamics (LED) Program

The Local Employment Dynamics (LED) Program is an innovative new state/federal partnership with U.S. Census Bureau and Iowa Workforce Development to provide new demographic employment information, Quarterly Workforce Indicators (QWI). Local decision makers - employers, workers, transportation agencies, education and training institutions, and economic development agencies - increasingly need detailed local information about their economies to make informed decisions, but are frustrated by the lack of timely local data. The LED partnership works to fill critical data gaps and provide the type of workplace indicators needed by state and local authorities. Just as national economic indicators measure the performance of the overall economy, the QWI measure the performance of the local economy.

Definitions

Total Employment

Beginning of Quarter Employment Total number of workers who were employed by the same employer in both the current and previous quarter.

Answers the questions

- Who is filling what jobs?
- What industries have the biggest employers?
- What industries employ the largest numbers of particular types of worker?

Net Job Flows (Job Change)

The difference between current and previous employment at each business.

Answers the questions;

- Which industries are expanding employment?
- Which industries are contracting employment?

Job Creation (Job Gains)

The number of new jobs that are created by either new area businesses or the expansion of employment by existing firms.

Answers the question:

- What industries are creating the most jobs?

New Hires

Total number of accessions that were also not employed by the employer during the previous four quarters.

Answers the questions:

- What industries are hiring the most workers?
- Which industries are hiring older workers?
- Which industries are hiring young workers?
- What demographic areas are doing the most hiring?

(cont'd)

Separations

Total number of workers who were employed by a business in the current quarter, but not in the subsequent quarter.

Answers the questions:

- What workers are leaving jobs?
- What industries are workers leaving?

Turnover Rate

Turnover Rate = $(1/2) * (\text{accessions} + \text{separations}) / \text{employment stable jobs}$

Answers the questions:

- What is the turnover rate in the workforce?
- What proportion of workers are new?

Average Monthly Earnings (for full-quarter employees)

Total quarterly earnings of all full-quarter employees divided by the number of full-quarter employees, divided by 3.

Answers the question:

- What are the average earnings of core employees;

Average Monthly Earnings New Hires (for full-quarter new hires)

Total quarterly earnings of all full-quarter new hires divided by the number of full-quarter new hires, divided by 3.

Answers the question:

- What are new hires earning?

<http://www.iowaworkforce.org/lmi/empstat/ledindex.html>

Click on State Data, Quarterly Workforce Indicators (QWI)

LOCAL EMPLOYMENT DYNAMICS

Helping Decision Makers Make Better Informed Decisions

STATE OF IOWA



Enriching the Decision Making Process with Innovative,
Demographic Information

A Partnership Between
Iowa Workforce Development and
U.S. Census Bureau

1000 East Grand Avenue, Des Moines, IA 50319
Tel: 800-532-1249; Fax: 515-281-8195

www.iowaworkforce.org/lmi

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**Who Can Benefit From
Quarterly Workforce
Indicators?****Local Decision Makers**
*Strategic planning purposes***Employers**
*Questions regarding
workers and wages***Workers**
*Questions regarding
jobs and pay***Economic Development
Organizations**
*Information for
prospective businesses***Educational and Training
Organizations**
*Information regarding
potential students and future
curriculum opportunities***Transportation
Organizations**
*Information on where
people live and work****What is Local Employment Dynamics (LED)?***

LED is a partnership between Iowa Workforce Development and the U.S. Census Bureau, providing innovative demographic employment information (Quarterly Workforce Indicators) for local decision makers, economic development agencies, education and training institutions, and transportation agencies. Just as national economic indicators measure the performance of the overall economy, the Quarterly Workforce Indicators measure the performance of the local economy.

What Does Local Employment Dynamics Provide?

- Time Sensitive and Historical Demographic Information
 - Locations of industries
 - Listing of industries prone to hiring
 - Demographic monthly salary figures
 - Worker characteristics by industry, gender, and age
 - Economic trends by worker's age and sex; by state, county, and MSA
- Information Applicable for Decision Makers
 - Managerial planning
 - Performance accountability
 - Grant writing
 - Economic plans
 - Strategic Planning

***Examples of Local Employment Dynamics used by
Decision Makers***

- Measurement of Worker Turnover
 - Workers identifying the likely duration of employment
 - Management benchmarking turnover rates within an industry
 - State and local agencies measuring workforce quality
- Worker's Wages in an Industry by Geography
 - Employers knowing what workers are being paid and how much to pay new hires
 - Workers knowing what wages they may expect to earn in a particular industry
 - Placement agencies recognizing what jobs in different industries are likely to pay
 - Education institutions measuring wage performances
- Concentration of Workforce by Industry
 - Transportation planners knowing where new roads and public transportation should be located

WHAT IS LED?

EMPLOYMENT STATISTICS
BUREAU

Who can Benefit from LED Quarterly Workforce Indicators?

Businesses	Federal, State, and Local Agencies
Chambers of Commerce	Career Advisors
Economic Development Groups	Workforce Investment Boards
Educational Institutions	Transportation Planners

What Questions can LED Answer?

Where are the workers?
How much are they paid?
What is the turnover rate for a particular industry?

Where are the jobs?
How much do they pay?
What are the best paying industries for men and women?

How much are new hires in a particular industry paid?
Where should a business locate?

What can be Measured to Answer these Questions?

Demographics

Current Data	New Data
NONE	Gender
	Age Categories
	14-18
	19-21
	22-24
	25-34
	35-44
	45-54
	55-64
	65+

Geography

Current Data	New Data
Nation	SAME
State	
County	
Sub-County	
Workforce Investment Area (IWD Regions)	

Workforce Indicators

Current Data	New Data		
Jobs Total	Jobs	Total Payroll	Gross Job Gain
Payroll	Gross Job Loss	Net Jobs	New Hires
	Recalls	Layoff/quits	Individual Earnings

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**Example of how a
Quarterly Workforce
Indicator can assist a
Decision Maker**

**For a Worker Considering
Employment...**

*It may be valuable for
him/her to learn what
industries are hiring the
most workers within a
particular geographical area
by observing the number of
new hires.*

*Depending upon the age of
the individual, he/she can
also determine what
industries are more likely to
hire an older and/or
younger worker.*

*This data could decrease
the amount of time required
to look for employment.*

Total Employment

Total number of workers who were employed by the same employer in both current and previous quarters. This will determine who is filling what jobs, what industries are the biggest employers, and what industries employ the largest numbers of particular types of workers.

Net Job Flows

Difference between current and previous employment. This will determine which industries are expanding employment and contracting in employment.

Job Creation

Number of new jobs that are created by new area businesses or the expansion of employment by existing firms. This will determine what industries are creating the most jobs.

New Hires

Total number of accessions (new employees) that were not employed by an employer during the previous four quarters. See example in side bar to the left.

Separations

Total number of workers who were employed by a business in the current quarter, but not in the subsequent quarter. This will determine what workers are leaving jobs and what industries are hiring.

Turnover Rate

Is defined as: $\text{Turnover Rate} = (1/2) * (\text{accessions} + \text{separations}) / \text{employment (All Full Quarter Measures)}$. This will determine what proportions of workers are new to the job.

Average Monthly Earnings

For full-Qtr (workers employed for all three months of the quarter) Employees, it is the total quarterly earnings of all full-quarter employees divided by the number of full-quarter employees, divided by 3. This will determine what are the average earnings of core employees.

Average Monthly Earnings—New Hires

For full-Qtr New Hires, it is the total quarterly earnings of all full-quarter new hires divided by the number of full-quarter new hires, divided by 3. This will determine what are new hires earning.

Getting Started

- Go to <http://www.iowaworkforce.org/lmi/lehd.html>
- Select the criteria from the drop-down menus to create a query from the eight Quarterly Workforce Indicators available on the website
- For advanced customized data queries, contact Iowa Workforce Development

For Example

Suppose an economic developer in Polk County wanted to learn about total employment, net job flows, job creation, new hires, separations, turnover, average monthly earnings, and average new hire earnings in 1st Quarter of 2003 by all females between the ages of 35 and 44 in the retail trade sector. He or she would select the particular attributes of interest from the drop-down menus provided and the webpage would automatically query the results. Below is an illustration of what the query fields look like.

LEHD Iowa County Reports - Quarterly Workforce Indicators
Select Criteria below: A new report will be created below as selections change

Year	2003	Geographic Grouping	County	or Information by Detailed Industry
Quarter	Q3	County	153 Polk	
Sex	Female	Industry	44-45 Retail Trade	
Age Group	35-44	Ownership	All Private (5)	

A query such as the one shown above will generate the following data results.

QWI Quick Facts	Polk County (Q3)	Polk County (4 Qtr Avg)	Iowa (Q3)	Iowa (4 Qtr Avg)
Total Employment	2,974	3,120	17,197	17,673
Net Job Flows	34	4	242	128
Job Creation	199	219	1,284	1,320
New Hires	461	473	2,558	2,479
Separations	492	538	2,691	2,782
Turnover	8.9%	9.4%	8.7%	9.1%
Avg Monthly Earnings	\$1,861.00	\$1,844.00	\$1,688.00	\$1,661.75
Avg New Hire Earnings	\$1,231.00	\$1,232.00	\$1,136.00	\$1,127.75

This table was created directly from the LED interactive website, <http://www.iowaworkforce.org/lmi/lehd.html> without the use of advanced customized services of Iowa Workforce Development

If a local decision maker wanted to observe a geographical area that encompasses one of Iowa Workforce Development's 16 regions, this can be achieved by selecting the region of interest from the 'Geographic Grouping' drop-down menu. By clicking on 'Information by Detailed Industry', one can obtain all of the Quarterly Workforce Indicators by industry of interest (e.g. manufacturing and construction).

Obtaining Data for Analysis, Specifically for Educational and Training Institutions

If an educator or a representative from an educational institution wanted to learn about the number of workers employed, job creation activity, number of new hires by gender and age group, and earnings per industry for some geographical area of interest then he or she can easily generate the data by running a specialized query.

For example, suppose an educator wanted to explain Polk County's workforce characteristics to those who are about to graduate from the 12th grade. To obtain the data one would need to visit <http://www.iowaworkforce.org/lmi/lehd.html>. Then, select the attributes of interest from all of the drop down menus provided. Once the query results are displayed, at the bottom of the page click on 'View Detailed Comparison Reports' by the line graph icon. After completing that, another screen will appear showing 'QWI Iowa County Pivot Reports' and from the pivot column, select the attribute of interest such as age group. From the data row menu, one can select several attributes by holding down the CTRL key, allowing a user to create multiple data sets (e.g. average new hire earnings, job creation, and new hires).

Such a query would provide an educator with the following information provided below in the table, 'Average New Hire Earnings, Job Creation, and New Hires Statistics by Age Groups for the Latest Reporting Quarters for Polk County.'

Average New Hire Earnings, Job Creation, and New Hires Statistics by Age Groups for the Latest Reporting Quarters for Polk County

Yr/Qtr	QWI Quick Facts	14-18	19-21	22-24	25-34	35-44	45-54	55-64	65-99
2002 Qtr 4	Avg New Hire Earnings	\$498	\$1,057	\$1,629	\$2,231	\$2,538	\$2,636	\$2,301	\$1,039
	Job Creation	1,738	1,944	1,851	3,446	2,926	2,081	1,020	433
	New Hires	4,430	5,269	4,893	9,775	7,184	4,378	1,798	691
2003 Qtr 1	Avg New Hire Earnings	\$459	\$939	\$1,493	\$2,031	\$2,396	\$2,487	\$2,100	\$920
	Job Creation	1,462	1,814	2,184	3,948	3,660	2,925	1,447	556
	New Hires	3,199	4,089	4,456	8,113	6,068	3,942	1,575	534
2003 Qtr 2	Avg New Hire Earnings	\$539	\$1,091	\$1,655	\$2,266	\$2,722	\$2,764	\$2,249	\$1,242
	Job Creation	3,858	4,101	2,883	4,930	4,508	3,855	2,049	971
	New Hires	6,141	7,057	5,576	9,922	6,951	4,490	1,914	774
2003 Qtr 3	Avg New Hire Earnings	\$565	\$1,155	\$1,733	\$2,258	\$2,669	\$2,749	\$2,303	\$1,157
	Job Creation	1,679	1,468	2,112	3,630	3,150	2,293	1,080	511
	New Hires	7,837	6,154	5,939	10,452	7,518	4,885	1,911	713

This table was created directly from the LED interactive website, <http://www.iowaworkforce.org/lmi/lehd.html> without the use of advanced customized services of Iowa Workforce Development

What Earnings Should Young Workers Expect in Different Industries?

Industries in Iowa paying the highest earnings to 22-24 year old workers (both sexes)
Average 4th Quarter 2002-3rd Quarter 2003

Industry	Average Monthly Earnings	Average Quarterly Employment
221 Utilities	\$2,958	162
334 Computer and Electronic Product Manufacturing	\$2,948	239
333 Machinery Manufacturing	\$2,730	1,164
237 Heavy and Civil Engineering Construction	\$2,657	633
321 Wood Product Manufacturing	\$2,626	991
322 Paper Manufacturing	\$2,604	158
327 Nonmetallic Mineral Product Manufacturing	\$2,528	360
325 Chemical Manufacturing	\$2,365	308
524 Insurance Carriers and Related Activities	\$2,340	2,205
335 Electrical Equipment, Appliance, and Component Mfg	\$2,315	313
All Industries Average Monthly Earnings = \$1,658 All Industries Average Quarterly Employment = 84,976		

This table was created directly from the LED interactive website, <http://www.iowaworkforce.org/lmi/lehd.html> without the use of advanced customized services of Iowa Workforce Development

By identifying certain high-tech industries in the areas of employment, new hires, number of jobs created, average wage, and average wage of new hires, educators are able to build a stronger educational pipeline to produce trainable graduates for the future. For example, the table below shows that the number of new hires and number of jobs created are greatest for those employed in telecommunications. New hires in this field may expect to receive an average monthly wage of \$2,541.

What is the Job Market in Iowa's High Tech Industries, as of 3rd Quarter 2003?

	Employment	New Hires	Job Created	Average Monthly Wage	Average Wage For New Hires
Computer/Electronic Product Manufacturing	12,328	329	93	\$4,605	\$3,632
Broadcasting (except Internet)	2,929	328	201	\$2,762	\$1,648
Internet Publishing	240	35	17	\$4,177	\$3,458
Telecommunications	10,251	695	306	\$3,541	\$2,541
Internet Service Providers, Web Portals, and Data Processing	8,000	695	235	\$3,256	\$2,995
Research and Development	1,154	363	80	\$3,382	\$2,040

This table was created by using the advanced customized services of Iowa Workforce Development

Obtaining Data for Analysis, Specifically for Employers

Suppose an employer wanted to learn more about their industry within a particular geographical area. For example, a human resource manager at a local hospital may want to learn about total employment, net job flows, average new hires earnings, average monthly earnings, number of jobs that are created, new hires, separations, and turnover statistics to help make better informed decisions about human resource issues.

For an employer to access this kind of information, visit <http://www.iowaworkforce.org/lmi/lehd.html>. Then, select the attributes of interest from all of the drop down menus provided. Such a query would provide an employer with the following information provided below.

Comparison of Workforce Statistics in the Hospital Industry and All Industries for the State of Iowa, Quarter 3, 2003

QWI Quick Facts	Hospitals		All Industries	
	Qtr 3, 2003	4 Qtr Avg	Qtr 3, 2003	4 Qtr Avg
Total Employment	63,808	63,418	1,390,792	1,382,111
Net Job Flows	71	491	-19,556	13,845
Job Creation	679	1,417	63,513	84,631
New Hires	3,705	3,162	232,401	203,780
Separations	4,611	4,175	297,805	251,664
Turnover	5.08%	5.20%	10.00%	9.60%
Avg Monthly Earnings	\$3,048.00	\$2,968.00	\$2,651.00	\$2,647.75
Avg New Hire Earnings	\$2,016.00	\$2,048.50	\$1,673.00	\$1,650.25

This table was created directly from the LED interactive website, <http://www.iowaworkforce.org/lmi/lehd.html> without the use of advanced customized services of Iowa Workforce Development

Another example illustrated below shows that LED data can also provide the number of new hires, particularly of women between the ages of 35-44 in Linn County in various industries in 2003.

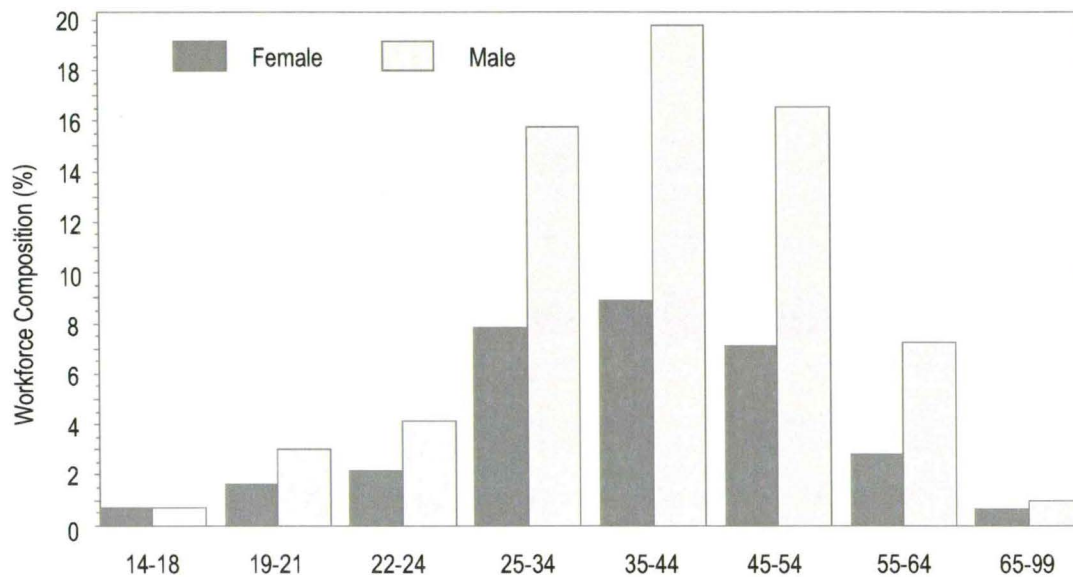
Average Monthly Earnings by Incumbent Women Workers & New Hires per Industry

This table was created by using the advanced customized services of Iowa Workforce Development

What is the Workforce Distribution in a Particular Industry and Area?

Designed for businesses, the 'local workforce option' provides timely and pertinent answers to key questions regarding their local workforce, by industry, age, and sex. By using the drop down boxes a query to see the employee distribution by age and sex in food manufacturing in Iowa will produce the following chart.

Employee Distribution by Age and Sex



	Age							
	14-18	19-21	22-24	25-34	35-44	45-54	55-64	65-99
Female	0.6%	1.6%	2.1%	7.8%	8.8%	7.1%	2.8%	0.6%
Male	0.7%	2.9%	4.1%	15.7%	19.7%	16.5%	7.2%	0.9%

State: Iowa
Sector: 31-33 Manufacturing
Detailed Industry: 311 Food Manufacturing
Data: 2003Q3

This table was created directly from the LED interactive website, <http://lehd.dsd.census.gov/led/> without the use of advanced customized services of Iowa Workforce Development

How Can a Worker Determine Where New Employment Opportunities Exist?

For an example, suppose a 55 year old female worker was laid off recently and is looking for employment in an industry that continues to thrive in job creation. In doing so, she may want to further investigate what particular industries are hiring, in this example Information is chosen. For such a request of data, she would simply need to visit <http://www.iowaworkforce.org/lmi/lehd.html>. Then, select the attributes of interest from all of the drop down menus provided. Once the query results are displayed, at the bottom of the page click on 'View Detailed Comparison Reports' by the line graph icon. After completing that, another screen will appear allowing a user to select from a variety of data attributes per each drop-down menu. Such a query would provide an employer with the following information provided below.

Job Creation and Total New Employment Statistics per Industrial Sectors for Iowa

QWI Quickfacts		Industrial Sectors							
2002 Qtr 4	Job Creation	3,191	4,934	2,403	11,398	1,069	4,874	Health Care & Social Assistance	
	Total Employment	68,382	220,364	48,644	183,926	35,721	181,391		
2003 Qtr 1	Job Creation	4,662	19,116	3,552	8,043	1,847	8,909		
	Total Employment	56,225	217,178	47,748	890,848	34,592	179,308		
2003 Qtr 2	Job Creation	16,739	7,434	2,631	11,728	1,484	8,092		
	Total Employment	58,187	225,105	48,135	178,767	35,213	180,761		
2003 Qtr 3	Job Creation	58,886	6,424	2,271	8,457	1,142	5,960		
	Total Employment	69,248	222,435	47,813	179,909	34,836	181,178		

This table was created directly from the LED interactive website, <http://www.iowaworkforce.org/lmi/lehd.html> without the use of advanced customized services of Iowa Workforce Development

Information Industry Focus: Female, Age 55-64, State of Iowa, 2nd Quarter 2003

QWI Quickfacts	Information (Qtr 2)	Information (4 Qtr Avg)	All Major Groups (Qtr 2)	All Major Groups (4 Qtr Avg)
Total Employment	1,975	1,9516	85,237	82,158
Net Job Flow	-9	-27	-2,050	-937
Job Creation	70	71	3,951	4,079
New Hires	108	88	4,378	4,438
Separations	152	163	9,521	8,619
Turnover	6.40%	5.60%	7.00%	6.10%
Average Monthly Earnings	\$2,304.00	\$2,386.25	\$2,128.00	\$2,065.25
Average New Hire Earnings	\$1,856.00	\$1,648.75	\$1,455.00	\$1,327.75

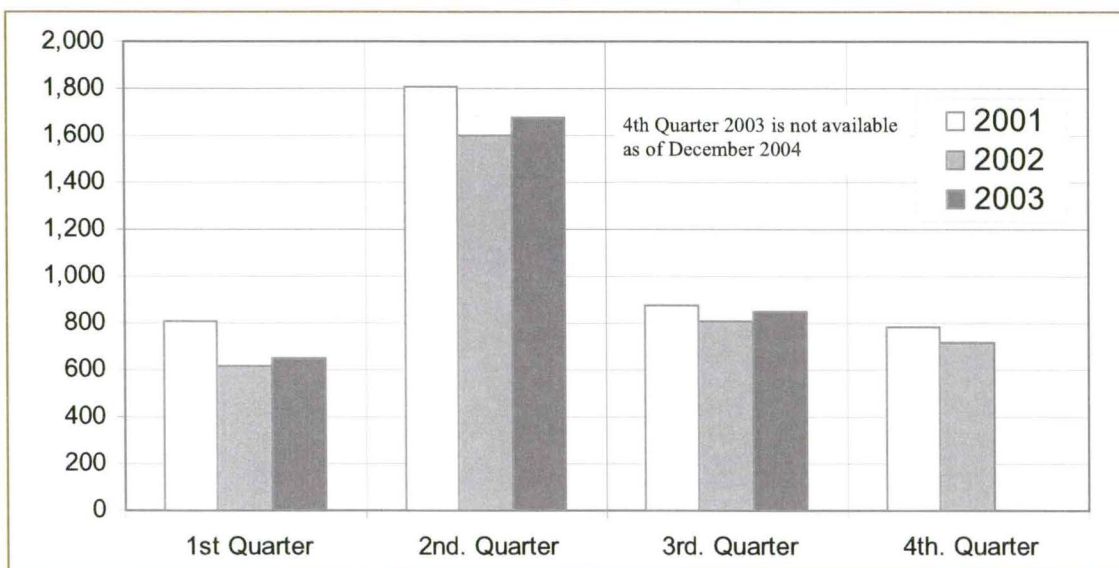
This table was created directly from the LED interactive website, <http://www.iowaworkforce.org/lmi/lehd.html> without the use of advanced customized services of Iowa Workforce Development

How Can a Young Worker Determine When and Where New Employment Opportunities Will Present Themselves?

For example, suppose a 18 year old male worker in Cedar Rapids, Iowa is looking for summer employment in an industry that continues to thrive in new hires. A couple of questions could arise as to how the employment situation looks for the year and what industries are hiring youth workers.

For such a request, a couple of queries would be necessary to obtain this kind of data. To extract employment hiring trends for the last three years, visit <http://www.iowaworkforce.org/lmi/lehd.html>. Then, select the attributes of interest from all of the drop down menus provided. Such a query would provide an worker with the information provided below.

New Hires (Age 14-18) by Yearly Quarters for Cedar Rapids



This table was created directly from the LED interactive website, <http://www.iowaworkforce.org/lmi/lehd.html> without the use of advanced customized services of Iowa Workforce Development

What Industries Hire the Most Youth in the Cedar Rapids area on Average in 2003?

Top 5 Industries	Number of Hires	Region: 10 Age: 14-18 Sex: Male & Female Data: 2002Q4 - 2003Q3 Total Employment All Industries: 8,106
Food and Drinking Places	2,624	
Food and Beverage Stores	1,255	
Administrative and Support Services	422	
General Merchandise Stores	369	
Clothing and Accessories Stores	277	

This table was created directly from the LED interactive website, <http://www.iowaworkforce.org/lmi/lehd.html> without the use of advanced customized services of Iowa Workforce Development

How Can a Decision Maker Determine Local Workforce Trends?

The 'Top Industries' link on the LED homepage is designed for analysis of the state's top industries based on age, sex, and region. There are eight template reports that provide information on employment growth and earnings by demographics.

By selecting parameters from the drop down menu boxes, a statewide query for the highest average monthly earnings for all ages and both sexes will provide a display as follows.

Top 15 Industries Ranked on the Greatest Average Monthly Earnings for all Workers

Industry	Average Monthly Earnings	Average Quarterly Employment
533 Lessors of Nonfinancial intangible Assets (except Copyrighted Works)	\$6,024	249
523 Securities, Commodity Contracts, and Other Financial Investments and Related Activities	\$5,423	2,861
486 Pipeline Transportation	\$5,292	277
334 Computer and Electric Product Manufacturing	\$4,721	9,304
221 Utilities	\$4,525	8,437
516 Internet Publishing and Broadcasting	\$4,282	260
333 Machinery Manufacturing	\$3,973	33,337
524 Insurance Carriers and Related Activities	\$3,922	39,428
621 Ambulatory Health Care Services	\$3,907	42,178
325 Chemical Manufacturing	\$3,750	7,144
331 Primary Metal Manufacturing	\$3,602	7,030
212 Mining (except Oil and Gas)	\$3,566	1,936
483 Water Transportation	\$3,553	272
517 Telecommunications	\$3,521	9,760
237 Heavy and Civil Engineering Construction	\$3,493	9,273
All Industries Average Monthly Earnings = \$2,622 All Industries Average Quarterly Employment = 1,172,771		

State: Iowa

WIB: Statewide

Age: 14-99

Sex: Male and Female

Data: 2003Q3, 2003Q2, 2003Q1, 2003Q4

This table was created directly from the LED interactive website, <http://lehd.dsd.census.gov/led/> without the use of advanced customized services of Iowa Workforce Development

Obtaining Additional Data for Analysis

A query to determine the top 10 industries ranked by greatest total private employment will provide the table below. Information on average monthly earnings and job creation has also been included.

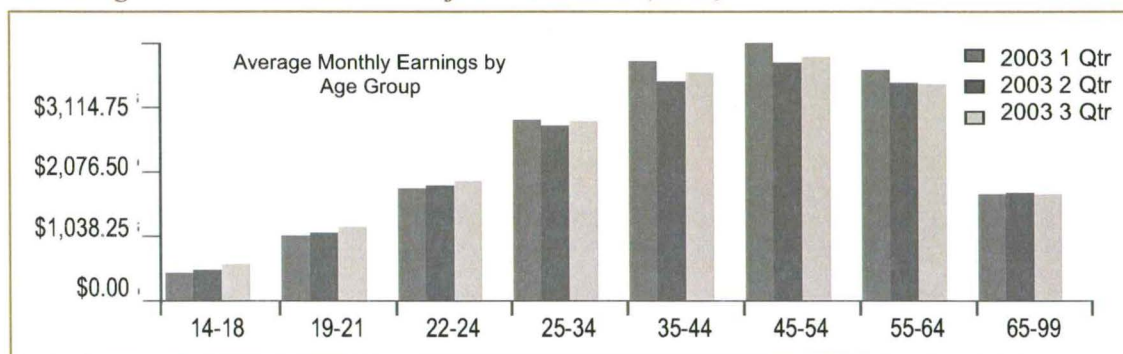
Key Industries by Employment (Qtr 4 2002 through Qtr 3 2003 Average) Statewide

Industry	Average Quarterly Employment	Average Monthly Earnings	Job Creation
722 Food Services and Drinking Places	86,096	\$872	7,985
561 Administrative and Support Services	56,073	\$1,925	6,065
623 Nursing and Residential Care Facilities	50,455	\$1,623	1,857
311 Food Manufacturing	49,276	\$2,937	1,246
622 Hospitals	43,685	\$2,923	744
621 Ambulatory Health Care Services	42,178	\$3,907	2,139
524 Insurance Carriers and Related Activities	39,428	\$3,922	1,308
522 Credit Intermediation and Related Activities	37,375	\$3,329	1,480
541 Professional, Scientific and Technical Services	37,158	\$3,473	3,123
238 Specialty Trade Contractors	36,980	\$2,979	3,856
All Industries Average Quarterly Employment = 1,172,771			

This table was created by using the advanced customized services of Iowa Workforce Development

The LED website also provides a user the ability to generate a graph 'on-the-fly' by simply clicking on the graph icon next to the attribute of interest after one has clicked on 'View Comparison Detailed Reports.' This will generate a table tailored to a user's selected fields of interest. Identified below is a table based upon the average monthly earnings of those employed in Polk County by age group.

Zooming In—The Local Context for Evaluation (2003)



This table was created directly from the LED interactive website, <http://www.iowaworkforce.org/lmi/lehd.html> without the use of advanced customized services of Iowa Workforce Development

LED In Summary

Decision Makers Usefulness

- Understanding core performance in a local economic environment, so local WIB (Workforce Investment Board) reports on entered employment, retention and earnings gain outcomes can be evaluated in a local context;
- Identifying the most promising industry targets for helping older displaced workers to find new jobs at acceptable earnings levels;
- Identifying stable concentrations of firms in a local workforce investment area that are hiring enough workers to justify client placement advocacy;
- Providing new evidence of emerging trends and turning points in previously stable trends, such as identifying changes in hiring patterns in the health care services sector or new job creation in an area of retail trade.

Educational and Training Institutions Usefulness

- Examining earnings for new and incumbent workers in different industries to benchmark their performance and improve their placement strategies;
- Identifying the most promising industry targets for developing educational curriculums and to find new jobs at acceptable earnings levels;
- Identifying the workforce composition in a local workforce area, earnings and turnover that are hiring enough workers to justify client placement advocacy;
- Providing new evidence of emerging trends, and turning points in previously stable trends-such as identifying changes in hiring patterns or new job creation.

Employers Usefulness

- Employers can use new information on where workers live to find out where to go to hire workers;
- Transportation agencies can use it to find out where local needs are greatest;
- Employers can identify where the workers are in their industry by county;
- Employers can now find out how much other employers, like themselves, are paying their workers for wage-setting strategies;
- Businesses can identify how the turnover for other firms in their industry compare to the turnover at their workplace.

Job Seekers Usefulness

- Show which types of businesses are hiring workers of their age, what they're paying, and what the growth trends look like;
- Identify where the jobs are, in what industry and county so they know where to look;
- Identify how much they can expect to be paid in different industries;
- Examine how long they can expect their job to last in their industries.

NOTES

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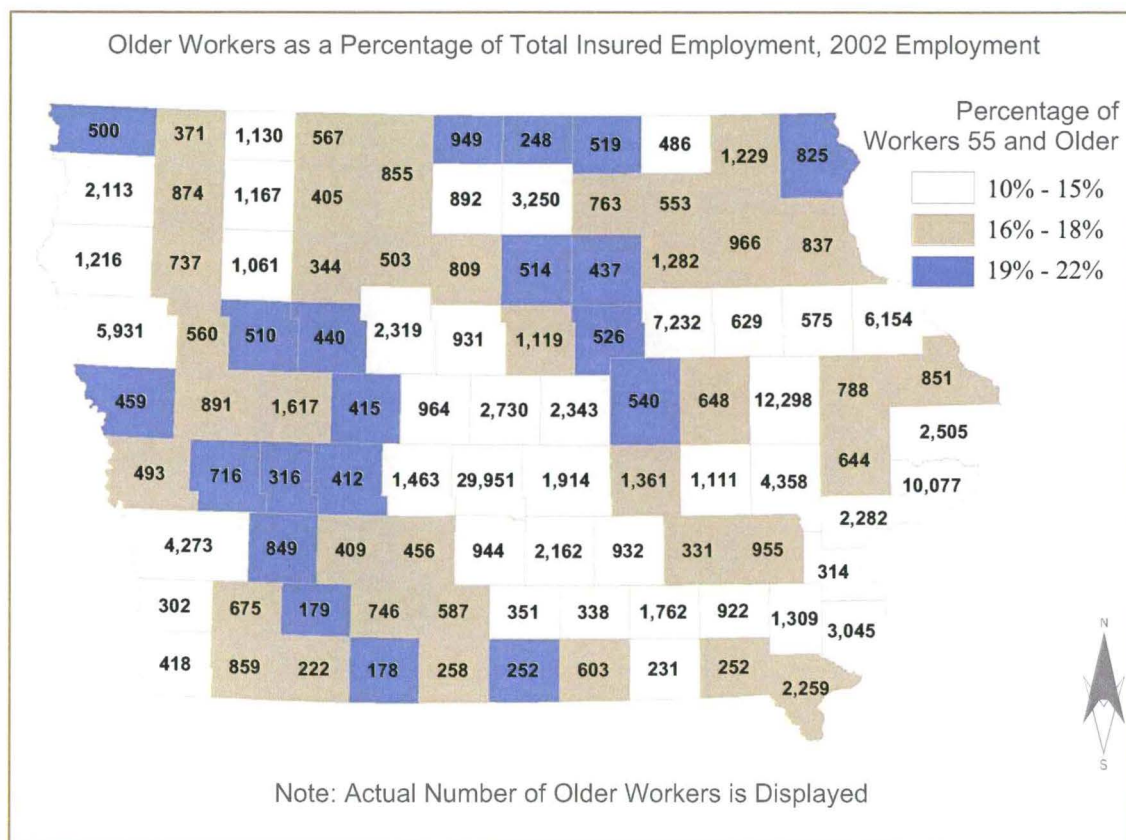
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What Else Can Iowa Workforce Development Offer in Conjunction with LED Data?

Iowa Workforce Development, Employment Statistics Bureau offers additional resources that can better benefit an individual's decision based upon the usage of Local Employment Dynamic data. For example, staff's knowledge in Geographical Information Systems can provide data in a illustrated form with the use of maps. One such request led to a map illustrating older workers as a percentage of total insured employment, based upon 2002 employment for the State of Iowa.

Below is the map generated for such a request. This same kind of map can be tailored to a decision maker's request upon geographical area of interest. Contact Iowa Workforce Development, Employment Statistics Bureau today for a specialized analysis. See contact information below.

*Contact Information*

® Iowa Workforce Development, Employment Statistics Bureau
1000 East Grand Avenue,
Des Moines, IA 50319
Tel: 800-532-1249; Fax: 515-281-8195
Email: trends@iwd.state.ia.us

www.iowaworkforce.org

Iowa Wage Survey Information and Definitions

Survey Information

Iowa Wage Survey estimates are based on May, 2004 wages which have been updated to the second quarter of 2005 using the Employment Cost Index. It should be noted that these are not official Bureau of Labor Statistics (BLS) data series and are not validated by BLS however they provide additional information that can be valuable to users of wage data.

All wage data are reported as hourly except for teaching occupations and education administrators.

Some occupations may not have data for Iowa. When only a few workers are reported, we are required to suppress publication for that occupation if data would reveal confidential employer information. Information is also suppressed if the resulting estimates have a low degree of confidence.

The Bureau of Labor Statistics website for the Occupational Employment Statistics Website located at <http://www.bls.gov/oes/> is a resource for national wage information. Data are also available for all states and metropolitan statistical areas.

Survey Definitions

Mean Wage refers to the average wage and is computed by dividing the estimated total wage for an occupation by its weighted employment.

Entry Wage is the average of the lowest third of reported wages for the occupation.

Experienced Wage is the average of the upper two-thirds of reported wages for the occupation.

10th Percentile Wage is the point at which 10% of the employment was below this wage and 90% was above.

25th Percentile Wage is the point at which 25% of the employment was below this wage and 75% was above.

Median Wage or 50th Percentile Wage is the point at which 50% of the employment was below this wage and 50% was above.

75th Percentile Wage is the point at which 75% of the employment was below this wage and 25% was above.

90th Percentile Wage is the point at which 90% of the employment was below this wage and 10% was above.

Website: <http://www.iowaworkforce.org/lmi/occupations/wages/index.htm>

Occupation	Occupational Code	Employment	Estimated	Mean Wage	Entry Wage	Experienced Wage	10th pct	25th pct	Median Wage	75th pct	90th pct							
MANAGEMENT OCCUPATIONS	11-0000	57,400	\$	35.57	\$	17.77	\$	44.46	\$	15.24	\$	22.03	\$	31.43	\$	43.85	\$	61.50
Chief Executives	11-1011	2,830	\$	64.71	\$	29.55	\$	82.30	\$	22.32	\$	40.80	\$	63.44		N.A.		N.A.
General and Operations Managers	11-1021	13,430	\$	40.04	\$	19.52	\$	50.30	\$	17.00	\$	23.45	\$	34.84	\$	50.35		N.A.
Legislators	11-1031	1,640	\$	8.89	\$	6.06	\$	10.31	\$	5.63	\$	6.00	\$	6.56	\$	7.44	\$	17.95
Advertising and Promotions Managers	11-2011	500	\$	29.72	\$	16.09	\$	36.54	\$	14.34	\$	18.50	\$	26.21	\$	35.92	\$	52.05
Marketing Managers	11-2021	1,410	\$	38.70	\$	21.77	\$	47.16	\$	19.27	\$	25.77	\$	35.45	\$	47.82	\$	61.94
Sales Managers	11-2022	2,280	\$	39.77	\$	21.51	\$	48.90	\$	19.25	\$	25.27	\$	36.21	\$	49.82	\$	66.44
Public Relations Managers	11-2031	480	\$	30.65	\$	18.29	\$	36.83	\$	16.68	\$	20.88	\$	27.69	\$	37.96	\$	48.09
Administrative Services Managers	11-3011	3,200	\$	31.48	\$	18.28	\$	38.08	\$	15.97	\$	21.43	\$	30.14	\$	39.12	\$	48.94
Computer and Information Systems Managers	11-3021	2,170	\$	39.72	\$	26.45	\$	46.35	\$	24.18	\$	30.59	\$	39.21	\$	47.61	\$	56.25
Financial Managers	11-3031	4,450	\$	41.68	\$	24.21	\$	50.41	\$	21.94	\$	28.01	\$	37.09	\$	50.51		>\$70
Compensation and Benefits Managers	11-3041	450	\$	31.65	\$	19.66	\$	37.65	\$	17.38	\$	22.57	\$	29.19	\$	37.69	\$	48.10
Training and Development Managers	11-3042	300	\$	32.59	\$	19.50	\$	39.14	\$	17.87	\$	22.73	\$	29.60	\$	39.56	\$	52.14
Human Resources Managers, All Other	11-3049	480	\$	35.44	\$	22.07	\$	42.13	\$	19.49	\$	26.07	\$	33.82	\$	43.35	\$	53.88
Industrial Production Managers	11-3051	1,970	\$	34.06	\$	22.29	\$	39.95	\$	19.89	\$	25.77	\$	32.83	\$	41.79	\$	50.09
Purchasing Managers	11-3061	580	\$	33.95	\$	22.61	\$	39.61	\$	20.08	\$	26.39	\$	33.38	\$	40.85	\$	48.23
Transportation, Storage, and Distribution Managers	11-3071	1,120	\$	35.92	\$	20.94	\$	43.40	\$	18.41	\$	24.49	\$	34.95	\$	46.63	\$	55.24
Farm, Ranch, and Other Agricultural Managers	11-9011	270	\$	35.79	\$	19.84	\$	43.76	\$	18.50	\$	22.61	\$	31.46	\$	46.79	\$	63.96
Construction Managers	11-9021	1,410	\$	33.00	\$	20.72	\$	39.15	\$	19.14	\$	23.80	\$	29.80	\$	38.74	\$	48.45
Education Administrators, Preschool and Child Care Center/Program	11-9031	570	\$	17.52	\$	10.96	\$	20.80	\$	10.01	\$	11.97	\$	14.67	\$	20.52	\$	30.88
Education Administrators, Elementary and Secondary School	11-9032	2,230	\$	69,613.00	\$	51,111.00	\$	78,864.00	\$	47,628.00	\$	58,649.00	\$	69,073.00	\$	81,617.00	\$	93,200.00
Education Administrators, Postsecondary	11-9033	1,500	\$	32.73	\$	17.97	\$	40.10	\$	15.90	\$	20.87	\$	28.46	\$	39.51	\$	54.60
Education Administrators, All Other	11-9039	550	\$	28.79	\$	17.26	\$	34.54	\$	15.15	\$	20.20	\$	26.78	\$	35.42	\$	44.62
Engineering Managers	11-9041	1,330	\$	41.71	\$	29.91	\$	47.61	\$	27.99	\$	33.59	\$	40.38	\$	47.10	\$	57.30
Food Service Managers	11-9051	1,580	\$	18.07	\$	10.99	\$	21.60	\$	9.91	\$	12.44	\$	16.57	\$	22.56	\$	27.75
Funeral Directors	11-9061	410	\$	29.00	\$	16.76	\$	35.13	\$	14.67	\$	19.59	\$	24.88	\$	34.90	\$	53.49
Gaming Managers	11-9071	80	\$	27.34	\$	20.13	\$	30.95	\$	19.29	\$	21.68	\$	25.70	\$	30.12	\$	38.90
Lodging Managers	11-9081	310		N.A.		N.A.		N.A.		N.A.		N.A.		N.A.		N.A.		N.A.
Medical and Health Services Managers	11-9111	4,360	\$	29.26	\$	19.66	\$	34.06	\$	18.48	\$	22.11	\$	27.35	\$	33.96	\$	41.96
Natural Sciences Managers	11-9121	220	\$	45.17	\$	26.47	\$	54.53	\$	23.61	\$	30.43	\$	42.55	\$	55.92		>\$70
Postmasters and Mail Superintendents	11-9131	880	\$	23.10	\$	17.09	\$	26.11	\$	15.76	\$	19.73	\$	23.62	\$	26.57	\$	30.11
Property, Real Estate, and Community Association Managers	11-9141	480	\$	24.16	\$	14.13	\$	29.18	\$	13.96	\$	15.19	\$	17.19	\$	28.95	\$	44.89
Social and Community Service Managers	11-9151	1,610	\$	22.12	\$	14.14	\$	26.11	\$	13.18	\$	15.88	\$	20.32	\$	27.22	\$	33.89
Managers, All Other	11-9199	2,320	\$	31.93	\$	17.67	\$	39.07	\$	15.10	\$	21.08	\$	29.64	\$	40.87	\$	52.50
BUSINESS AND FINANCIAL OPERATIONS OCCUPATIONS	13-0000	55,030	\$	23.21	\$	13.73	\$	27.94	\$	12.40	\$	16.19	\$	21.11	\$	27.63	\$	36.06
Agents and Business Managers of Artists, Performers, and Athletes	13-1011	20	\$	28.00	\$	15.79	\$	34.11	\$	15.33	\$	17.61	\$	22.95	\$	37.58	\$	44.50
Purchasing Agents and Buyers, Farm Products	13-1021	840	\$	23.07	\$	14.83	\$	27.19	\$	11.86	\$	17.93	\$	21.89	\$	28.75	\$	34.83
Wholesale and Retail Buyers, Except Farm Products	13-1022	1,520	\$	20.27	\$	13.10	\$	23.86	\$	11.83	\$	14.76	\$	19.01	\$	24.48	\$	31.23
Purchasing Agents, Except Wholesale, Retail, and Farm Products	13-1023	2,200	\$	21.88	\$	14.69	\$	25.47	\$	13.37	\$	16.72	\$	20.84	\$	26.07	\$	33.13
Claims Adjusters, Examiners, and Investigators	13-1031	2,690	\$	19.15	\$	13.01	\$	22.22	\$	12.04	\$	14.37	\$	18.08	\$	22.67	\$	27.88
Insurance Appraisers, Auto Damage	13-1032	150	\$	22.32	\$	17.89	\$	24.53	\$	16.47	\$	18.77	\$	21.31	\$	25.54	\$	31.12

Occupation	Occupational Code	Estimated Employment	Mean Wage	Entry Wage	Experienced Wage	10th pct	25th pct	Median Wage	75th pct	90th pct
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	13-1041	1,730	\$ 22.70	\$ 15.89	\$ 26.11	\$ 14.46	\$ 17.93	\$ 21.20	\$ 26.33	\$ 34.05
Cost Estimators	13-1051	1,880	\$ 23.08	\$ 14.87	\$ 27.18	\$ 13.83	\$ 16.92	\$ 21.78	\$ 27.32	\$ 34.47
Emergency Management Specialists	13-1061	140	\$ 20.69	\$ 11.79	\$ 25.14	\$ 10.14	\$ 14.54	\$ 18.79	\$ 25.74	\$ 35.67
Employment, Recruitment, and Placement Specialists	13-1071	1,460	\$ 20.37	\$ 13.86	\$ 23.64	\$ 12.53	\$ 15.97	\$ 19.25	\$ 22.81	\$ 28.16
Compensation, Benefits, and Job Analysis Specialists	13-1072	790	\$ 20.50	\$ 14.05	\$ 23.72	\$ 13.00	\$ 15.59	\$ 19.52	\$ 24.28	\$ 30.56
Training and Development Specialists	13-1073	2,160	\$ 19.40	\$ 11.76	\$ 23.22	\$ 10.18	\$ 13.82	\$ 19.05	\$ 23.53	\$ 29.27
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	1,670	\$ 19.30	\$ 8.38	\$ 24.74	\$ 6.10	\$ 11.22	\$ 19.26	\$ 25.35	\$ 33.75
Logisticians	13-1081	380	\$ 26.41	\$ 17.93	\$ 30.63	\$ 15.95	\$ 20.27	\$ 24.12	\$ 29.95	\$ 38.17
Management Analysts	13-1111	2,480	\$ 29.42	\$ 18.11	\$ 35.07	\$ 16.65	\$ 20.95	\$ 27.09	\$ 35.08	\$ 45.04
Meeting and Convention Planners	13-1121	190	\$ 16.70	\$ 10.66	\$ 19.72	\$ 8.84	\$ 12.54	\$ 15.76	\$ 20.62	\$ 25.88
Business Operations Specialists, All Other	13-1199	14,210	\$ 23.32	\$ 12.37	\$ 28.79	\$ 10.65	\$ 14.97	\$ 20.97	\$ 28.36	\$ 37.90
Accountants and Auditors	13-2011	8,320	\$ 25.15	\$ 16.44	\$ 29.50	\$ 15.10	\$ 18.30	\$ 22.29	\$ 28.43	\$ 36.78
Appraisers and Assessors of Real Estate	13-2021	900	\$ 22.65	\$ 15.29	\$ 26.33	\$ 14.89	\$ 17.34	\$ 21.01	\$ 24.16	\$ 33.11
Budget Analysts	13-2031	260	\$ 25.27	\$ 16.71	\$ 29.54	\$ 14.17	\$ 19.47	\$ 25.16	\$ 30.91	\$ 35.84
Credit Analysts	13-2041	630	\$ 22.34	\$ 15.97	\$ 25.52	\$ 15.30	\$ 17.08	\$ 20.68	\$ 25.75	\$ 31.95
Financial Analysts	13-2051	1,820	\$ 28.11	\$ 17.45	\$ 33.44	\$ 15.92	\$ 19.26	\$ 24.75	\$ 33.85	\$ 44.74
Personal Financial Advisors	13-2052	720	\$ 34.87	\$ 13.89	\$ 45.36	\$ 11.25	\$ 16.73	\$ 25.64	\$ 46.75	>\$70
Insurance Underwriters	13-2053	1,630	\$ 23.42	\$ 15.88	\$ 27.19	\$ 14.72	\$ 17.62	\$ 22.66	\$ 28.04	\$ 33.99
Financial Examiners	13-2061	550	\$ 28.42	\$ 17.59	\$ 33.82	\$ 15.60	\$ 20.40	\$ 27.91	\$ 35.47	\$ 42.59
Loan Counselors	13-2071	420	\$ 16.38	\$ 12.29	\$ 18.44	\$ 11.45	\$ 12.79	\$ 14.33	\$ 17.59	\$ 23.74
Loan Officers	13-2072	3,580	\$ 22.82	\$ 14.51	\$ 26.96	\$ 13.47	\$ 16.20	\$ 20.88	\$ 27.77	\$ 35.06
Tax Examiners, Collectors, and Revenue Agents	13-2081	300	\$ 26.71	\$ 18.06	\$ 31.05	\$ 17.61	\$ 19.78	\$ 25.09	\$ 33.97	\$ 40.71
Tax Preparers	13-2082	710	\$ 13.36	\$ 8.89	\$ 15.59	\$ 7.99	\$ 10.10	\$ 12.94	\$ 14.99	\$ 20.16
Financial Specialists, All Other	13-2099	690	\$ 19.63	\$ 13.58	\$ 22.65	\$ 12.42	\$ 14.86	\$ 17.79	\$ 22.90	\$ 28.96
COMPUTER AND MATHEMATICAL OCCUPATIONS	15-0000	23,740	\$ 26.53	\$ 16.51	\$ 31.55	\$ 14.83	\$ 19.38	\$ 25.79	\$ 33.19	\$ 40.56
Computer and Information Scientists, Research	15-1011	60	\$ 33.82	\$ 21.74	\$ 39.85	\$ 17.76	\$ 28.16	\$ 33.39	\$ 43.28	\$ 52.50
Computer Programmers	15-1021	3,410	\$ 26.77	\$ 18.40	\$ 30.96	\$ 16.73	\$ 21.02	\$ 26.38	\$ 32.50	\$ 37.50
Computer Software Engineers, Applications	15-1031	2,220	\$ 31.83	\$ 19.47	\$ 38.02	\$ 17.69	\$ 24.54	\$ 32.01	\$ 40.10	\$ 46.22
Computer Software Engineers, Systems Software	15-1032	2,140	\$ 30.51	\$ 22.05	\$ 34.73	\$ 19.85	\$ 24.64	\$ 29.76	\$ 35.39	\$ 42.93
Computer Support Specialists	15-1041	4,690	\$ 18.90	\$ 12.48	\$ 22.11	\$ 11.34	\$ 14.34	\$ 18.16	\$ 22.39	\$ 28.02
Computer Systems Analysts	15-1051	5,120	\$ 29.74	\$ 21.78	\$ 33.71	\$ 19.74	\$ 24.24	\$ 29.45	\$ 35.38	\$ 41.87
Database Administrators	15-1061	610	\$ 27.82	\$ 17.16	\$ 33.14	\$ 15.54	\$ 19.71	\$ 27.87	\$ 35.63	\$ 42.29
Network and Computer Systems Administrators	15-1071	2,350	\$ 26.16	\$ 17.75	\$ 30.36	\$ 16.27	\$ 20.24	\$ 25.65	\$ 32.06	\$ 37.46
Network Systems and Data Communications Analysts	15-1081	1,080	\$ 25.19	\$ 15.96	\$ 29.80	\$ 14.79	\$ 18.04	\$ 23.52	\$ 31.73	\$ 39.68
Computer Specialists, All Other	15-1099	970	\$ 22.23	\$ 13.45	\$ 26.62	\$ 12.34	\$ 15.07	\$ 20.37	\$ 26.06	\$ 35.07
Actuaries	15-2011	350	\$ 37.66	\$ 21.05	\$ 45.96	\$ 19.10	\$ 23.64	\$ 34.58	\$ 48.90	\$ 58.43
Operations Research Analysts	15-2031	680	\$ 26.03	\$ 17.36	\$ 30.36	\$ 15.94	\$ 18.90	\$ 24.27	\$ 32.07	\$ 40.41
Statisticians	15-2041	80	\$ 28.49	\$ 19.78	\$ 32.85	\$ 18.79	\$ 21.40	\$ 26.78	\$ 33.40	\$ 41.96
ARCHITECTURE AND ENGINEERING OCCUPATIONS	17-0000	15,780	\$ 26.18	\$ 16.58	\$ 30.98	\$ 14.90	\$ 19.09	\$ 25.08	\$ 32.37	\$ 39.71
Architects, Except Landscape and Naval	17-1011	540	\$ 29.92	\$ 18.14	\$ 35.81	\$ 16.60	\$ 20.48	\$ 27.48	\$ 35.21	\$ 44.78
Landscape Architects	17-1012	100	\$ 23.53	\$ 14.44	\$ 28.08	\$ 12.47	\$ 16.74	\$ 23.08	\$ 27.41	\$ 36.86

Occupation	Occupational Code	Employment	Estimated	Mean Wage	Entry Wage	Experienced Wage	10th pct	25th pct	Median Wage	75th pct	90th pct							
Cartographers and Photogrammetrists	17-1021	30	\$	19.21	\$	12.55	\$	22.53	\$	12.01	\$	13.18	\$	16.33	\$	22.13	\$	32.92
Surveyors	17-1022	440	\$	20.70	\$	13.77	\$	24.16	\$	12.43	\$	15.75	\$	20.18	\$	25.01	\$	29.09
Aerospace Engineers	17-2011	N.A.	\$	30.91	\$	18.57	\$	37.07	\$	16.53	\$	20.90	\$	29.57	\$	36.09	\$	51.06
Agricultural Engineers	17-2021	230	\$	27.29	\$	14.56	\$	33.66	\$	12.97	\$	16.22	\$	25.32	\$	38.64	\$	44.53
Biomedical Engineers	17-2031	60	\$	28.10	\$	18.47	\$	32.92	\$	17.55	\$	20.60	\$	26.33	\$	35.26	\$	43.02
Chemical Engineers	17-2041	160	\$	32.90	\$	24.85	\$	36.94	\$	23.75	\$	26.94	\$	32.31	\$	37.96	\$	44.74
Civil Engineers	17-2051	1,390	\$	30.97	\$	22.23	\$	35.34	\$	20.37	\$	24.35	\$	30.12	\$	36.54	\$	43.20
Computer Hardware Engineers	17-2061	210	\$	26.81	\$	16.66	\$	31.88	\$	13.80	\$	20.06	\$	26.37	\$	32.93	\$	40.59
Electrical Engineers	17-2071	1,210	\$	33.13	\$	24.14	\$	37.63	\$	22.79	\$	26.94	\$	32.56	\$	38.74	\$	45.42
Electronics Engineers, Except Computer	17-2072	410	\$	32.69	\$	19.97	\$	39.04	\$	17.17	\$	23.57	\$	29.64	\$	37.67	\$	61.58
Environmental Engineers	17-2081	190	\$	28.50	\$	21.22	\$	32.14	\$	19.76	\$	22.77	\$	27.78	\$	34.14	\$	40.41
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	17-2111	120	\$	27.17	\$	17.99	\$	31.75	\$	15.90	\$	20.79	\$	27.45	\$	33.08	\$	38.49
Industrial Engineers	17-2112	1,790	\$	28.95	\$	22.30	\$	32.26	\$	20.33	\$	24.27	\$	28.80	\$	33.96	\$	38.08
Materials Engineers	17-2131	190	\$	30.56	\$	23.22	\$	34.23	\$	21.50	\$	24.43	\$	28.35	\$	34.96	\$	43.80
Mechanical Engineers	17-2141	2,320	\$	29.57	\$	21.36	\$	33.67	\$	19.57	\$	23.63	\$	28.30	\$	34.55	\$	41.73
Mining and Geological Engineers, Including Mining Safety Engineers	17-2151	20	\$	27.25	\$	19.72	\$	31.01	\$	18.39	\$	21.83	\$	26.22	\$	32.53	\$	40.19
Nuclear Engineers	17-2161	N.A.	\$	39.90	\$	32.12	\$	43.79	\$	30.88	\$	34.49	\$	40.04	\$	45.95	\$	52.42
Engineers, All Other	17-2199	790	\$	31.14	\$	20.40	\$	36.52	\$	17.55	\$	24.30	\$	31.60	\$	38.59	\$	44.75
Architectural and Civil Drafters	17-3011	750	\$	18.78	\$	13.76	\$	21.28	\$	12.46	\$	15.24	\$	18.06	\$	22.23	\$	26.43
Electrical and Electronics Drafters	17-3012	210	\$	25.23	\$	16.97	\$	29.36	\$	15.08	\$	19.15	\$	26.75	\$	31.89	\$	34.41
Mechanical Drafters	17-3013	900	\$	18.25	\$	13.64	\$	20.55	\$	12.44	\$	14.90	\$	17.89	\$	21.30	\$	24.73
Drafters, All Other	17-3019	220	\$	18.09	\$	12.65	\$	20.80	\$	11.60	\$	14.23	\$	18.47	\$	21.84	\$	24.62
Civil Engineering Technicians	17-3022	690	\$	18.62	\$	13.37	\$	21.25	\$	11.77	\$	15.33	\$	18.39	\$	22.04	\$	26.08
Electrical and Electronic Engineering Technicians	17-3023	930	\$	19.84	\$	13.28	\$	23.11	\$	12.21	\$	14.67	\$	20.13	\$	24.40	\$	27.51
Environmental Engineering Technicians	17-3025	60	\$	19.17	\$	14.97	\$	21.26	\$	13.80	\$	16.07	\$	19.25	\$	22.45	\$	25.18
Industrial Engineering Technicians	17-3026	490	\$	19.51	\$	13.65	\$	22.44	\$	12.56	\$	15.59	\$	18.68	\$	23.41	\$	28.28
Mechanical Engineering Technicians	17-3027	420	\$	19.65	\$	15.23	\$	21.86	\$	14.48	\$	15.87	\$	18.15	\$	22.81	\$	28.02
Engineering Technicians, Except Drafters, All Other	17-3029	390	\$	22.19	\$	16.54	\$	25.01	\$	15.26	\$	18.41	\$	21.45	\$	25.76	\$	30.57
Surveying and Mapping Technicians	17-3031	280	\$	16.04	\$	11.22	\$	18.46	\$	10.23	\$	13.01	\$	16.08	\$	19.01	\$	21.90
LIFE, PHYSICAL, AND SOCIAL SCIENCE OCCUPATIONS	19-0000	9,340	\$	23.39	\$	13.54	\$	28.32	\$	12.02	\$	16.13	\$	21.46	\$	28.36	\$	36.97
Animal Scientists	19-1011	30	\$	24.30	\$	18.49	\$	27.20	\$	17.11	\$	19.36	\$	22.24	\$	30.78	\$	34.59
Food Scientists and Technologists	19-1012	130	\$	23.69	\$	14.57	\$	28.25	\$	13.24	\$	16.21	\$	20.99	\$	28.34	\$	40.20
Soil and Plant Scientists	19-1013	740	\$	31.39	\$	19.42	\$	37.37	\$	18.65	\$	21.88	\$	27.97	\$	39.55	\$	50.23
Biochemists and Biophysicists	19-1021	50	\$	35.37	\$	21.27	\$	42.42	\$	17.98	\$	24.94	\$	32.73	\$	44.34	\$	60.81
Microbiologists	19-1022	140	\$	29.97	\$	19.00	\$	35.45	\$	16.98	\$	21.80	\$	29.06	\$	37.34	\$	45.70
Zoologists and Wildlife Biologists	19-1023	120	\$	25.47	\$	19.15	\$	28.64	\$	17.80	\$	21.54	\$	24.69	\$	27.41	\$	33.45
Biological Scientists, All Other	19-1029	110	\$	25.84	\$	12.19	\$	32.67	\$	8.63	\$	14.28	\$	27.33	\$	34.13	\$	42.15
Conservation Scientists	19-1031	320	\$	24.02	\$	14.48	\$	28.78	\$	13.12	\$	16.28	\$	24.21	\$	31.02	\$	35.39
Foresters	19-1032	130	\$	19.30	\$	9.41	\$	24.24	\$	7.19	\$	11.21	\$	19.92	\$	25.56	\$	31.01
Physicists	19-2012	30	\$	36.31	\$	26.32	\$	41.30	\$	22.55	\$	29.68	\$	34.99	\$	42.14	\$	54.37
Atmospheric and Space Scientists	19-2021	60	\$	30.57	\$	19.11	\$	36.30	\$	18.54	\$	22.63	\$	31.39	\$	39.61	\$	43.98
Chemists	19-2031	360	\$	24.27	\$	14.56	\$	29.13	\$	14.23	\$	16.52	\$	21.36	\$	29.72	\$	38.69
Materials Scientists	19-2032	180	\$	29.33	\$	19.23	\$	34.38	\$	17.53	\$	21.48	\$	27.28	\$	36.27	\$	44.95
Geoscientists, Except Hydrologists and Geographers	19-2042	60	\$	26.61	\$	20.18	\$	29.84	\$	17.10	\$	23.18	\$	27.36	\$	31.69	\$	34.70
Hydrologists	19-2043	50	\$	26.33	\$	19.88	\$	29.55	\$	17.66	\$	22.22	\$	26.86	\$	31.20	\$	34.60

Occupation	Occupational Code	Estimated Employment	Mean Wage	Entry Wage	Experienced Wage	10th pct	25th pct	Median Wage	75th pct	90th pct
Market Research Analysts	19-3021	1,500	\$ 25.61	\$ 15.64	\$ 30.59	\$ 14.15	\$ 17.85	\$ 23.09	\$ 31.73	\$ 40.77
Survey Researchers	19-3022	160	\$ 14.10	\$ 9.92	\$ 16.19	\$ 9.40	\$ 10.02	\$ 11.05	\$ 14.16	\$ 29.48
Clinical, Counseling, and School Psychologists	19-3031	720	\$ 26.57	\$ 17.42	\$ 31.14	\$ 15.91	\$ 19.75	\$ 24.79	\$ 29.84	\$ 37.29
Psychologists, All Other	19-3039	40	\$ 41.06	\$ 24.54	\$ 49.32	\$ 24.76	\$ 29.44	\$ 37.33	\$ 42.71	N.A.
Urban and Regional Planners	19-3051	170	\$ 22.84	\$ 17.33	\$ 25.61	\$ 15.92	\$ 18.75	\$ 22.29	\$ 26.38	\$ 30.31
Historians	19-3093	10	\$ 19.69	\$ 15.99	\$ 21.54	\$ 15.26	\$ 16.67	\$ 19.15	\$ 22.42	\$ 25.92
Social Scientists and Related Workers, All Other	19-3099	160	\$ 27.92	\$ 16.75	\$ 33.51	\$ 14.03	\$ 19.20	\$ 23.28	\$ 33.10	\$ 51.63
Agricultural and Food Science Technicians	19-4011	880	\$ 18.40	\$ 10.87	\$ 22.17	\$ 9.74	\$ 12.61	\$ 17.05	\$ 23.14	\$ 29.53
Biological Technicians	19-4021	810	\$ 15.83	\$ 10.45	\$ 18.52	\$ 9.15	\$ 12.23	\$ 15.82	\$ 19.25	\$ 22.65
Chemical Technicians	19-4031	350	\$ 20.23	\$ 14.41	\$ 23.14	\$ 12.92	\$ 16.89	\$ 20.53	\$ 23.98	\$ 27.33
Geological and Petroleum Technicians	19-4041	20	\$ 14.02	\$ 9.75	\$ 16.16	\$ 9.36	\$ 10.75	\$ 15.24	\$ 16.98	\$ 18.01
Environmental Science and Protection Technicians, Including Health	19-4091	420	\$ 19.94	\$ 11.00	\$ 24.41	\$ 6.52	\$ 15.18	\$ 20.54	\$ 26.17	\$ 30.91
Forest and Conservation Technicians	19-4093	480	\$ 16.02	\$ 11.47	\$ 18.30	\$ 10.79	\$ 12.93	\$ 16.52	\$ 19.51	\$ 21.22
Life, Physical, and Social Science Technicians, All Other	19-4099	280	\$ 20.38	\$ 12.34	\$ 24.40	\$ 11.48	\$ 13.97	\$ 18.78	\$ 26.00	\$ 33.38
COMMUNITY AND SOCIAL SERVICES OCCUPATIONS	21-0000	20,610	\$ 15.86	\$ 9.47	\$ 19.05	\$ 8.43	\$ 10.94	\$ 14.98	\$ 19.76	\$ 24.19
Substance Abuse and Behavioral Disorder Counselors	21-1011	1,060	\$ 15.95	\$ 11.89	\$ 17.99	\$ 11.36	\$ 12.75	\$ 14.95	\$ 18.64	\$ 22.98
Educational, Vocational, and School Counselors	21-1012	2,070	\$ 18.77	\$ 12.69	\$ 21.80	\$ 11.23	\$ 14.62	\$ 18.49	\$ 22.71	\$ 26.80
Marriage and Family Therapists	21-1013	430	\$ 17.58	\$ 13.15	\$ 19.79	\$ 11.78	\$ 14.79	\$ 16.62	\$ 18.48	\$ 25.45
Mental Health Counselors	21-1014	760	\$ 20.54	\$ 12.46	\$ 24.58	\$ 11.86	\$ 13.82	\$ 17.49	\$ 23.16	\$ 29.48
Rehabilitation Counselors	21-1015	1,330	\$ 13.54	\$ 9.41	\$ 15.60	\$ 8.74	\$ 9.94	\$ 11.58	\$ 15.98	\$ 22.21
Counselors, All Other	21-1019	650	\$ 11.38	\$ 7.89	\$ 13.13	\$ 7.57	\$ 8.33	\$ 10.11	\$ 13.15	\$ 17.21
Child, Family, and School Social Workers	21-1021	3,080	\$ 18.07	\$ 11.23	\$ 21.49	\$ 10.23	\$ 12.68	\$ 17.61	\$ 21.58	\$ 26.43
Medical and Public Health Social Workers	21-1022	1,190	\$ 18.35	\$ 12.99	\$ 21.03	\$ 11.84	\$ 14.45	\$ 17.41	\$ 21.47	\$ 26.10
Mental Health and Substance Abuse Social Workers	21-1023	920	\$ 17.34	\$ 11.63	\$ 20.18	\$ 11.42	\$ 13.24	\$ 16.11	\$ 20.66	\$ 26.97
Social Workers, All Other	21-1029	780	\$ 17.80	\$ 11.30	\$ 21.05	\$ 10.06	\$ 13.10	\$ 17.81	\$ 22.05	\$ 26.28
Health Educators	21-1091	180	\$ 18.61	\$ 12.21	\$ 21.82	\$ 10.46	\$ 14.55	\$ 17.92	\$ 23.19	\$ 27.34
Probation Officers and Correctional Treatment Specialists	21-1092	490	\$ 21.24	\$ 17.49	\$ 23.11	\$ 16.08	\$ 18.81	\$ 20.94	\$ 23.35	\$ 27.33
Social and Human Service Assistants	21-1093	5,290	\$ 12.39	\$ 7.62	\$ 14.78	\$ 6.87	\$ 8.65	\$ 11.46	\$ 16.19	\$ 19.69
Community and Social Service Specialists, All Other	21-1099	1,920	\$ 13.91	\$ 8.40	\$ 16.66	\$ 6.97	\$ 9.92	\$ 12.62	\$ 16.38	\$ 20.84
Clergy	21-2011	300	\$ 21.91	\$ 13.44	\$ 26.15	\$ 11.64	\$ 16.24	\$ 20.56	\$ 27.43	\$ 35.14
Directors, Religious Activities and Education	21-2021	80	\$ 15.88	\$ 8.44	\$ 19.59	\$ 7.34	\$ 9.98	\$ 15.23	\$ 18.64	\$ 25.57
Religious Workers, All Other	21-2099	80	\$ 16.25	\$ 8.55	\$ 20.10	\$ 7.22	\$ 10.08	\$ 14.71	\$ 20.47	\$ 30.17
LEGAL OCCUPATIONS	23-0000	6,800	\$ 29.58	\$ 13.76	\$ 37.49	\$ 11.95	\$ 16.31	\$ 22.98	\$ 36.17	\$ 55.08
Lawyers	23-1011	2,880	\$ 42.31	\$ 22.69	\$ 52.13	\$ 20.25	\$ 26.34	\$ 35.42	\$ 50.13	N.A.
Administrative Law Judges, Adjudicators, and Hearing Officers	23-1021	100	\$ 38.41	\$ 29.14	\$ 43.05	\$ 22.96	\$ 35.01	\$ 39.62	\$ 43.53	\$ 49.18
Arbitrators, Mediators, and Conciliators	23-1022	50	\$ 26.97	\$ 18.42	\$ 31.26	\$ 17.42	\$ 20.20	\$ 25.09	\$ 33.70	\$ 41.57
Judges, Magistrate Judges, and Magistrates	23-1023	370	\$ 35.43	\$ 13.66	\$ 46.31	\$ 14.35	\$ 15.86	\$ 47.15	\$ 53.02	\$ 56.55
Paralegals and Legal Assistants	23-2011	1,020	\$ 18.82	\$ 13.87	\$ 21.30	\$ 12.70	\$ 15.20	\$ 19.06	\$ 21.75	\$ 24.76
Court Reporters	23-2091	250	\$ 25.44	\$ 22.30	\$ 27.00	\$ 20.76	\$ 23.39	\$ 25.29	\$ 27.17	\$ 28.31
Law Clerks	23-2092	210	\$ 14.40	\$ 9.92	\$ 16.64	\$ 9.59	\$ 10.98	\$ 13.98	\$ 17.44	\$ 20.73
Title Examiners, Abstractors, and Searchers	23-2093	850	\$ 13.81	\$ 9.82	\$ 15.80	\$ 9.32	\$ 10.14	\$ 11.85	\$ 16.07	\$ 21.50
Legal Support Workers, All Other	23-2099	1,070	\$ 19.31	\$ 13.91	\$ 22.01	\$ 12.82	\$ 15.14	\$ 17.45	\$ 22.01	\$ 30.87

Occupation	Occupational Code	Estimated Employment	Mean Wage	Entry Wage	Experienced Wage	10th pct	25th pct	Median Wage	75th pct	90th pct
EDUCATION, TRAINING, AND LIBRARY OCCUPATIONS	25-0000	87,000	\$ 16.99	\$ 8.70	\$ 21.13	\$ 7.16	\$ 10.45	\$ 15.36	\$ 21.14	\$ 27.17
Business Teachers, Postsecondary	25-1011	930	\$ 54,933.00	\$ 28,413.00	\$ 68,193.00	\$ 25,882.00	\$ 33,594.00	\$ 48,278.00	\$ 66,162.00	\$ 101,099.00
Computer Science Teachers, Postsecondary	25-1021	430	\$ 54,783.00	\$ 31,254.00	\$ 66,548.00	\$ 27,770.00	\$ 37,712.00	\$ 49,716.00	\$ 68,606.00	\$ 92,352.00
Mathematical Science Teachers, Postsecondary	25-1022	460	\$ 60,068.00	\$ 36,135.00	\$ 72,035.00	\$ 33,144.00	\$ 41,018.00	\$ 54,712.00	\$ 71,589.00	\$ 94,851.00
Agricultural Sciences Teachers, Postsecondary	25-1041	250	\$ 75,422.00	\$ 47,725.00	\$ 89,271.00	\$ 43,416.00	\$ 54,287.00	\$ 70,473.00	\$ 90,539.00	\$ 116,360.00
Biological Science Teachers, Postsecondary	25-1042	570	\$ 65,985.00	\$ 39,513.00	\$ 79,220.00	\$ 37,337.00	\$ 45,328.00	\$ 59,679.00	\$ 79,543.00	\$ 109,157.00
Atmospheric, Earth, Marine, and Space Sciences Teachers, Postsecondary	25-1051	60	\$ 59,810.00	\$ 45,959.00	\$ 66,736.00	\$ 40,868.00	\$ 50,139.00	\$ 57,750.00	\$ 69,671.00	\$ 84,491.00
Chemistry Teachers, Postsecondary	25-1052	170	\$ 61,340.00	\$ 40,429.00	\$ 71,795.00	\$ 38,346.00	\$ 44,481.00	\$ 54,985.00	\$ 69,901.00	\$ 91,683.00
Environmental Science Teachers, Postsecondary	25-1053	10	\$ 47,199.00	\$ 41,215.00	\$ 50,191.00	\$ 38,569.00	\$ 40,982.00	\$ 45,002.00	\$ 54,339.00	\$ 59,970.00
Physics Teachers, Postsecondary	25-1054	130	\$ 67,936.00	\$ 39,861.00	\$ 81,974.00	\$ 35,549.00	\$ 45,103.00	\$ 65,927.00	\$ 82,309.00	\$ 106,360.00
Anthropology and Archeology Teachers, Postsecondary	25-1061	50	\$ 58,538.00	\$ 41,518.00	\$ 67,048.00	\$ 39,863.00	\$ 44,211.00	\$ 52,326.00	\$ 67,257.00	\$ 96,188.00
Economics Teachers, Postsecondary	25-1063	150	\$ 84,532.00	\$ 50,523.00	\$ 101,536.00	\$ 46,763.00	\$ 58,545.00	\$ 77,814.00	\$ 107,493.00	\$ 131,107.00
Political Science Teachers, Postsecondary	25-1065	130	\$ 61,725.00	\$ 40,724.00	\$ 72,225.00	\$ 39,077.00	\$ 44,934.00	\$ 55,925.00	\$ 73,751.00	\$ 97,514.00
Psychology Teachers, Postsecondary	25-1066	310	\$ 56,814.00	\$ 35,664.00	\$ 67,389.00	\$ 32,657.00	\$ 40,763.00	\$ 52,326.00	\$ 66,023.00	\$ 85,350.00
Sociology Teachers, Postsecondary	25-1067	140	\$ 57,648.00	\$ 37,888.00	\$ 67,529.00	\$ 35,148.00	\$ 41,782.00	\$ 52,550.00	\$ 70,014.00	\$ 92,373.00
Social Sciences Teachers, Postsecondary, All Other	25-1069	80	\$ 24.81	\$ 18.30	\$ 28.06	\$ 16.97	\$ 19.67	\$ 22.73	\$ 28.11	\$ 35.02
Nursing Instructors and Teachers, Postsecondary	25-1072	530	\$ 49,081.00	\$ 34,626.00	\$ 56,310.00	\$ 31,788.00	\$ 39,495.00	\$ 48,577.00	\$ 57,464.00	\$ 68,380.00
Education Teachers, Postsecondary	25-1081	620	\$ 51,201.00	\$ 30,129.00	\$ 61,737.00	\$ 27,384.00	\$ 34,866.00	\$ 47,947.00	\$ 60,902.00	\$ 77,507.00
Library Science Teachers, Postsecondary	25-1082	100	\$ 54,418.00	\$ 38,343.00	\$ 62,456.00	\$ 35,410.00	\$ 44,400.00	\$ 53,998.00	\$ 64,920.00	\$ 75,091.00
Criminal Justice and Law Enforcement Teachers, Postsecondary	25-1111	60	\$ 46,883.00	\$ 36,148.00	\$ 52,251.00	\$ 34,696.00	\$ 39,938.00	\$ 44,939.00	\$ 53,346.00	\$ 66,046.00
Social Work Teachers, Postsecondary	25-1113	90	\$ 46,224.00	\$ 32,218.00	\$ 53,227.00	\$ 29,229.00	\$ 37,985.00	\$ 45,471.00	\$ 54,963.00	\$ 66,558.00
Art, Drama, and Music Teachers, Postsecondary	25-1121	760	\$ 46,695.00	\$ 29,436.00	\$ 55,324.00	\$ 27,492.00	\$ 35,715.00	\$ 45,870.00	\$ 57,473.00	\$ 69,825.00
Communications Teachers, Postsecondary	25-1122	360	\$ 51,374.00	\$ 35,410.00	\$ 59,355.00	\$ 30,385.00	\$ 40,553.00	\$ 49,966.00	\$ 60,261.00	\$ 72,370.00
English Language and Literature Teachers, Postsecondary	25-1123	570	\$ 51,752.00	\$ 34,580.00	\$ 60,337.00	\$ 30,637.00	\$ 40,131.00	\$ 50,216.00	\$ 60,634.00	\$ 73,519.00
Foreign Language and Literature Teachers, Postsecondary	25-1124	220	\$ 53,249.00	\$ 36,704.00	\$ 61,522.00	\$ 34,322.00	\$ 41,262.00	\$ 50,760.00	\$ 60,886.00	\$ 74,560.00
History Teachers, Postsecondary	25-1125	180	\$ 54,562.00	\$ 37,017.00	\$ 63,336.00	\$ 35,313.00	\$ 42,273.00	\$ 51,376.00	\$ 63,645.00	\$ 81,330.00
Philosophy and Religion Teachers, Postsecondary	25-1126	240	\$ 50,160.00	\$ 36,338.00	\$ 57,071.00	\$ 33,580.00	\$ 40,725.00	\$ 48,678.00	\$ 58,872.00	\$ 70,225.00
Recreation and Fitness Studies Teachers, Postsecondary	25-1193	120	\$ 54,826.00	\$ 34,830.00	\$ 64,824.00	\$ 31,143.00	\$ 41,382.00	\$ 52,597.00	\$ 64,927.00	\$ 73,781.00
Vocational Education Teachers, Postsecondary	25-1194	740	\$ 19.66	\$ 10.63	\$ 24.17	\$ 9.20	\$ 12.77	\$ 19.31	\$ 25.25	\$ 32.56
Postsecondary Teachers, All Other	25-1199	3,000	\$ 42,536.00	\$ 17,189.00	\$ 55,208.00	\$ 13,336.00	\$ 23,218.00	\$ 37,981.00	\$ 63,144.00	\$ 79,568.00
Preschool Teachers, Except Special Education	25-2011	3,220	\$ 10.05	\$ 6.64	\$ 11.75	\$ 6.14	\$ 7.25	\$ 9.10	\$ 12.04	\$ 14.71
Kindergarten Teachers, Except Special Education	25-2012	1,620	\$ 35,967.00	\$ 25,424.00	\$ 41,238.00	\$ 24,305.00	\$ 28,526.00	\$ 35,778.00	\$ 42,868.00	\$ 47,928.00
Elementary School Teachers, Except Special Education	25-2021	17,390	\$ 35,067.00	\$ 23,714.00	\$ 40,744.00	\$ 22,344.00	\$ 26,670.00	\$ 34,454.00	\$ 43,052.00	\$ 50,662.00
Middle School Teachers, Except Special and Vocational Education	25-2022	6,900	\$ 35,797.00	\$ 24,015.00	\$ 41,686.00	\$ 23,047.00	\$ 27,244.00	\$ 35,517.00	\$ 43,680.00	\$ 51,302.00
Vocational Education Teachers, Middle School	25-2023	180	\$ 35,504.00	\$ 26,678.00	\$ 39,916.00	\$ 23,556.00	\$ 29,934.00	\$ 36,934.00	\$ 42,201.00	\$ 45,418.00
Secondary School Teachers, Except Special and Vocational Education	25-2031	12,170	\$ 35,482.00	\$ 24,205.00	\$ 41,122.00	\$ 23,607.00	\$ 27,724.00	\$ 35,042.00	\$ 43,353.00	\$ 50,690.00

Occupation	Occupational Code	Estimated Employment	Mean Wage	Entry Wage	Experienced Wage	10th pct	25th pct	Median Wage	75th pct	90th pct
Vocational Education Teachers, Secondary School	25-2032	1,300	\$ 38,185.00	\$ 28,178.00	\$ 43,188.00	\$ 25,977.00	\$ 30,861.00	\$ 39,324.00	\$ 44,770.00	\$ 50,610.00
Special Education Teachers, Preschool, Kindergarten, and Elementary School	25-2041	2,240	\$ 38,581.00	\$ 28,322.00	\$ 43,712.00	\$ 26,039.00	\$ 30,483.00	\$ 37,058.00	\$ 45,470.00	\$ 54,394.00
Special Education Teachers, Middle School	25-2042	1,070	\$ 39,162.00	\$ 28,505.00	\$ 44,491.00	\$ 26,296.00	\$ 31,026.00	\$ 37,919.00	\$ 46,090.00	\$ 55,487.00
Special Education Teachers, Secondary School	25-2043	1,930	\$ 38,316.00	\$ 28,046.00	\$ 43,452.00	\$ 25,888.00	\$ 30,246.00	\$ 37,470.00	\$ 45,716.00	\$ 54,050.00
Adult Literacy, Remedial Education, and GED Teachers and Instructors	25-3011	330	\$ 16.83	\$ 11.99	\$ 19.24	\$ 11.38	\$ 13.28	\$ 16.95	\$ 20.33	\$ 22.23
Self-Enrichment Education Teachers	25-3021	1,230	\$ 10.48	\$ 6.30	\$ 12.57	\$ 5.92	\$ 6.42	\$ 7.26	\$ 14.77	\$ 20.15
Teachers and Instructors, All Other	25-3099	3,350	\$ 14.58	\$ 8.59	\$ 17.58	\$ 7.36	\$ 9.95	\$ 13.35	\$ 17.48	\$ 23.97
Archivists	25-4011	40	\$ 14.64	\$ 9.13	\$ 17.39	\$ 7.51	\$ 11.74	\$ 13.96	\$ 16.91	\$ 24.73
Curators	25-4012	100	\$ 20.81	\$ 10.05	\$ 26.19	\$ 7.67	\$ 12.73	\$ 20.62	\$ 26.23	\$ 32.11
Museum Technicians and Conservators	25-4013	80	\$ 18.15	\$ 10.45	\$ 22.00	\$ 8.81	\$ 13.17	\$ 18.49	\$ 23.64	\$ 27.00
Librarians	25-4021	1,430	\$ 20.57	\$ 13.28	\$ 24.22	\$ 12.00	\$ 15.49	\$ 20.19	\$ 24.88	\$ 29.45
Library Technicians	25-4031	1,680	\$ 11.29	\$ 7.27	\$ 13.30	\$ 6.83	\$ 8.09	\$ 10.30	\$ 13.82	\$ 17.92
Audio-Visual Collections Specialists	25-9011	30	\$ 18.75	\$ 11.88	\$ 22.18	\$ 8.53	\$ 15.22	\$ 19.60	\$ 23.56	\$ 26.66
Instructional Coordinators	25-9031	1,360	\$ 22.77	\$ 14.74	\$ 26.79	\$ 12.03	\$ 18.05	\$ 23.34	\$ 28.16	\$ 33.16
Teacher Assistants	25-9041	14,430	\$ 17,322.00	\$ 13,109.00	\$ 19,429.00	\$ 12,556.00	\$ 14,198.00	\$ 16,967.00	\$ 20,337.00	\$ 22,903.00
Education, Training, and Library Workers, All Other	25-9099	810	\$ 12.94	\$ 7.55	\$ 15.64	\$ 6.60	\$ 8.69	\$ 11.43	\$ 16.34	\$ 21.60
ARTS, DESIGN, ENTERTAINMENT, SPORTS, AND MEDIA OCCUPATIONS	27-0000	16,710	\$ 14.98	\$ 7.34	\$ 18.80	\$ 6.44	\$ 8.45	\$ 12.85	\$ 19.12	\$ 25.96
Art Directors	27-1011	150	\$ 31.16	\$ 17.81	\$ 37.84	\$ 16.35	\$ 19.91	\$ 25.52	\$ 33.53	\$ 52.14
Fine Artists, Including Painters, Sculptors, and Illustrators	27-1013	120	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Multi-Media Artists and Animators	27-1014	110	\$ 19.82	\$ 9.88	\$ 24.80	\$ 9.28	\$ 11.67	\$ 17.27	\$ 26.00	\$ 37.07
Artists and Related Workers, All Other	27-1019	70	\$ 13.85	\$ 7.84	\$ 16.86	\$ 7.45	\$ 8.03	\$ 9.72	\$ 18.92	\$ 25.66
Commercial and Industrial Designers	27-1021	290	\$ 20.94	\$ 12.70	\$ 25.07	\$ 11.13	\$ 14.47	\$ 19.86	\$ 26.77	\$ 33.65
Fashion Designers	27-1022	30	\$ 16.52	\$ 10.90	\$ 19.32	\$ 9.84	\$ 13.06	\$ 16.07	\$ 18.12	\$ 21.32
Floral Designers	27-1023	980	\$ 9.60	\$ 6.95	\$ 10.94	\$ 6.36	\$ 7.67	\$ 9.37	\$ 10.83	\$ 13.20
Graphic Designers	27-1024	1,920	\$ 16.75	\$ 10.69	\$ 19.78	\$ 9.83	\$ 11.88	\$ 15.64	\$ 20.28	\$ 25.79
Interior Designers	27-1025	410	\$ 16.49	\$ 11.79	\$ 18.83	\$ 11.27	\$ 12.79	\$ 15.75	\$ 19.48	\$ 22.89
Merchandise Displayers and Window Trimmers	27-1026	1,130	\$ 9.60	\$ 7.44	\$ 10.68	\$ 6.95	\$ 7.83	\$ 8.89	\$ 10.70	\$ 13.10
Set and Exhibit Designers	27-1027	190	\$ 19.07	\$ 11.55	\$ 22.84	\$ 10.64	\$ 12.84	\$ 15.65	\$ 24.45	\$ 33.76
Actors	27-2011	50	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Producers and Directors	27-2012	330	\$ 37,111.00	\$ 22,365.00	\$ 44,485.00	\$ 19,524.00	\$ 26,420.00	\$ 34,717.00	\$ 45,737.00	\$ 57,684.00
Athletes and Sports Competitors	27-2021	140	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Coaches and Scouts	27-2022	2,620	\$ 20,920.00	\$ 12,677.00	\$ 25,041.00	\$ 11,908.00	\$ 12,821.00	\$ 14,343.00	\$ 25,297.00	\$ 37,507.00
Umpires, Referees, and Other Sports Officials	27-2023	60	\$ 28,438.00	\$ 12,935.00	\$ 36,188.00	\$ 12,243.00	\$ 14,060.00	\$ 32,415.00	\$ 39,486.00	\$ 43,694.00
Dancers	27-2031	60	\$ 12.51	\$ 6.92	\$ 15.31	\$ 6.44	\$ 7.40	\$ 9.24	\$ 13.56	\$ 29.68
Choreographers	27-2032	180	\$ 13.84	\$ 8.06	\$ 16.72	\$ 7.06	\$ 9.25	\$ 12.58	\$ 19.39	\$ 22.35
Music Directors and Composers	27-2041	30	\$ 40,658.00	\$ 30,096.00	\$ 45,939.00	\$ 30,749.00	\$ 32,851.00	\$ 36,353.00	\$ 47,085.00	\$ 59,021.00
Musicians and Singers	27-2042	280	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Entertainers and Performers, Sports and Related Workers, All Other	27-2099	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Radio and Television Announcers	27-3011	730	\$ 11.38	\$ 6.16	\$ 13.99	\$ 5.93	\$ 6.63	\$ 8.72	\$ 12.82	\$ 19.22
Public Address System and Other Announcers	27-3012	140	\$ 14.38	\$ 7.68	\$ 17.73	\$ 7.42	\$ 8.28	\$ 10.30	\$ 20.48	\$ 29.30
Broadcast News Analysts	27-3021	110	\$ 18.14	\$ 9.67	\$ 22.38	\$ 9.38	\$ 10.59	\$ 12.86	\$ 17.02	\$ 26.82
Reporters and Correspondents	27-3022	850	\$ 15.20	\$ 8.29	\$ 18.66	\$ 7.40	\$ 9.43	\$ 12.82	\$ 18.23	\$ 27.37
Public Relations Specialists	27-3031	1,140	\$ 19.74	\$ 12.34	\$ 23.44	\$ 11.10	\$ 14.42	\$ 18.59	\$ 23.16	\$ 31.41

Occupation	Occupational Code	Employment	Estimated Mean Wage	Entry Wage	Experienced Wage	10th pct	25th pct	Median Wage	75th pct	90th pct
Editors	27-3041	1,350	\$ 21.93	\$ 14.79	\$ 25.49	\$ 12.89	\$ 17.42	\$ 20.51	\$ 25.75	\$ 34.34
Technical Writers	27-3042	350	\$ 21.32	\$ 13.82	\$ 25.07	\$ 12.70	\$ 15.39	\$ 20.98	\$ 26.51	\$ 31.58
Writers and Authors	27-3043	480	\$ 15.23	\$ 7.85	\$ 18.93	\$ 6.81	\$ 9.03	\$ 12.85	\$ 18.82	\$ 27.46
Interpreters and Translators	27-3091	280	\$ 13.59	\$ 9.37	\$ 15.71	\$ 8.44	\$ 10.89	\$ 14.08	\$ 16.49	\$ 18.12
Media and Communication Workers, All Other	27-3099	260	\$ 16.82	\$ 11.18	\$ 19.63	\$ 9.81	\$ 13.43	\$ 16.95	\$ 20.65	\$ 23.10
Audio and Video Equipment Technicians	27-4011	180	\$ 14.49	\$ 6.27	\$ 18.61	\$ 6.04	\$ 6.79	\$ 14.76	\$ 20.62	\$ 25.30
Broadcast Technicians	27-4012	270	\$ 11.64	\$ 6.70	\$ 14.11	\$ 6.27	\$ 7.20	\$ 9.73	\$ 15.37	\$ 20.14
Sound Engineering Technicians	27-4014	70	\$ 16.89	\$ 6.84	\$ 21.91	\$ 6.28	\$ 7.59	\$ 10.59	\$ 24.62	\$ 39.41
Photographers	27-4021	700	\$ 13.83	\$ 7.77	\$ 16.85	\$ 7.22	\$ 8.64	\$ 12.79	\$ 17.60	\$ 22.19
Camera Operators, Television, Video, and Motion Picture	27-4031	270	\$ 9.80	\$ 6.35	\$ 11.54	\$ 6.06	\$ 6.78	\$ 7.97	\$ 9.67	\$ 16.36
Film and Video Editors	27-4032	60	\$ 15.05	\$ 9.55	\$ 17.79	\$ 9.09	\$ 11.10	\$ 13.04	\$ 18.42	\$ 25.70
Media and Communication Equipment Workers, All Other	27-4099	50	\$ 16.40	\$ 10.62	\$ 19.30	\$ 9.70	\$ 12.54	\$ 16.37	\$ 20.17	\$ 23.75
HEALTHCARE PRACTITIONERS AND TECHNICAL OCCUPATIONS	29-0000	70,150	\$ 24.31	\$ 13.16	\$ 29.89	\$ 11.67	\$ 15.43	\$ 20.13	\$ 26.07	\$ 37.51
Chiropractors	29-1011	330	\$ 26.46	\$ 14.95	\$ 32.21	\$ 12.26	\$ 19.96	\$ 26.10	\$ 32.10	\$ 36.12
Dentists, General	29-1021	600	\$ 70.85	\$ 41.43	\$ 85.55	\$ 33.86	\$ 50.58	\$ 67.22	N.A.	N.A.
Oral and Maxillofacial Surgeons	29-1022	N.A.	\$ 90.90	N.A.	N.A.	\$ 28.76	N.A.	N.A.	N.A.	N.A.
Prosthodontists	29-1024	N.A.	\$ 85.10	N.A.	N.A.	\$ 28.77	N.A.	N.A.	N.A.	N.A.
Dietitians and Nutritionists	29-1031	590	\$ 20.06	\$ 14.88	\$ 22.66	\$ 13.87	\$ 16.69	\$ 19.96	\$ 23.20	\$ 27.11
Optometrists	29-1041	340	\$ 42.83	\$ 17.06	\$ 55.73	\$ 16.08	\$ 18.17	\$ 39.83	\$ 54.50	N.A.
Pharmacists	29-1051	2,560	\$ 39.95	\$ 29.07	\$ 45.38	\$ 27.50	\$ 34.26	\$ 39.54	\$ 44.25	\$ 52.06
Anesthesiologists	29-1061	N.A.	\$ 90.14	N.A.	N.A.	\$ 59.14	N.A.	N.A.	N.A.	N.A.
Family and General Practitioners	29-1062	1,260	\$ 72.89	\$ 46.43	\$ 86.12	\$ 35.88	\$ 60.92	>\$70	N.A.	N.A.
Internists, General	29-1063	340	\$ 76.67	\$ 39.49	\$ 95.25	\$ 10.65	\$ 62.02	N.A.	N.A.	N.A.
Obstetricians and Gynecologists	29-1064	130	\$ 96.38	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Pediatricians, General	29-1065	160	\$ 85.20	N.A.	N.A.	\$ 51.88	\$ 62.98	N.A.	N.A.	N.A.
Psychiatrists	29-1066	390	\$ 78.00	\$ 47.10	\$ 93.45	\$ 42.32	\$ 56.74	N.A.	N.A.	N.A.
Surgeons	29-1067	280	\$ 86.69	N.A.	N.A.	\$ 60.46	>\$70	N.A.	N.A.	N.A.
Physicians and Surgeons, All Other	29-1069	1,010	\$ 74.37	\$ 44.35	\$ 89.38	\$ 45.36	\$ 52.55	N.A.	N.A.	N.A.
Physician Assistants	29-1071	600	\$ 35.36	\$ 27.71	\$ 39.18	\$ 25.93	\$ 30.48	\$ 35.10	\$ 41.29	\$ 46.13
Podiatrists	29-1081	70	\$ 54.56	\$ 36.39	\$ 63.64	\$ 33.14	\$ 40.33	\$ 48.82	\$ 63.24	N.A.
Registered Nurses	29-1111	29,960	\$ 21.42	\$ 16.72	\$ 23.77	\$ 15.55	\$ 18.14	\$ 21.06	\$ 24.80	\$ 27.81
Audiologists	29-1121	130	\$ 25.34	\$ 19.68	\$ 28.18	\$ 18.49	\$ 22.33	\$ 25.38	\$ 28.04	\$ 32.46
Occupational Therapists	29-1122	630	\$ 24.31	\$ 18.86	\$ 27.04	\$ 18.29	\$ 20.40	\$ 23.62	\$ 27.23	\$ 32.28
Physical Therapists	29-1123	1,240	\$ 28.36	\$ 21.30	\$ 31.89	\$ 19.60	\$ 23.69	\$ 27.81	\$ 32.80	\$ 36.40
Recreational Therapists	29-1125	380	\$ 15.05	\$ 9.64	\$ 17.75	\$ 9.23	\$ 10.43	\$ 13.36	\$ 18.94	\$ 24.91
Respiratory Therapists	29-1126	790	\$ 19.63	\$ 15.60	\$ 21.64	\$ 14.72	\$ 17.14	\$ 19.67	\$ 21.93	\$ 25.28
Speech-Language Pathologists	29-1127	790	\$ 25.59	\$ 19.32	\$ 28.72	\$ 18.62	\$ 21.46	\$ 25.10	\$ 28.37	\$ 34.47
Therapists, All Other	29-1129	120	\$ 19.27	\$ 13.15	\$ 22.32	\$ 12.48	\$ 13.92	\$ 17.87	\$ 22.92	\$ 29.56
Veterinarians	29-1131	680	\$ 41.39	\$ 24.92	\$ 49.61	\$ 23.94	\$ 26.18	\$ 31.26	\$ 49.79	N.A.
Health Diagnosing and Treating Practitioners, All Other	29-1199	490	\$ 50.32	\$ 15.75	\$ 67.62	\$ 13.15	\$ 19.18	\$ 24.62	N.A.	N.A.
Medical and Clinical Laboratory Technologists	29-2011	1,710	\$ 19.80	\$ 14.04	\$ 22.69	\$ 12.61	\$ 16.46	\$ 20.05	\$ 23.49	\$ 26.99
Medical and Clinical Laboratory Technicians	29-2012	1,400	\$ 15.17	\$ 11.12	\$ 17.18	\$ 10.15	\$ 12.32	\$ 15.03	\$ 17.90	\$ 21.03
Dental Hygienists	29-2021	1,710	\$ 26.96	\$ 23.93	\$ 28.47	\$ 22.47	\$ 24.36	\$ 26.85	\$ 29.63	\$ 33.79
Cardiovascular Technologists and Technicians	29-2031	400	\$ 17.71	\$ 12.39	\$ 20.36	\$ 11.27	\$ 13.74	\$ 17.55	\$ 21.26	\$ 24.68
Diagnostic Medical Sonographers	29-2032	480	\$ 24.27	\$ 19.35	\$ 26.73	\$ 18.89	\$ 21.63	\$ 24.62	\$ 27.20	\$ 29.08
Nuclear Medicine Technologists	29-2033	170	\$ 27.86	\$ 23.19	\$ 30.19	\$ 21.77	\$ 24.34	\$ 27.87	\$ 32.49	\$ 35.21

Occupation	Occupational Code	Estimated Employment	Mean Wage	Entry Wage	Experienced Wage	10th pct	25th pct	Median Wage	75th pct	90th pct
Radiologic Technologists and Technicians	29-2034	1,930	\$ 18.56	\$ 14.47	\$ 20.61	\$ 13.97	\$ 15.79	\$ 18.31	\$ 21.41	\$ 24.77
Emergency Medical Technicians and Paramedics	29-2041	2,110	\$ 12.15	\$ 7.89	\$ 14.29	\$ 6.91	\$ 9.01	\$ 11.43	\$ 14.40	\$ 17.75
Dietetic Technicians	29-2051	250	\$ 9.65	\$ 7.93	\$ 10.51	\$ 7.56	\$ 8.15	\$ 9.09	\$ 10.62	\$ 12.95
Pharmacy Technicians	29-2052	2,690	\$ 10.98	\$ 8.61	\$ 12.16	\$ 7.95	\$ 9.16	\$ 10.54	\$ 12.51	\$ 14.46
Psychiatric Technicians	29-2053	160	\$ 13.89	\$ 9.76	\$ 15.95	\$ 9.19	\$ 10.61	\$ 13.16	\$ 16.41	\$ 20.44
Respiratory Therapy Technicians	29-2054	230	\$ 15.73	\$ 12.22	\$ 17.47	\$ 11.65	\$ 13.23	\$ 15.49	\$ 17.74	\$ 20.95
Surgical Technologists	29-2055	720	\$ 15.03	\$ 11.71	\$ 16.68	\$ 11.05	\$ 12.64	\$ 14.82	\$ 17.30	\$ 19.96
Veterinary Technologists and Technicians	29-2056	470	\$ 14.30	\$ 10.43	\$ 16.24	\$ 9.51	\$ 11.41	\$ 13.48	\$ 16.61	\$ 20.92
Licensed Practical and Licensed Vocational Nurses	29-2061	6,930	\$ 15.22	\$ 12.30	\$ 16.68	\$ 11.84	\$ 13.13	\$ 15.10	\$ 17.13	\$ 19.52
Medical Records and Health Information Technicians	29-2071	1,680	\$ 12.13	\$ 9.06	\$ 13.66	\$ 8.35	\$ 9.66	\$ 11.34	\$ 13.84	\$ 17.67
Opticians, Dispensing	29-2081	810	\$ 11.95	\$ 8.93	\$ 13.46	\$ 8.11	\$ 9.72	\$ 11.67	\$ 13.80	\$ 16.24
Orthotists and Prosthetists	29-2091	40	\$ 45.64	\$ 21.84	\$ 57.53	\$ 19.53	\$ 24.96	\$ 31.87	\$ 47.42	N.A.
Health Technologists and Technicians, All Other	29-2099	650	\$ 14.53	\$ 9.99	\$ 16.82	\$ 9.53	\$ 10.70	\$ 13.13	\$ 17.93	\$ 22.11
Occupational Health and Safety Specialists	29-9011	340	\$ 24.91	\$ 17.14	\$ 28.79	\$ 15.31	\$ 19.36	\$ 24.03	\$ 29.27	\$ 36.39
Occupational Health and Safety Technicians	29-9012	130	\$ 22.07	\$ 13.93	\$ 26.14	\$ 12.71	\$ 15.29	\$ 20.22	\$ 28.44	\$ 34.84
Athletic Trainers	29-9091	140	\$ 33,105.00	\$ 26,188.00	\$ 36,564.00	\$ 24,857.00	\$ 28,501.00	\$ 32,641.00	\$ 36,441.00	\$ 43,065.00
Healthcare Practitioners and Technical Workers, All Other	29-9099	830	\$ 17.22	\$ 10.61	\$ 20.52	\$ 9.71	\$ 12.17	\$ 15.42	\$ 20.74	\$ 28.57
HEALTHCARE SUPPORT OCCUPATIONS	31-0000	41,430	\$ 10.75	\$ 8.44	\$ 11.90	\$ 7.76	\$ 9.05	\$ 10.31	\$ 12.09	\$ 14.30
Home Health Aides	31-1011	8,850	\$ 9.22	\$ 7.53	\$ 10.07	\$ 7.24	\$ 7.96	\$ 9.14	\$ 10.47	\$ 11.53
Nursing Aides, Orderlies, and Attendants	31-1012	20,710	\$ 10.65	\$ 9.04	\$ 11.45	\$ 8.37	\$ 9.32	\$ 10.31	\$ 11.47	\$ 13.58
Psychiatric Aides	31-1013	280	\$ 13.29	\$ 9.13	\$ 15.36	\$ 8.46	\$ 10.14	\$ 13.20	\$ 16.29	\$ 18.86
Occupational Therapist Assistants	31-2011	230	\$ 15.92	\$ 12.20	\$ 17.79	\$ 11.26	\$ 14.03	\$ 15.82	\$ 17.68	\$ 21.31
Occupational Therapist Aides	31-2012	N.A.	\$ 8.95	\$ 7.65	\$ 9.59	\$ 7.24	\$ 7.80	\$ 8.81	\$ 10.05	\$ 10.75
Physical Therapist Assistants	31-2021	620	\$ 15.85	\$ 11.35	\$ 18.09	\$ 10.25	\$ 12.76	\$ 15.79	\$ 18.86	\$ 21.46
Physical Therapist Aides	31-2022	580	\$ 10.59	\$ 8.68	\$ 11.53	\$ 8.01	\$ 9.10	\$ 10.38	\$ 12.02	\$ 13.50
Massage Therapists	31-9011	150	\$ 14.44	\$ 9.04	\$ 17.14	\$ 8.09	\$ 10.38	\$ 14.06	\$ 17.34	\$ 21.46
Dental Assistants	31-9091	2,390	\$ 13.56	\$ 10.76	\$ 14.96	\$ 9.97	\$ 11.49	\$ 13.08	\$ 14.93	\$ 18.45
Medical Assistants	31-9092	2,150	\$ 11.97	\$ 9.62	\$ 13.14	\$ 9.21	\$ 10.25	\$ 11.84	\$ 13.51	\$ 15.40
Medical Equipment Preparers	31-9093	390	\$ 11.96	\$ 9.14	\$ 13.37	\$ 8.50	\$ 9.78	\$ 11.58	\$ 13.53	\$ 16.10
Medical Transcriptionists	31-9094	1,710	\$ 12.96	\$ 10.30	\$ 14.29	\$ 9.74	\$ 11.05	\$ 12.75	\$ 14.60	\$ 16.87
Pharmacy Aides	31-9095	420	\$ 8.26	\$ 6.18	\$ 9.30	\$ 5.80	\$ 6.29	\$ 7.08	\$ 10.04	\$ 13.03
Veterinary Assistants and Laboratory Animal Caretakers	31-9096	1,020	\$ 8.66	\$ 6.68	\$ 9.65	\$ 6.16	\$ 7.24	\$ 8.23	\$ 9.56	\$ 12.43
Healthcare Support Workers, All Other	31-9099	1,830	\$ 10.98	\$ 7.94	\$ 12.51	\$ 7.56	\$ 8.52	\$ 10.19	\$ 12.78	\$ 16.27
PROTECTIVE SERVICE OCCUPATIONS	33-0000	22,390	\$ 16.05	\$ 8.37	\$ 19.88	\$ 7.42	\$ 9.78	\$ 15.89	\$ 20.84	\$ 25.81
First-Line Supervisors/Managers of Correctional Officers	33-1011	410	\$ 25.12	\$ 18.88	\$ 28.25	\$ 18.42	\$ 20.82	\$ 24.73	\$ 29.33	\$ 33.80
First-Line Supervisors/Managers of Police and Detectives	33-1012	740	\$ 26.43	\$ 18.60	\$ 30.34	\$ 17.69	\$ 21.06	\$ 25.71	\$ 31.47	\$ 37.77
First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	33-1021	420	\$ 22.63	\$ 15.90	\$ 25.98	\$ 15.13	\$ 17.52	\$ 23.18	\$ 26.63	\$ 29.70
First-Line Supervisors/Managers, Protective Service Workers, All Other	33-1099	290	\$ 21.72	\$ 13.27	\$ 25.96	\$ 12.16	\$ 14.53	\$ 18.29	\$ 27.02	\$ 35.90
Fire Fighters	33-2011	1,920	\$ 18.17	\$ 12.53	\$ 20.99	\$ 11.26	\$ 15.25	\$ 18.90	\$ 21.41	\$ 23.65
Fire Inspectors and Investigators	33-2021	60	\$ 25.07	\$ 18.68	\$ 28.27	\$ 18.21	\$ 20.51	\$ 24.37	\$ 27.88	\$ 35.73
Bailiffs	33-3011	20	\$ 14.49	\$ 7.95	\$ 17.76	\$ 6.05	\$ 10.18	\$ 15.50	\$ 18.59	\$ 21.02
Correctional Officers and Jailers	33-3012	3,710	\$ 17.51	\$ 13.28	\$ 19.63	\$ 11.85	\$ 15.29	\$ 18.50	\$ 20.38	\$ 21.51

Occupation	Occupational Code	Employment	Estimated Mean Wage	Entry Wage	Experienced Wage	10th pct	25th pct	Median Wage	75th pct	90th pct
Detectives and Criminal Investigators	33-3021	420	\$ 25.31	\$ 17.59	\$ 29.17	\$ 15.88	\$ 19.69	\$ 24.72	\$ 31.38	\$ 35.68
Fish and Game Wardens	33-3031	140	\$ 22.66	\$ 18.52	\$ 24.73	\$ 17.69	\$ 20.24	\$ 23.43	\$ 25.74	\$ 27.12
Parking Enforcement Workers	33-3041	90	\$ 14.37	\$ 10.82	\$ 16.14	\$ 10.09	\$ 12.24	\$ 14.78	\$ 16.70	\$ 18.14
Police and Sheriff's Patrol Officers	33-3051	4,860	\$ 20.36	\$ 14.60	\$ 23.24	\$ 14.09	\$ 16.55	\$ 20.22	\$ 24.51	\$ 27.62
Animal Control Workers	33-9011	140	\$ 13.12	\$ 7.93	\$ 15.72	\$ 7.53	\$ 8.63	\$ 13.78	\$ 16.59	\$ 18.28
Private Detectives and Investigators	33-9021	180	\$ 16.69	\$ 9.83	\$ 20.12	\$ 9.00	\$ 10.92	\$ 13.55	\$ 21.59	\$ 30.97
Gaming Surveillance Officers and Gaming Investigators	33-9031	110	\$ 12.58	\$ 9.65	\$ 14.05	\$ 9.17	\$ 10.14	\$ 11.87	\$ 14.06	\$ 16.79
Security Guards	33-9032	6,260	\$ 10.87	\$ 7.45	\$ 12.58	\$ 7.15	\$ 8.00	\$ 9.66	\$ 12.74	\$ 16.79
Crossing Guards	33-9091	370	\$ 10.49	\$ 7.82	\$ 11.84	\$ 7.23	\$ 8.75	\$ 10.14	\$ 11.43	\$ 15.65
Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	33-9092	1,690	\$ 7.21	\$ 6.02	\$ 7.80	\$ 5.69	\$ 6.15	\$ 6.96	\$ 8.19	\$ 9.05
Protective Service Workers, All Other	33-9099	550	\$ 13.08	\$ 7.80	\$ 15.72	\$ 6.80	\$ 8.91	\$ 12.20	\$ 15.39	\$ 20.91
FOOD PREPARATION AND SERVING-RELATED OCCUPATIONS	35-0000	121,660	\$ 7.82	\$ 6.05	\$ 8.71	\$ 5.72	\$ 6.21	\$ 7.09	\$ 8.77	\$ 10.96
Chefs and Head Cooks	35-1011	910	\$ 14.28	\$ 9.30	\$ 16.78	\$ 8.88	\$ 10.26	\$ 12.77	\$ 17.52	\$ 22.70
First-Line Supervisors/Managers of Food Preparation and Serving Workers	35-1012	7,590	\$ 12.62	\$ 8.94	\$ 14.47	\$ 8.19	\$ 9.58	\$ 11.43	\$ 14.38	\$ 18.67
Cooks, Fast Food	35-2011	8,230	\$ 6.79	\$ 6.06	\$ 7.15	\$ 5.65	\$ 6.03	\$ 6.67	\$ 7.56	\$ 8.52
Cooks, Institution and Cafeteria	35-2012	7,570	\$ 9.36	\$ 7.18	\$ 10.44	\$ 6.72	\$ 7.83	\$ 9.29	\$ 10.69	\$ 12.46
Cooks, Private Household	35-2013	20	\$ 8.25	\$ 6.97	\$ 8.88	\$ 6.45	\$ 7.33	\$ 8.32	\$ 9.35	\$ 10.35
Cooks, Restaurant	35-2014	7,850	\$ 8.88	\$ 6.86	\$ 9.89	\$ 6.35	\$ 7.34	\$ 8.71	\$ 10.32	\$ 11.76
Cooks, Short Order	35-2015	2,660	\$ 7.71	\$ 6.07	\$ 8.54	\$ 5.84	\$ 6.51	\$ 7.59	\$ 8.70	\$ 10.28
Cooks, All Other	35-2019	260	\$ 8.71	\$ 6.36	\$ 9.88	\$ 5.96	\$ 6.88	\$ 8.33	\$ 10.22	\$ 12.23
Food Preparation Workers	35-2021	10,900	\$ 7.98	\$ 6.19	\$ 8.87	\$ 5.94	\$ 6.71	\$ 7.87	\$ 9.04	\$ 10.62
Bartenders	35-3011	7,010	\$ 7.40	\$ 6.08	\$ 8.06	\$ 5.70	\$ 6.13	\$ 6.86	\$ 8.12	\$ 10.06
Combined Food Preparation and Serving Workers, Including Fast Food	35-3021	23,920	\$ 7.06	\$ 6.02	\$ 7.57	\$ 5.64	\$ 6.05	\$ 6.74	\$ 7.95	\$ 9.05
Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	35-3022	4,310	\$ 7.18	\$ 6.09	\$ 7.72	\$ 5.70	\$ 6.12	\$ 6.83	\$ 7.98	\$ 9.07
Waiters and Waitresses	35-3031	26,230	\$ 6.84	\$ 6.04	\$ 7.23	\$ 5.59	\$ 5.92	\$ 6.45	\$ 7.01	\$ 8.86
Food Servers, Nonrestaurant	35-3041	2,580	\$ 8.48	\$ 6.56	\$ 9.43	\$ 6.10	\$ 7.09	\$ 8.38	\$ 9.93	\$ 11.02
Dining Room and Cafeteria Attendants and Bartender Helpers	35-9011	3,030	\$ 7.41	\$ 6.03	\$ 8.09	\$ 5.70	\$ 6.18	\$ 7.01	\$ 8.45	\$ 10.19
Dishwashers	35-9021	4,940	\$ 7.06	\$ 6.04	\$ 7.57	\$ 5.66	\$ 6.09	\$ 6.81	\$ 8.05	\$ 9.26
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	35-9031	2,790	\$ 7.27	\$ 6.02	\$ 7.91	\$ 5.69	\$ 6.17	\$ 6.99	\$ 8.24	\$ 9.57
Food Preparation and Serving Related Workers, All Other	35-9099	890	\$ 8.02	\$ 6.14	\$ 8.96	\$ 5.89	\$ 6.54	\$ 7.74	\$ 9.28	\$ 10.94
BUILDING AND GROUNDS CLEANING AND MAINTENANCE OCCUPATIONS	37-0000	46,130	\$ 9.90	\$ 7.06	\$ 11.33	\$ 6.52	\$ 7.62	\$ 9.11	\$ 11.35	\$ 14.41
First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	37-1011	1,900	\$ 14.65	\$ 9.84	\$ 17.06	\$ 9.05	\$ 10.84	\$ 13.66	\$ 17.77	\$ 21.68
First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	37-1012	620	\$ 17.03	\$ 11.46	\$ 19.81	\$ 10.64	\$ 12.83	\$ 16.48	\$ 20.40	\$ 24.28
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	37-2011	24,500	\$ 9.76	\$ 7.13	\$ 11.07	\$ 6.62	\$ 7.68	\$ 9.13	\$ 11.34	\$ 13.71
Maids and Housekeeping Cleaners	37-2012	10,100	\$ 8.30	\$ 6.65	\$ 9.13	\$ 6.15	\$ 7.15	\$ 8.23	\$ 9.55	\$ 10.73
Building Cleaning Workers, All Other	37-2019	720	\$ 8.86	\$ 6.30	\$ 10.15	\$ 5.98	\$ 6.62	\$ 9.46	\$ 10.58	\$ 11.25
Pest Control Workers	37-2021	420	\$ 12.80	\$ 8.70	\$ 14.84	\$ 7.68	\$ 10.23	\$ 12.48	\$ 14.30	\$ 18.76

Occupation	Occupational Code	Estimated Employment	Mean Wage	Entry Wage	Experienced Wage	10th pct	25th pct	Median Wage	75th pct	90th pct
Landscaping and Groundskeeping Workers	37-3011	6,660	\$ 10.34	\$ 7.15	\$ 11.94	\$ 6.67	\$ 7.76	\$ 9.52	\$ 12.37	\$ 16.00
Pesticide Handlers, Sprayers, and Applicators, Vegetation	37-3012	520	\$ 12.32	\$ 9.40	\$ 13.78	\$ 9.02	\$ 10.15	\$ 12.07	\$ 14.33	\$ 16.58
Tree Trimmers and Pruners	37-3013	410	\$ 14.56	\$ 8.88	\$ 17.41	\$ 6.55	\$ 11.46	\$ 15.37	\$ 18.54	\$ 20.68
Grounds Maintenance Workers, All Other	37-3019	290	\$ 10.77	\$ 7.43	\$ 12.44	\$ 7.11	\$ 7.85	\$ 9.29	\$ 12.73	\$ 15.44
PERSONAL CARE AND SERVICE OCCUPATIONS	39-0000	33,710	\$ 9.24	\$ 6.16	\$ 10.79	\$ 5.92	\$ 6.68	\$ 8.17	\$ 10.53	\$ 13.63
Gaming Supervisors	39-1011	300	\$ 18.72	\$ 13.98	\$ 21.09	\$ 12.90	\$ 14.80	\$ 17.77	\$ 21.58	\$ 26.57
Slot Key Persons	39-1012	470	\$ 10.59	\$ 8.80	\$ 11.47	\$ 8.10	\$ 9.18	\$ 10.25	\$ 11.42	\$ 14.01
First-Line Supervisors/Managers of Personal Service Workers	39-1021	1,050	\$ 14.96	\$ 10.28	\$ 17.30	\$ 9.39	\$ 11.52	\$ 13.77	\$ 17.40	\$ 22.29
Animal Trainers	39-2011	50	\$ 19.25	\$ 11.12	\$ 23.32	\$ 9.96	\$ 11.99	\$ 13.65	\$ 31.10	\$ 34.32
Nonfarm Animal Caretakers	39-2021	750	\$ 8.63	\$ 6.08	\$ 9.90	\$ 5.80	\$ 6.40	\$ 7.56	\$ 9.49	\$ 14.14
Gaming Dealers	39-3011	1,310	\$ 7.96	\$ 6.13	\$ 8.86	\$ 5.77	\$ 6.27	\$ 7.10	\$ 8.58	\$ 11.74
Motion Picture Projectionists	39-3021	60	\$ 7.16	\$ 6.21	\$ 7.63	\$ 5.75	\$ 6.08	\$ 6.64	\$ 7.26	\$ 9.77
Ushers, Lobby Attendants, and Ticket Takers	39-3031	620	\$ 6.85	\$ 6.09	\$ 7.23	\$ 5.64	\$ 5.98	\$ 6.53	\$ 7.16	\$ 8.69
Amusement and Recreation Attendants	39-3091	2,870	\$ 7.22	\$ 6.04	\$ 7.81	\$ 5.65	\$ 6.07	\$ 6.77	\$ 8.05	\$ 9.56
Locker Room, Coatroom, and Dressing Room Attendants	39-3093	260	\$ 8.38	\$ 6.65	\$ 9.25	\$ 6.16	\$ 7.15	\$ 8.27	\$ 9.70	\$ 10.85
Embalmers	39-4011	40	\$ 19.93	\$ 12.96	\$ 23.41	\$ 10.34	\$ 14.11	\$ 21.10	\$ 24.87	\$ 27.57
Funeral Attendants	39-4021	570	\$ 7.70	\$ 6.27	\$ 8.43	\$ 5.82	\$ 6.26	\$ 6.98	\$ 8.71	\$ 10.33
Barbers	39-5011	N.A.	\$ 8.20	\$ 6.04	\$ 9.28	\$ 5.58	\$ 5.90	\$ 6.43	\$ 6.96	\$ 15.15
Hairdressers, Hairstylists, and Cosmetologists	39-5012	4,200	\$ 11.02	\$ 6.90	\$ 13.08	\$ 6.37	\$ 7.64	\$ 9.83	\$ 12.66	\$ 16.05
Manicurists and Pedicurists	39-5092	40	\$ 11.64	\$ 8.14	\$ 13.38	\$ 7.46	\$ 8.97	\$ 10.75	\$ 13.86	\$ 17.57
Skin Care Specialists	39-5094	110	\$ 7.96	\$ 6.08	\$ 8.89	\$ 5.74	\$ 6.24	\$ 7.08	\$ 8.86	\$ 10.84
Baggage Porters and Bellhops	39-6011	140	\$ 7.37	\$ 6.02	\$ 8.03	\$ 5.79	\$ 6.43	\$ 7.48	\$ 8.33	\$ 8.92
Concierges	39-6012	N.A.	\$ 8.20	\$ 7.69	\$ 8.46	\$ 7.20	\$ 7.55	\$ 8.12	\$ 8.70	\$ 10.11
Tour Guides and Escorts	39-6021	310	\$ 8.98	\$ 6.68	\$ 10.12	\$ 6.18	\$ 7.18	\$ 8.36	\$ 11.16	\$ 12.88
Travel Guides	39-6022	N.A.	\$ 10.66	\$ 6.92	\$ 12.52	\$ 6.38	\$ 7.68	\$ 9.76	\$ 11.04	\$ 16.43
Child Care Workers	39-9011	8,050	\$ 7.86	\$ 6.07	\$ 8.75	\$ 5.76	\$ 6.29	\$ 7.22	\$ 8.85	\$ 10.88
Personal and Home Care Aides	39-9021	4,790	\$ 9.04	\$ 7.70	\$ 9.70	\$ 7.34	\$ 7.86	\$ 8.73	\$ 10.21	\$ 11.47
Fitness Trainers and Aerobics Instructors	39-9031	1,470	\$ 11.22	\$ 6.36	\$ 13.64	\$ 6.01	\$ 6.90	\$ 8.37	\$ 13.53	\$ 21.19
Recreation Workers	39-9032	4,530	\$ 9.79	\$ 6.20	\$ 11.59	\$ 5.97	\$ 6.66	\$ 8.55	\$ 11.69	\$ 15.62
Residential Advisors	39-9041	300	\$ 11.13	\$ 7.94	\$ 12.72	\$ 7.57	\$ 8.60	\$ 10.24	\$ 13.10	\$ 16.39
Personal Care and Service Workers, All Other	39-9099	330	\$ 7.79	\$ 6.13	\$ 8.62	\$ 5.88	\$ 6.54	\$ 7.66	\$ 8.75	\$ 10.18
SALES AND RELATED OCCUPATIONS	41-0000	149,430	\$ 13.38	\$ 6.75	\$ 16.69	\$ 6.22	\$ 7.34	\$ 9.45	\$ 15.53	\$ 25.28
First-Line Supervisors/Managers of Retail Sales Workers	41-1011	12,530	\$ 16.89	\$ 10.15	\$ 20.27	\$ 9.27	\$ 11.36	\$ 14.69	\$ 19.93	\$ 27.11
First-Line Supervisors/Managers of Non-Retail Sales Workers	41-1012	2,670	\$ 28.37	\$ 15.65	\$ 34.74	\$ 13.31	\$ 18.50	\$ 23.61	\$ 33.53	\$ 46.82
Cashiers	41-2011	38,110	\$ 7.60	\$ 6.08	\$ 8.37	\$ 5.82	\$ 6.45	\$ 7.44	\$ 8.52	\$ 10.04
Gaming Change Persons and Booth Cashiers	41-2012	500	\$ 10.80	\$ 9.08	\$ 11.65	\$ 8.44	\$ 9.52	\$ 10.65	\$ 12.22	\$ 13.61
Counter and Rental Clerks	41-2021	3,870	\$ 8.76	\$ 6.17	\$ 10.06	\$ 5.85	\$ 6.42	\$ 7.44	\$ 9.75	\$ 14.06
Parts Salespersons	41-2022	3,090	\$ 13.92	\$ 8.99	\$ 16.38	\$ 8.01	\$ 10.44	\$ 13.53	\$ 16.75	\$ 20.66
Retail Salespersons	41-2031	46,060	\$ 10.29	\$ 6.56	\$ 12.15	\$ 6.12	\$ 7.10	\$ 8.51	\$ 11.17	\$ 16.83
Advertising Sales Agents	41-3011	2,050	\$ 15.59	\$ 8.72	\$ 19.03	\$ 7.84	\$ 10.05	\$ 13.54	\$ 18.13	\$ 25.49
Insurance Sales Agents	41-3021	4,560	\$ 22.50	\$ 11.49	\$ 28.01	\$ 10.51	\$ 13.25	\$ 17.10	\$ 25.56	\$ 41.73
Securities, Commodities, and Financial Services Sales Agents	41-3031	2,330	\$ 33.25	\$ 12.52	\$ 43.62	\$ 11.43	\$ 15.09	\$ 22.03	\$ 43.27	N.A.
Travel Agents	41-3041	670	\$ 12.55	\$ 8.84	\$ 14.41	\$ 8.21	\$ 9.83	\$ 12.13	\$ 14.73	\$ 17.30

Occupation	Occupational Code	Estimated Employment	Mean Wage	Entry Wage	Experienced Wage	10th pct	25th pct	Median Wage	75th pct	90th pct	
Sales Representatives, Services, All Other	41-3099		2,900	\$ 21.17	\$ 11.08	\$ 26.21	\$ 9.79	\$ 13.17	\$ 18.37	\$ 25.76	\$ 36.18
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	41-4011		3,940	\$ 27.02	\$ 15.54	\$ 32.77	\$ 14.07	\$ 17.59	\$ 22.83	\$ 33.23	\$ 47.99
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	41-4012		13,060	\$ 24.57	\$ 12.56	\$ 30.59	\$ 10.75	\$ 15.27	\$ 21.22	\$ 29.89	\$ 41.68
Demonstrators and Product Promoters	41-9011		1,610	\$ 12.38	\$ 7.60	\$ 14.77	\$ 7.31	\$ 8.33	\$ 10.33	\$ 15.23	\$ 20.97
Real Estate Brokers	41-9021		170	\$ 28.65	\$ 13.61	\$ 36.17	\$ 10.83	\$ 16.12	\$ 20.38	\$ 33.66	\$ 46.40
Real Estate Sales Agents	41-9022		570	\$ 20.80	\$ 10.44	\$ 25.99	\$ 8.44	\$ 12.80	\$ 20.28	\$ 27.30	\$ 33.27
Sales Engineers	41-9031		290	\$ 28.66	\$ 18.03	\$ 33.98	\$ 16.35	\$ 20.29	\$ 25.45	\$ 31.93	\$ 42.44
Telemarketers	41-9041		8,350	\$ 9.24	\$ 6.88	\$ 10.41	\$ 6.31	\$ 7.42	\$ 8.74	\$ 10.61	\$ 12.74
Door-to-Door Sales Workers, News and Street Vendors, and Related Workers	41-9091		120	\$ 16.13	\$ 10.88	\$ 18.76	\$ 10.00	\$ 11.82	\$ 14.35	\$ 18.63	\$ 25.98
Sales and Related Workers, All Other	41-9099		1,980	\$ 16.33	\$ 8.36	\$ 20.32	\$ 7.02	\$ 9.94	\$ 14.09	\$ 20.27	\$ 27.36
OFFICE AND ADMINISTRATIVE SUPPORT OCCUPATIONS	43-0000		237,570	\$ 12.85	\$ 8.55	\$ 15.00	\$ 7.70	\$ 9.58	\$ 11.89	\$ 15.33	\$ 19.59
First-Line Supervisors/Managers of Office and Administrative Support Workers	43-1011		11,840	\$ 19.81	\$ 12.79	\$ 23.32	\$ 11.44	\$ 14.74	\$ 18.84	\$ 23.66	\$ 29.19
Switchboard Operators, Including Answering Service	43-2011		1,280	\$ 10.32	\$ 8.03	\$ 11.47	\$ 7.60	\$ 8.74	\$ 10.17	\$ 11.71	\$ 13.60
Communications Equipment Operators, All Other	43-2099		110	\$ 12.93	\$ 10.15	\$ 14.33	\$ 9.64	\$ 10.61	\$ 12.26	\$ 14.30	\$ 18.12
Bill and Account Collectors	43-3011		3,350	\$ 13.45	\$ 10.07	\$ 15.14	\$ 9.61	\$ 10.77	\$ 12.90	\$ 15.54	\$ 17.83
Billing and Posting Clerks and Machine Operators	43-3021		4,390	\$ 12.93	\$ 9.91	\$ 14.44	\$ 9.44	\$ 10.73	\$ 12.63	\$ 14.76	\$ 17.30
Bookkeeping, Accounting, and Auditing Clerks	43-3031		22,810	\$ 13.00	\$ 8.93	\$ 15.05	\$ 8.07	\$ 10.16	\$ 12.61	\$ 15.44	\$ 18.39
Gaming Cage Workers	43-3041		400	\$ 10.48	\$ 8.84	\$ 11.31	\$ 8.06	\$ 9.41	\$ 10.46	\$ 11.65	\$ 13.31
Payroll and Timekeeping Clerks	43-3051		2,010	\$ 13.73	\$ 9.92	\$ 15.64	\$ 9.44	\$ 11.04	\$ 13.24	\$ 16.25	\$ 19.59
Procurement Clerks	43-3061		530	\$ 14.09	\$ 10.00	\$ 16.15	\$ 9.60	\$ 10.82	\$ 13.29	\$ 16.82	\$ 20.51
Tellers	43-3071		8,770	\$ 10.25	\$ 8.27	\$ 11.24	\$ 7.92	\$ 8.91	\$ 10.19	\$ 11.37	\$ 13.04
Brokerage Clerks	43-4011		370	\$ 14.36	\$ 10.52	\$ 16.28	\$ 9.56	\$ 11.70	\$ 14.15	\$ 16.88	\$ 19.45
Correspondence Clerks	43-4021		210	\$ 12.02	\$ 9.26	\$ 13.38	\$ 8.58	\$ 9.73	\$ 11.46	\$ 13.92	\$ 16.68
Court, Municipal, and License Clerks	43-4031		960	\$ 14.81	\$ 11.71	\$ 16.35	\$ 11.28	\$ 12.78	\$ 14.81	\$ 16.74	\$ 18.54
Credit Authorizers, Checkers, and Clerks	43-4041		780	\$ 14.54	\$ 9.90	\$ 16.88	\$ 9.41	\$ 10.70	\$ 13.19	\$ 18.89	\$ 22.30
Customer Service Representatives	43-4051		24,170	\$ 12.73	\$ 9.21	\$ 14.48	\$ 8.52	\$ 10.17	\$ 12.22	\$ 14.66	\$ 17.68
Eligibility Interviewers, Government Programs	43-4061		900	\$ 18.04	\$ 13.73	\$ 20.20	\$ 12.62	\$ 16.50	\$ 19.12	\$ 20.93	\$ 22.02
File Clerks	43-4071		1,390	\$ 10.11	\$ 7.24	\$ 11.55	\$ 6.70	\$ 8.03	\$ 9.80	\$ 11.81	\$ 14.12
Hotel, Motel, and Resort Desk Clerks	43-4081		2,400	\$ 8.33	\$ 6.38	\$ 9.29	\$ 6.02	\$ 6.93	\$ 8.29	\$ 9.60	\$ 10.79
Interviewers, Except Eligibility and Loan	43-4111		1,100	\$ 12.00	\$ 8.89	\$ 13.54	\$ 8.22	\$ 9.55	\$ 11.50	\$ 13.67	\$ 16.82
Library Assistants, Clerical	43-4121		2,150	\$ 9.51	\$ 6.70	\$ 10.91	\$ 6.26	\$ 7.25	\$ 8.93	\$ 10.83	\$ 13.88
Loan Interviewers and Clerks	43-4131		1,670	\$ 13.40	\$ 10.79	\$ 14.71	\$ 10.17	\$ 11.47	\$ 13.05	\$ 15.19	\$ 17.34
New Accounts Clerks	43-4141		1,210	\$ 12.62	\$ 10.28	\$ 13.79	\$ 9.68	\$ 10.39	\$ 11.55	\$ 14.40	\$ 17.66
Order Clerks	43-4151		2,420	\$ 12.63	\$ 9.00	\$ 14.44	\$ 8.25	\$ 9.87	\$ 11.96	\$ 14.68	\$ 18.12
Human Resources Assistants, Except Payroll and Timekeeping	43-4161		1,150	\$ 15.32	\$ 11.16	\$ 17.39	\$ 10.23	\$ 12.18	\$ 14.43	\$ 18.05	\$ 21.70
Receptionists and Information Clerks	43-4171		9,420	\$ 10.29	\$ 7.41	\$ 11.72	\$ 6.71	\$ 8.39	\$ 10.18	\$ 12.01	\$ 13.99
Reservation and Transportation Ticket Agents and Travel Clerks	43-4181		470	\$ 12.97	\$ 8.42	\$ 15.24	\$ 7.88	\$ 9.10	\$ 11.45	\$ 15.88	\$ 21.69
Information and Record Clerks, All Other	43-4199		1,660	\$ 14.60	\$ 9.28	\$ 17.26	\$ 8.60	\$ 10.32	\$ 13.17	\$ 17.22	\$ 21.55
Cargo and Freight Agents	43-5011		300	\$ 18.87	\$ 13.31	\$ 21.66	\$ 12.31	\$ 14.82	\$ 17.90	\$ 22.11	\$ 26.39
Couriers and Messengers	43-5021		1,270	\$ 9.65	\$ 7.68	\$ 10.64	\$ 7.35	\$ 8.20	\$ 9.55	\$ 10.90	\$ 11.85
Police, Fire, and Ambulance Dispatchers	43-5031		980	\$ 14.86	\$ 11.51	\$ 16.54	\$ 10.54	\$ 12.23	\$ 14.12	\$ 17.52	\$ 20.88

Occupation	Occupational Code	Estimated Employment	Mean Wage	Entry Wage	Experienced Wage	10th pct	25th pct	Median Wage	75th pct	90th pct
Dispatchers, Except Police, Fire, and Ambulance	43-5032	1,760	\$ 16.28	\$ 10.52	\$ 19.16	\$ 9.49	\$ 12.01	\$ 16.25	\$ 20.47	\$ 22.87
Meter Readers, Utilities	43-5041	780	\$ 12.97	\$ 7.44	\$ 15.74	\$ 6.48	\$ 8.60	\$ 13.32	\$ 16.50	\$ 19.62
Postal Service Clerks	43-5051	460	\$ 21.00	\$ 19.17	\$ 21.91	\$ 18.00	\$ 19.02	\$ 20.70	\$ 22.96	\$ 26.00
Postal Service Mail Carriers	43-5052	4,180	\$ 21.12	\$ 16.63	\$ 23.37	\$ 15.27	\$ 17.80	\$ 21.71	\$ 24.90	\$ 26.77
Postal Service Mail Sorters, Processors, and Processing Machine Operators	43-5053	2,800	\$ 18.00	\$ 12.93	\$ 20.53	\$ 10.10	\$ 16.13	\$ 19.22	\$ 21.11	\$ 23.04
Production, Planning, and Expediting Clerks	43-5061	2,870	\$ 16.70	\$ 11.37	\$ 19.38	\$ 10.38	\$ 12.59	\$ 15.88	\$ 20.28	\$ 25.13
Shipping, Receiving, and Traffic Clerks	43-5071	7,080	\$ 13.05	\$ 9.22	\$ 14.98	\$ 8.52	\$ 10.18	\$ 12.54	\$ 15.57	\$ 17.98
Stock Clerks and Order Fillers	43-5081	19,450	\$ 10.06	\$ 6.97	\$ 11.60	\$ 6.41	\$ 7.55	\$ 9.11	\$ 11.88	\$ 15.27
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	43-5111	1,470	\$ 13.35	\$ 9.48	\$ 15.29	\$ 9.13	\$ 10.59	\$ 13.28	\$ 15.91	\$ 17.58
Executive Secretaries and Administrative Assistants	43-6011	11,600	\$ 15.99	\$ 11.65	\$ 18.16	\$ 10.86	\$ 12.84	\$ 15.52	\$ 18.70	\$ 22.02
Legal Secretaries	43-6012	2,660	\$ 14.87	\$ 10.76	\$ 16.92	\$ 9.81	\$ 11.84	\$ 15.04	\$ 17.64	\$ 20.66
Medical Secretaries	43-6013	4,850	\$ 12.33	\$ 9.91	\$ 13.55	\$ 9.50	\$ 10.45	\$ 12.17	\$ 14.05	\$ 16.02
Secretaries, Except Legal, Medical, and Executive	43-6014	17,920	\$ 12.21	\$ 8.71	\$ 13.96	\$ 7.92	\$ 9.55	\$ 11.50	\$ 14.49	\$ 17.85
Computer Operators	43-9011	2,020	\$ 13.76	\$ 9.42	\$ 15.93	\$ 8.75	\$ 10.16	\$ 12.50	\$ 16.55	\$ 20.50
Data Entry Keyers	43-9021	2,500	\$ 10.71	\$ 7.95	\$ 12.10	\$ 7.62	\$ 8.70	\$ 10.24	\$ 12.07	\$ 14.84
Word Processors and Typists	43-9022	1,840	\$ 11.96	\$ 8.22	\$ 13.84	\$ 7.36	\$ 9.27	\$ 11.58	\$ 14.74	\$ 17.06
Desktop Publishers	43-9031	250	\$ 11.83	\$ 8.05	\$ 13.72	\$ 6.85	\$ 9.43	\$ 11.46	\$ 13.76	\$ 16.64
Insurance Claims and Policy Processing Clerks	43-9041	2,520	\$ 13.60	\$ 10.87	\$ 14.97	\$ 10.00	\$ 11.54	\$ 13.15	\$ 15.21	\$ 17.77
Mail Clerks and Mail Machine Operators, Except Postal Service	43-9051	1,610	\$ 11.39	\$ 8.50	\$ 12.84	\$ 7.79	\$ 9.25	\$ 10.86	\$ 13.08	\$ 15.82
Office Clerks, General	43-9061	34,850	\$ 10.97	\$ 7.48	\$ 12.70	\$ 6.78	\$ 8.48	\$ 10.56	\$ 13.00	\$ 16.00
Office Machine Operators, Except Computer	43-9071	800	\$ 12.13	\$ 9.02	\$ 13.68	\$ 8.31	\$ 9.78	\$ 11.96	\$ 13.94	\$ 16.49
Proofreaders and Copy Markers	43-9081	230	\$ 10.68	\$ 7.07	\$ 12.49	\$ 6.51	\$ 7.86	\$ 10.75	\$ 13.31	\$ 14.72
Statistical Assistants	43-9111	260	\$ 13.19	\$ 10.44	\$ 14.55	\$ 9.70	\$ 10.24	\$ 11.14	\$ 14.34	\$ 21.16
Office and Administrative Support Workers, All Other	43-9199	2,130	\$ 12.01	\$ 8.59	\$ 13.70	\$ 7.50	\$ 9.82	\$ 12.13	\$ 13.80	\$ 15.82
FARMING, FISHING, AND FORESTRY OCCUPATIONS	45-0000	5,550	\$ 11.14	\$ 7.26	\$ 13.08	\$ 6.74	\$ 7.90	\$ 9.88	\$ 13.11	\$ 17.95
First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	45-1011	290	\$ 19.80	\$ 13.36	\$ 23.03	\$ 12.13	\$ 15.19	\$ 18.67	\$ 22.17	\$ 30.25
Agricultural Inspectors	45-2011	260	\$ 17.93	\$ 11.00	\$ 21.38	\$ 9.88	\$ 12.72	\$ 18.30	\$ 21.99	\$ 26.54
Animal Breeders	45-2021	30	\$ 18.54	\$ 14.40	\$ 20.61	\$ 13.19	\$ 15.62	\$ 18.57	\$ 21.14	\$ 24.59
Graders and Sorters, Agricultural Products	45-2041	710	\$ 11.68	\$ 8.78	\$ 13.13	\$ 7.96	\$ 9.53	\$ 11.14	\$ 13.56	\$ 16.86
Agricultural Equipment Operators	45-2091	620	\$ 10.93	\$ 8.43	\$ 12.19	\$ 7.95	\$ 8.96	\$ 10.52	\$ 12.72	\$ 14.60
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	45-2092	1,580	\$ 8.33	\$ 6.26	\$ 9.36	\$ 5.95	\$ 6.58	\$ 7.56	\$ 8.81	\$ 11.44
Farmworkers, Farm and Ranch Animals	45-2093	1,590	\$ 10.41	\$ 7.41	\$ 11.91	\$ 7.10	\$ 8.00	\$ 9.68	\$ 11.97	\$ 15.57
Agricultural Workers, All Other	45-2099	150	\$ 10.65	\$ 8.10	\$ 11.93	\$ 6.63	\$ 9.22	\$ 10.47	\$ 12.32	\$ 13.95
Forest and Conservation Workers	45-4011	240	\$ 11.02	\$ 8.25	\$ 12.41	\$ 7.65	\$ 8.84	\$ 10.21	\$ 12.59	\$ 16.26
Logging Equipment Operators	45-4022	40	\$ 11.50	\$ 7.79	\$ 13.35	\$ 7.47	\$ 8.30	\$ 10.64	\$ 12.98	\$ 14.59
Log Graders and Scalars	45-4023	30	\$ 16.76	\$ 11.92	\$ 19.19	\$ 11.32	\$ 12.35	\$ 14.21	\$ 20.40	\$ 27.32
CONSTRUCTION AND EXTRACTION OCCUPATIONS	47-0000	65,330	\$ 16.82	\$ 10.86	\$ 19.81	\$ 9.89	\$ 12.23	\$ 15.90	\$ 20.58	\$ 25.62
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	47-1011	5,060	\$ 23.07	\$ 13.30	\$ 27.95	\$ 11.09	\$ 16.30	\$ 21.36	\$ 27.98	\$ 34.47
Boilermakers	47-2011	300	\$ 20.86	\$ 15.59	\$ 23.50	\$ 15.02	\$ 18.08	\$ 20.81	\$ 23.34	\$ 28.71

Occupation	Occupational Code	Estimated Employment	Mean Wage	Entry Wage	Experienced Wage	10th pct	25th pct	Median Wage	75th pct	90th pct
Brickmasons and Blockmasons	47-2021	1,370	\$ 18.10	\$ 11.67	\$ 21.32	\$ 10.39	\$ 13.30	\$ 18.26	\$ 22.96	\$ 26.48
Stonemasons	47-2022	N.A.	\$ 11.22	\$ 10.16	\$ 11.75	\$ 9.32	\$ 9.76	\$ 10.48	\$ 11.21	\$ 15.97
Carpenters	47-2031	9,150	\$ 16.11	\$ 11.54	\$ 18.39	\$ 10.65	\$ 12.58	\$ 15.07	\$ 19.16	\$ 23.66
Carpet Installers	47-2041	250	\$ 15.19	\$ 10.68	\$ 17.45	\$ 9.52	\$ 12.24	\$ 15.49	\$ 18.46	\$ 20.94
Floor Layers, Except Carpet, Wood, and Hard Tiles	47-2042	90	\$ 13.95	\$ 9.45	\$ 16.20	\$ 8.63	\$ 10.82	\$ 13.51	\$ 17.05	\$ 20.49
Tile and Marble Setters	47-2044	280	\$ 16.30	\$ 8.47	\$ 20.22	\$ 7.97	\$ 9.11	\$ 17.44	\$ 23.62	\$ 27.16
Cement Masons and Concrete Finishers	47-2051	3,730	\$ 14.78	\$ 10.25	\$ 17.04	\$ 9.66	\$ 11.09	\$ 13.93	\$ 17.66	\$ 21.47
Construction Laborers	47-2061	9,920	\$ 14.39	\$ 9.49	\$ 16.83	\$ 8.97	\$ 10.59	\$ 13.29	\$ 18.10	\$ 21.62
Paving, Surfacing, and Tamping Equipment Operators	47-2071	930	\$ 15.45	\$ 11.77	\$ 17.30	\$ 10.96	\$ 12.74	\$ 15.23	\$ 17.95	\$ 20.89
Operating Engineers and Other Construction Equipment Operators	47-2073	4,080	\$ 17.36	\$ 13.26	\$ 19.40	\$ 12.06	\$ 14.59	\$ 17.30	\$ 20.49	\$ 22.64
Drywall and Ceiling Tile Installers	47-2081	880	\$ 18.54	\$ 12.63	\$ 21.51	\$ 10.75	\$ 14.75	\$ 18.02	\$ 23.72	\$ 26.64
Tapers	47-2082	300	\$ 17.39	\$ 12.52	\$ 19.82	\$ 10.74	\$ 14.47	\$ 17.98	\$ 20.97	\$ 22.84
Electricians	47-2111	6,280	\$ 19.29	\$ 13.02	\$ 22.43	\$ 11.88	\$ 14.81	\$ 18.76	\$ 23.51	\$ 28.35
Glaziers	47-2121	390	\$ 16.74	\$ 12.23	\$ 19.00	\$ 11.58	\$ 13.60	\$ 17.06	\$ 20.22	\$ 22.04
Insulation Workers, Floor, Ceiling, and Wall	47-2131	250	\$ 12.97	\$ 8.48	\$ 15.21	\$ 7.89	\$ 9.04	\$ 11.76	\$ 15.51	\$ 19.38
Insulation Workers, Mechanical	47-2132	230	\$ 15.32	\$ 10.34	\$ 17.82	\$ 9.72	\$ 11.09	\$ 14.50	\$ 18.77	\$ 23.35
Painters, Construction and Maintenance	47-2141	1,970	\$ 15.15	\$ 10.02	\$ 17.70	\$ 9.22	\$ 11.44	\$ 14.74	\$ 18.59	\$ 22.03
Paperhangers	47-2142	N.A.	\$ 21.15	\$ 18.72	\$ 22.36	\$ 17.87	\$ 19.52	\$ 21.29	\$ 23.09	\$ 26.34
Pipelayers	47-2151	870	\$ 14.88	\$ 10.82	\$ 16.91	\$ 10.02	\$ 11.56	\$ 14.96	\$ 17.05	\$ 19.97
Plumbers, Pipefitters, and Steamfitters	47-2152	4,930	\$ 18.93	\$ 12.51	\$ 22.16	\$ 11.63	\$ 13.91	\$ 18.10	\$ 23.08	\$ 28.46
Plasterers and Stucco Masons	47-2161	120	\$ 17.70	\$ 13.56	\$ 19.78	\$ 12.29	\$ 14.77	\$ 16.76	\$ 20.04	\$ 24.53
Reinforcing Iron and Rebar Workers	47-2171	140	\$ 21.57	\$ 16.36	\$ 24.17	\$ 15.25	\$ 17.81	\$ 22.57	\$ 25.71	\$ 27.50
Roofers	47-2181	1,270	\$ 13.84	\$ 9.70	\$ 15.89	\$ 9.23	\$ 10.92	\$ 13.13	\$ 16.55	\$ 20.56
Sheet Metal Workers	47-2211	2,440	\$ 17.37	\$ 10.82	\$ 20.64	\$ 9.84	\$ 11.96	\$ 16.06	\$ 22.86	\$ 26.78
Structural Iron and Steel Workers	47-2221	870	\$ 20.05	\$ 13.15	\$ 23.50	\$ 12.15	\$ 14.36	\$ 20.90	\$ 24.99	\$ 27.40
Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	47-3011	400	\$ 12.94	\$ 9.40	\$ 14.71	\$ 8.58	\$ 10.49	\$ 12.62	\$ 14.48	\$ 17.65
Helpers--Carpenters	47-3012	570	\$ 10.68	\$ 8.81	\$ 11.61	\$ 8.14	\$ 9.12	\$ 10.10	\$ 11.29	\$ 14.70
Helpers--Electricians	47-3013	850	\$ 11.40	\$ 8.17	\$ 13.01	\$ 7.65	\$ 8.94	\$ 10.72	\$ 13.28	\$ 16.21
Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons	47-3014	70	\$ 12.21	\$ 8.72	\$ 13.95	\$ 8.01	\$ 9.35	\$ 12.29	\$ 14.96	\$ 16.68
Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	47-3015	580	\$ 10.67	\$ 7.90	\$ 12.05	\$ 6.99	\$ 8.92	\$ 10.52	\$ 12.64	\$ 14.79
Helpers--Roofers	47-3016	150	\$ 10.29	\$ 7.59	\$ 11.64	\$ 6.58	\$ 8.86	\$ 10.18	\$ 11.40	\$ 14.99
Helpers, Construction Trades, All Other	47-3019	N.A.	\$ 11.72	\$ 9.66	\$ 12.74	\$ 9.22	\$ 9.85	\$ 10.85	\$ 11.90	\$ 15.94
Construction and Building Inspectors	47-4011	510	\$ 21.10	\$ 15.34	\$ 23.99	\$ 14.20	\$ 17.44	\$ 20.86	\$ 25.01	\$ 28.48
Fence Erectors	47-4031	780	\$ 11.27	\$ 8.72	\$ 12.54	\$ 8.12	\$ 9.18	\$ 10.78	\$ 13.07	\$ 15.78
Hazardous Materials Removal Workers	47-4041	140	\$ 14.14	\$ 10.80	\$ 15.82	\$ 9.87	\$ 11.55	\$ 13.14	\$ 16.64	\$ 20.46
Highway Maintenance Workers	47-4051	2,840	\$ 16.65	\$ 14.33	\$ 17.82	\$ 13.52	\$ 14.91	\$ 16.57	\$ 18.71	\$ 20.99
Rail-Track Laying and Maintenance Equipment Operators	47-4061	220	\$ 20.73	\$ 18.70	\$ 21.75	\$ 17.82	\$ 18.93	\$ 20.51	\$ 22.09	\$ 25.69
Septic Tank Servicers and Sewer Pipe Cleaners	47-4071	310	\$ 14.88	\$ 9.86	\$ 17.39	\$ 9.20	\$ 11.48	\$ 14.20	\$ 18.45	\$ 21.95
Construction and Related Workers, All Other	47-4099	580	\$ 14.01	\$ 10.54	\$ 15.75	\$ 9.44	\$ 11.47	\$ 12.96	\$ 16.68	\$ 20.84
Earth Drillers, Except Oil and Gas	47-5021	140	\$ 18.68	\$ 12.30	\$ 21.87	\$ 11.77	\$ 12.97	\$ 15.19	\$ 21.78	\$ 32.23
Explosives Workers, Ordnance Handling Experts, and Blasters	47-5031	10	\$ 16.25	\$ 16.13	\$ 16.31	\$ 14.90	\$ 15.46	\$ 16.40	\$ 17.35	\$ 18.04
Continuous Mining Machine Operators	47-5041	130	\$ 14.44	\$ 11.66	\$ 15.84	\$ 10.72	\$ 12.85	\$ 15.04	\$ 16.61	\$ 17.54

Occupation	Occupational Code	Estimated Employment	Mean Wage	Entry Wage	Experienced Wage	10th pct	25th pct	Median Wage	75th pct	90th pct
Mine Cutting and Channeling Machine Operators	47-5042	50	\$ 15.79	\$ 14.48	\$ 16.45	\$ 13.28	\$ 14.96	\$ 16.15	\$ 17.33	\$ 18.06
Mining Machine Operators, All Other	47-5049	180	\$ 17.80	\$ 12.99	\$ 20.20	\$ 11.77	\$ 14.44	\$ 18.29	\$ 21.16	\$ 23.16
Helpers--Extraction Workers	47-5081	N.A.	\$ 11.09	\$ 10.27	\$ 11.50	\$ 9.51	\$ 10.03	\$ 10.88	\$ 12.08	\$ 13.65
Extraction Workers, All Other	47-5099	50	\$ 14.52	\$ 11.85	\$ 15.85	\$ 11.22	\$ 12.07	\$ 13.50	\$ 16.19	\$ 19.36
INSTALLATION, MAINTENANCE, AND REPAIR OCCUPATIONS	49-0000	60,070	\$ 16.90	\$ 10.51	\$ 20.09	\$ 9.44	\$ 12.17	\$ 16.19	\$ 21.03	\$ 26.13
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	49-1011	4,920	\$ 23.43	\$ 15.59	\$ 27.35	\$ 13.90	\$ 17.81	\$ 22.81	\$ 28.18	\$ 34.02
Computer, Automated Teller, and Office Machine Repairers	49-2011	1,200	\$ 16.99	\$ 10.86	\$ 20.05	\$ 9.88	\$ 12.37	\$ 16.43	\$ 21.13	\$ 25.83
Radio Mechanics	49-2021	270	\$ 15.06	\$ 9.99	\$ 17.60	\$ 6.95	\$ 12.60	\$ 15.39	\$ 17.68	\$ 21.30
Telecommunications Equipment Installers and Repairers, Except Line Installers	49-2022	2,570	\$ 21.71	\$ 15.12	\$ 25.01	\$ 12.59	\$ 18.43	\$ 23.54	\$ 26.47	\$ 28.35
Avionics Technicians	49-2091	80	\$ 21.60	\$ 17.19	\$ 23.81	\$ 15.57	\$ 18.74	\$ 21.62	\$ 25.12	\$ 27.51
Electric Motor, Power Tool, and Related Repairers	49-2092	220	\$ 15.91	\$ 11.99	\$ 17.88	\$ 11.47	\$ 12.98	\$ 15.01	\$ 17.54	\$ 22.67
Electrical and Electronics Installers and Repairers, Transportation Equipment	49-2093	140	\$ 17.36	\$ 11.45	\$ 20.31	\$ 10.06	\$ 12.96	\$ 18.56	\$ 21.31	\$ 23.50
Electrical and Electronics Repairers, Commercial and Industrial Equipment	49-2094	750	\$ 20.05	\$ 13.87	\$ 23.14	\$ 12.42	\$ 16.13	\$ 19.91	\$ 23.33	\$ 28.33
Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	49-2095	200	\$ 25.58	\$ 22.80	\$ 26.99	\$ 20.81	\$ 23.75	\$ 25.92	\$ 28.09	\$ 29.71
Electronic Equipment Installers and Repairers, Motor Vehicles	49-2096	310	\$ 14.02	\$ 10.74	\$ 15.66	\$ 9.95	\$ 12.11	\$ 14.63	\$ 16.18	\$ 17.10
Electronic Home Entertainment Equipment Installers and Repairers	49-2097	220	\$ 11.93	\$ 7.87	\$ 13.96	\$ 7.15	\$ 8.84	\$ 11.30	\$ 14.63	\$ 17.32
Security and Fire Alarm Systems Installers	49-2098	230	\$ 15.52	\$ 11.48	\$ 17.54	\$ 10.94	\$ 12.59	\$ 15.17	\$ 18.05	\$ 21.56
Aircraft Mechanics and Service Technicians	49-3011	320	\$ 20.25	\$ 13.51	\$ 23.63	\$ 11.90	\$ 16.34	\$ 19.81	\$ 23.39	\$ 27.01
Automotive Body and Related Repairers	49-3021	1,600	\$ 15.99	\$ 9.61	\$ 19.18	\$ 8.16	\$ 11.41	\$ 16.07	\$ 20.30	\$ 23.18
Automotive Glass Installers and Repairers	49-3022	270	\$ 13.70	\$ 8.25	\$ 16.44	\$ 6.61	\$ 9.84	\$ 12.25	\$ 19.32	\$ 21.77
Automotive Service Technicians and Mechanics	49-3023	8,630	\$ 14.32	\$ 8.92	\$ 17.02	\$ 8.19	\$ 9.93	\$ 13.29	\$ 18.05	\$ 22.12
Bus and Truck Mechanics and Diesel Engine Specialists	49-3031	3,960	\$ 15.82	\$ 11.26	\$ 18.11	\$ 10.33	\$ 12.46	\$ 15.49	\$ 19.17	\$ 21.98
Farm Equipment Mechanics	49-3041	1,520	\$ 14.63	\$ 10.81	\$ 16.56	\$ 9.93	\$ 11.94	\$ 15.03	\$ 16.94	\$ 18.48
Mobile Heavy Equipment Mechanics, Except Engines	49-3042	1,220	\$ 17.55	\$ 13.73	\$ 19.46	\$ 12.67	\$ 14.80	\$ 17.60	\$ 20.55	\$ 22.45
Rail Car Repairers	49-3043	220	\$ 18.02	\$ 13.03	\$ 20.52	\$ 11.79	\$ 14.33	\$ 17.43	\$ 21.60	\$ 25.62
Motorboat Mechanics	49-3051	170	\$ 14.17	\$ 10.10	\$ 16.21	\$ 9.16	\$ 11.44	\$ 13.30	\$ 16.13	\$ 21.37
Motorcycle Mechanics	49-3052	290	\$ 10.38	\$ 6.77	\$ 12.18	\$ 6.31	\$ 7.28	\$ 9.72	\$ 13.11	\$ 15.77
Outdoor Power Equipment and Other Small Engine Mechanics	49-3053	320	\$ 10.57	\$ 7.36	\$ 12.18	\$ 7.01	\$ 8.00	\$ 10.01	\$ 12.26	\$ 14.07
Bicycle Repairers	49-3091	120	\$ 10.23	\$ 7.71	\$ 11.50	\$ 7.44	\$ 8.22	\$ 9.54	\$ 10.79	\$ 15.38
Recreational Vehicle Service Technicians	49-3092	140	\$ 13.51	\$ 10.40	\$ 15.06	\$ 9.88	\$ 11.31	\$ 13.00	\$ 15.17	\$ 17.78
Tire Repairers and Changers	49-3093	760	\$ 10.95	\$ 7.45	\$ 12.70	\$ 7.03	\$ 8.19	\$ 9.87	\$ 13.48	\$ 16.34
Control and Valve Installers and Repairers, Except Mechanical Door	49-9012	640	\$ 22.61	\$ 15.89	\$ 25.96	\$ 13.16	\$ 19.12	\$ 23.98	\$ 27.19	\$ 29.32
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	49-9021	2,100	\$ 19.66	\$ 12.17	\$ 23.41	\$ 10.82	\$ 13.73	\$ 18.81	\$ 25.25	\$ 30.96
Home Appliance Repairers	49-9031	390	\$ 15.18	\$ 10.54	\$ 17.49	\$ 9.62	\$ 11.54	\$ 13.92	\$ 18.46	\$ 21.80
Industrial Machinery Mechanics	49-9041	3,010	\$ 17.38	\$ 13.25	\$ 19.44	\$ 12.05	\$ 14.62	\$ 16.89	\$ 20.27	\$ 23.79

Occupation	Occupational Code	Estimated Employment	Mean Wage	Entry Wage	Experienced Wage	10th pct	25th pct	Median Wage	75th pct	90th pct
Maintenance and Repair Workers, General	49-9042	13,920	\$ 15.28	\$ 10.20	\$ 17.83	\$ 9.31	\$ 11.63	\$ 14.94	\$ 18.58	\$ 21.96
Maintenance Workers, Machinery	49-9043	2,030	\$ 15.50	\$ 11.31	\$ 17.59	\$ 9.98	\$ 12.80	\$ 15.38	\$ 18.51	\$ 21.25
Millwrights	49-9044	790	\$ 19.94	\$ 12.86	\$ 23.48	\$ 11.73	\$ 14.29	\$ 20.09	\$ 25.30	\$ 28.16
Electrical Power-Line Installers and Repairers	49-9051	1,610	\$ 23.37	\$ 17.14	\$ 26.50	\$ 16.49	\$ 20.54	\$ 24.29	\$ 27.22	\$ 29.57
Telecommunications Line Installers and Repairers	49-9052	1,040	\$ 17.40	\$ 11.89	\$ 20.15	\$ 11.06	\$ 13.13	\$ 16.87	\$ 21.31	\$ 25.92
Camera and Photographic Equipment Repairers	49-9061	N.A.	\$ 18.97	\$ 16.52	\$ 20.20	\$ 13.48	\$ 18.78	\$ 20.12	\$ 21.46	\$ 22.27
Medical Equipment Repairers	49-9062	360	\$ 19.69	\$ 11.73	\$ 23.67	\$ 10.89	\$ 13.21	\$ 18.04	\$ 26.16	\$ 31.42
Musical Instrument Repairers and Tuners	49-9063	100	\$ 15.79	\$ 11.44	\$ 17.96	\$ 11.15	\$ 12.20	\$ 13.80	\$ 18.04	\$ 21.74
Watch Repairers	49-9064	30	\$ 13.60	\$ 10.66	\$ 15.06	\$ 8.47	\$ 12.07	\$ 13.86	\$ 15.89	\$ 17.32
Precision Instrument and Equipment Repairers, All Other	49-9069	190	\$ 17.59	\$ 10.28	\$ 21.25	\$ 8.94	\$ 12.09	\$ 16.55	\$ 21.89	\$ 29.31
Coin, Vending, and Amusement Machine Servicers and Repairers	49-9091	350	\$ 13.75	\$ 11.09	\$ 15.08	\$ 10.25	\$ 11.66	\$ 13.20	\$ 15.48	\$ 17.63
Locksmiths and Safe Repairers	49-9094	100	\$ 15.48	\$ 10.03	\$ 18.21	\$ 9.43	\$ 11.43	\$ 15.21	\$ 19.54	\$ 21.96
Manufactured Building and Mobile Home Installers	49-9095	140	\$ 12.54	\$ 8.64	\$ 14.49	\$ 7.41	\$ 9.87	\$ 12.28	\$ 14.59	\$ 17.89
Riggers	49-9096	N.A.	\$ 29.37	\$ 13.28	\$ 37.41	\$ 10.30	\$ 15.36	\$ 17.95	\$ 50.35	\$ 55.01
Signal and Track Switch Repairers	49-9097	200	\$ 22.91	\$ 19.29	\$ 24.72	\$ 18.35	\$ 19.85	\$ 22.26	\$ 26.23	\$ 28.92
Helpers--Installation, Maintenance, and Repair Workers	49-9098	970	\$ 12.82	\$ 8.14	\$ 15.15	\$ 7.54	\$ 8.97	\$ 12.13	\$ 15.43	\$ 20.60
Installation, Maintenance, and Repair Workers, All Other	49-9099	1,360	\$ 16.74	\$ 10.24	\$ 19.99	\$ 9.54	\$ 11.41	\$ 16.83	\$ 21.08	\$ 25.53
PRODUCTION OCCUPATIONS	51-0000	159,840	\$ 14.06	\$ 9.38	\$ 16.40	\$ 8.81	\$ 10.49	\$ 13.27	\$ 16.64	\$ 20.76
First-Line Supervisors/Managers of Production and Operating Workers	51-1011	11,250	\$ 22.70	\$ 14.93	\$ 26.58	\$ 13.98	\$ 16.89	\$ 21.46	\$ 27.41	\$ 34.04
Coil Winders, Tapers, and Finishers	51-2021	210	\$ 12.26	\$ 9.82	\$ 13.48	\$ 9.41	\$ 10.10	\$ 11.25	\$ 15.35	\$ 16.88
Electrical and Electronic Equipment Assemblers	51-2022	1,330	\$ 14.42	\$ 9.75	\$ 16.76	\$ 9.31	\$ 10.87	\$ 13.56	\$ 18.28	\$ 21.59
Electromechanical Equipment Assemblers	51-2023	200	\$ 13.02	\$ 8.73	\$ 15.16	\$ 7.95	\$ 9.82	\$ 13.45	\$ 16.15	\$ 17.56
Engine and Other Machine Assemblers	51-2031	840	\$ 16.56	\$ 11.94	\$ 18.87	\$ 11.42	\$ 12.76	\$ 17.80	\$ 20.18	\$ 21.60
Structural Metal Fabricators and Fitters	51-2041	1,420	\$ 14.71	\$ 11.02	\$ 16.55	\$ 10.11	\$ 12.01	\$ 14.69	\$ 17.08	\$ 20.07
Fiberglass Laminators and Fabricators	51-2091	300	\$ 11.84	\$ 9.99	\$ 12.76	\$ 9.51	\$ 10.47	\$ 11.86	\$ 13.32	\$ 14.24
Team Assemblers	51-2092	31,040	\$ 12.86	\$ 9.22	\$ 14.67	\$ 8.55	\$ 10.11	\$ 12.39	\$ 15.05	\$ 17.71
Timing Device Assemblers, Adjusters, and Calibrators	51-2093	N.A.	\$ 13.24	\$ 10.16	\$ 14.78	\$ 7.90	\$ 12.19	\$ 13.84	\$ 15.13	\$ 16.80
Assemblers and Fabricators, All Other	51-2099	2,060	\$ 13.36	\$ 9.31	\$ 15.39	\$ 8.61	\$ 10.37	\$ 12.75	\$ 15.81	\$ 19.54
Bakers	51-3011	1,290	\$ 10.37	\$ 7.61	\$ 11.74	\$ 7.25	\$ 8.41	\$ 10.34	\$ 12.37	\$ 13.75
Butchers and Meat Cutters	51-3021	3,520	\$ 11.94	\$ 8.99	\$ 13.42	\$ 8.24	\$ 10.06	\$ 12.31	\$ 13.89	\$ 15.33
Meat, Poultry, and Fish Cutters and Trimmers	51-3022	2,350	\$ 11.37	\$ 9.35	\$ 12.37	\$ 8.94	\$ 9.64	\$ 10.76	\$ 13.10	\$ 15.79
Slaughterers and Meat Packers	51-3023	11,900	\$ 11.85	\$ 9.72	\$ 12.91	\$ 9.22	\$ 10.06	\$ 11.49	\$ 13.56	\$ 15.73
Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders	51-3091	310	\$ 11.70	\$ 9.69	\$ 12.71	\$ 9.15	\$ 10.02	\$ 11.45	\$ 13.21	\$ 15.12
Food Batchmakers	51-3092	2,020	\$ 13.61	\$ 9.59	\$ 15.62	\$ 9.30	\$ 10.47	\$ 13.01	\$ 16.24	\$ 18.50
Food Cooking Machine Operators and Tenders	51-3093	630	\$ 12.16	\$ 9.28	\$ 13.60	\$ 8.62	\$ 9.87	\$ 11.50	\$ 13.66	\$ 17.21
Computer-Controlled Machine Tool Operators, Metal and Plastic	51-4011	1,830	\$ 13.68	\$ 9.77	\$ 15.62	\$ 8.55	\$ 11.17	\$ 13.67	\$ 16.36	\$ 18.04
Numerical Tool and Process Control Programmers	51-4012	930	\$ 16.51	\$ 14.72	\$ 17.40	\$ 14.20	\$ 15.33	\$ 16.48	\$ 17.64	\$ 18.42
Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	51-4021	820	\$ 12.11	\$ 9.47	\$ 13.44	\$ 8.79	\$ 9.95	\$ 11.47	\$ 14.07	\$ 16.69

Occupation	Occupational Code	Estimated Employment	Mean Wage	Entry Wage	Experienced Wage	10th pct	25th pct	Median Wage	75th pct	90th pct
Forging Machine Setters, Operators, and Tenders, Metal and Plastic	51-4022	510	\$ 13.83	\$ 10.61	\$ 15.43	\$ 9.92	\$ 11.25	\$ 13.28	\$ 16.15	\$ 19.07
Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	51-4023	870	\$ 16.91	\$ 13.24	\$ 18.75	\$ 12.09	\$ 14.49	\$ 17.29	\$ 20.04	\$ 21.58
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	51-4031	4,710	\$ 14.16	\$ 10.98	\$ 15.73	\$ 9.98	\$ 11.91	\$ 14.05	\$ 16.62	\$ 18.46
Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	51-4032	520	\$ 13.73	\$ 10.81	\$ 15.18	\$ 9.88	\$ 11.65	\$ 13.32	\$ 15.71	\$ 18.35
Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	51-4033	890	\$ 14.30	\$ 11.18	\$ 15.87	\$ 10.12	\$ 12.45	\$ 14.73	\$ 16.50	\$ 17.62
Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	51-4034	600	\$ 13.75	\$ 10.86	\$ 15.19	\$ 10.02	\$ 11.74	\$ 13.82	\$ 16.00	\$ 17.56
Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	51-4035	600	\$ 16.25	\$ 12.69	\$ 18.02	\$ 11.38	\$ 14.12	\$ 15.88	\$ 17.62	\$ 22.73
Machinists	51-4041	5,030	\$ 15.72	\$ 11.85	\$ 17.65	\$ 10.98	\$ 13.28	\$ 15.68	\$ 17.75	\$ 21.04
Metal-Refining Furnace Operators and Tenders	51-4051	360	\$ 15.44	\$ 11.32	\$ 17.51	\$ 10.55	\$ 12.26	\$ 15.48	\$ 18.49	\$ 20.86
Pourers and Casters, Metal	51-4052	240	\$ 13.58	\$ 9.69	\$ 15.53	\$ 9.24	\$ 10.40	\$ 12.77	\$ 16.15	\$ 20.59
Model Makers, Metal and Plastic	51-4061	70	\$ 18.28	\$ 14.21	\$ 20.30	\$ 12.28	\$ 16.60	\$ 19.41	\$ 21.13	\$ 22.24
Patternmakers, Metal and Plastic	51-4062	200	\$ 20.47	\$ 12.13	\$ 24.63	\$ 10.40	\$ 14.12	\$ 20.57	\$ 26.28	\$ 31.72
Foundry Mold and Coremakers	51-4071	660	\$ 14.10	\$ 10.17	\$ 16.07	\$ 9.59	\$ 10.95	\$ 13.17	\$ 15.74	\$ 21.60
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	51-4072	1,930	\$ 12.68	\$ 9.51	\$ 14.27	\$ 8.94	\$ 10.44	\$ 12.39	\$ 14.67	\$ 17.16
Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	51-4081	1,630	\$ 13.87	\$ 10.81	\$ 15.41	\$ 9.95	\$ 11.53	\$ 13.73	\$ 16.29	\$ 17.93
Tool and Die Makers	51-4111	1,430	\$ 18.41	\$ 13.50	\$ 20.87	\$ 12.05	\$ 15.10	\$ 18.62	\$ 21.49	\$ 24.77
Welders, Cutters, Solderers, and Brazers	51-4121	6,780	\$ 14.88	\$ 11.41	\$ 16.63	\$ 10.53	\$ 12.13	\$ 14.08	\$ 16.92	\$ 20.67
Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	51-4122	1,330	\$ 15.06	\$ 11.73	\$ 16.72	\$ 10.97	\$ 12.62	\$ 14.77	\$ 17.30	\$ 20.15
Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	51-4191	310	\$ 14.97	\$ 10.44	\$ 17.22	\$ 9.76	\$ 11.31	\$ 14.37	\$ 18.90	\$ 21.70
Lay-Out Workers, Metal and Plastic	51-4192	80	\$ 14.80	\$ 12.81	\$ 15.80	\$ 11.24	\$ 14.04	\$ 15.21	\$ 16.45	\$ 17.18
Tool Grinders, Filers, and Sharpeners	51-4194	220	\$ 16.65	\$ 12.40	\$ 18.78	\$ 11.88	\$ 13.64	\$ 16.51	\$ 19.97	\$ 22.27
Metal Workers and Plastic Workers, All Other	51-4199	780	\$ 14.02	\$ 8.99	\$ 16.53	\$ 8.09	\$ 10.12	\$ 14.46	\$ 16.78	\$ 19.56
Bindery Workers	51-5011	1,120	\$ 11.59	\$ 7.84	\$ 13.46	\$ 6.85	\$ 8.97	\$ 10.96	\$ 14.00	\$ 17.43
Job Printers	51-5021	910	\$ 13.83	\$ 9.24	\$ 16.12	\$ 8.48	\$ 10.41	\$ 13.06	\$ 17.09	\$ 21.02
Prepress Technicians and Workers	51-5022	1,120	\$ 13.16	\$ 9.18	\$ 15.16	\$ 8.49	\$ 10.07	\$ 12.59	\$ 16.19	\$ 19.00
Printing Machine Operators	51-5023	2,470	\$ 14.46	\$ 9.38	\$ 17.01	\$ 8.68	\$ 10.67	\$ 14.02	\$ 18.14	\$ 21.56
Laundry and Dry-Cleaning Workers	51-6011	2,550	\$ 9.34	\$ 7.45	\$ 10.30	\$ 7.11	\$ 7.92	\$ 9.09	\$ 10.69	\$ 12.45
Pressers, Textile, Garment, and Related Materials	51-6021	510	\$ 9.33	\$ 7.74	\$ 10.12	\$ 7.42	\$ 8.09	\$ 9.19	\$ 10.59	\$ 11.73
Sewing Machine Operators	51-6031	1,580	\$ 10.20	\$ 7.39	\$ 11.61	\$ 6.94	\$ 8.06	\$ 9.92	\$ 11.81	\$ 13.93
Shoe and Leather Workers and Repairers	51-6041	30	\$ 9.13	\$ 7.67	\$ 9.87	\$ 7.25	\$ 7.79	\$ 8.66	\$ 10.37	\$ 12.07
Tailors, Dressmakers, and Custom Sewers	51-6052	200	\$ 10.04	\$ 7.49	\$ 11.31	\$ 7.16	\$ 8.22	\$ 10.04	\$ 11.77	\$ 13.45
Textile Cutting Machine Setters, Operators, and Tenders	51-6062	190	\$ 11.80	\$ 6.95	\$ 14.23	\$ 6.36	\$ 7.92	\$ 10.74	\$ 14.22	\$ 19.64
Textile Knitting and Weaving Machine Setters, Operators, and Tenders	51-6063	60	\$ 9.65	\$ 7.48	\$ 10.74	\$ 6.91	\$ 7.97	\$ 9.20	\$ 10.98	\$ 13.08

Occupation	Occupational Code	Estimated Employment	Mean Wage	Entry Wage	Experienced Wage	10th pct	25th pct	Median Wage	75th pct	90th pct
Extruding and Forming Machine Setters, Operators, and Tenders, Synthetic and Glass Fibers	51-6091	240	\$ 19.86	\$ 16.88	\$ 21.35	\$ 15.56	\$ 18.07	\$ 20.07	\$ 22.02	\$ 24.64
Fabric and Apparel Patternmakers	51-6092	60	\$ 11.31	\$ 6.81	\$ 13.56	\$ 6.26	\$ 7.63	\$ 11.56	\$ 14.84	\$ 16.64
Upholsterers	51-6093	180	\$ 13.41	\$ 8.94	\$ 15.64	\$ 7.73	\$ 10.00	\$ 11.70	\$ 16.74	\$ 21.10
Textile, Apparel, and Furnishings Workers, All Other	51-6099	280	\$ 10.15	\$ 7.48	\$ 11.49	\$ 7.04	\$ 8.31	\$ 9.86	\$ 11.40	\$ 13.99
Cabinetmakers and Bench Carpenters	51-7011	1,610	\$ 12.95	\$ 9.55	\$ 14.65	\$ 9.18	\$ 10.59	\$ 12.69	\$ 15.27	\$ 17.39
Furniture Finishers	51-7021	340	\$ 10.78	\$ 7.35	\$ 12.50	\$ 6.72	\$ 8.09	\$ 11.27	\$ 13.18	\$ 15.05
Patternmakers, Wood	51-7032	N.A.	\$ 18.32	\$ 13.50	\$ 20.73	\$ 12.01	\$ 14.99	\$ 16.87	\$ 20.12	\$ 29.34
Sawing Machine Setters, Operators, and Tenders, Wood	51-7041	1,030	\$ 13.11	\$ 9.73	\$ 14.80	\$ 9.36	\$ 10.38	\$ 12.55	\$ 16.01	\$ 17.63
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	51-7042	1,250	\$ 12.12	\$ 9.84	\$ 13.26	\$ 9.40	\$ 10.30	\$ 11.81	\$ 13.63	\$ 15.80
Woodworkers, All Other	51-7099	N.A.	\$ 11.38	\$ 8.91	\$ 12.61	\$ 8.16	\$ 9.53	\$ 11.34	\$ 13.36	\$ 14.56
Power Distributors and Dispatchers	51-8012	90	\$ 27.69	\$ 22.15	\$ 30.48	\$ 20.45	\$ 23.39	\$ 26.63	\$ 31.16	\$ 37.56
Power Plant Operators	51-8013	620	\$ 22.69	\$ 18.45	\$ 24.81	\$ 17.17	\$ 19.47	\$ 22.60	\$ 26.27	\$ 28.46
Stationary Engineers and Boiler Operators	51-8021	260	\$ 21.94	\$ 15.16	\$ 25.33	\$ 14.34	\$ 16.71	\$ 21.56	\$ 26.44	\$ 30.61
Water and Liquid Waste Treatment Plant and System Operators	51-8031	1,610	\$ 17.01	\$ 12.93	\$ 19.06	\$ 11.18	\$ 14.68	\$ 17.11	\$ 20.10	\$ 22.02
Chemical Plant and System Operators	51-8091	870	\$ 21.39	\$ 17.77	\$ 23.20	\$ 16.16	\$ 19.01	\$ 21.17	\$ 24.09	\$ 27.67
Gas Plant Operators	51-8092	110	\$ 28.42	\$ 22.83	\$ 31.21	\$ 20.92	\$ 25.51	\$ 29.08	\$ 32.56	\$ 34.85
Petroleum Pump System Operators, Refinery Operators, and Gaugers	51-8093	50	\$ 24.59	\$ 19.33	\$ 27.23	\$ 18.56	\$ 20.55	\$ 24.02	\$ 27.84	\$ 33.14
Chemical Equipment Operators and Tenders	51-9011	420	\$ 15.62	\$ 12.60	\$ 17.13	\$ 11.85	\$ 13.50	\$ 15.56	\$ 17.39	\$ 20.23
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	51-9012	1,190	\$ 15.21	\$ 10.69	\$ 17.48	\$ 8.70	\$ 12.68	\$ 15.47	\$ 18.54	\$ 20.99
Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	51-9021	600	\$ 13.70	\$ 9.95	\$ 15.57	\$ 9.51	\$ 10.55	\$ 12.91	\$ 16.17	\$ 20.20
Grinding and Polishing Workers, Hand	51-9022	360	\$ 11.35	\$ 9.40	\$ 12.32	\$ 8.75	\$ 9.80	\$ 11.02	\$ 12.72	\$ 14.82
Mixing and Blending Machine Setters, Operators, and Tenders	51-9023	1,590	\$ 13.32	\$ 9.05	\$ 15.46	\$ 8.29	\$ 9.91	\$ 13.61	\$ 16.10	\$ 17.65
Cutters and Trimmers, Hand	51-9031	160	\$ 11.53	\$ 8.34	\$ 13.12	\$ 7.85	\$ 8.96	\$ 11.25	\$ 14.05	\$ 16.42
Cutting and Slicing Machine Setters, Operators, and Tenders	51-9032	920	\$ 12.87	\$ 9.35	\$ 14.62	\$ 8.85	\$ 10.35	\$ 12.79	\$ 15.67	\$ 17.32
Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	51-9041	610	\$ 14.74	\$ 11.47	\$ 16.37	\$ 10.56	\$ 12.56	\$ 14.95	\$ 17.02	\$ 18.86
Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	51-9051	100	\$ 15.08	\$ 11.92	\$ 16.66	\$ 11.41	\$ 12.20	\$ 13.51	\$ 18.50	\$ 21.83
Inspectors, Testers, Sorters, Samplers, and Weighers	51-9061	4,500	\$ 15.47	\$ 10.39	\$ 18.02	\$ 9.47	\$ 11.70	\$ 15.24	\$ 18.83	\$ 22.04
Jewelers and Precious Stone and Metal Workers	51-9071	210	\$ 16.53	\$ 10.19	\$ 19.70	\$ 9.26	\$ 11.61	\$ 16.47	\$ 20.09	\$ 22.38
Dental Laboratory Technicians	51-9081	290	\$ 15.82	\$ 10.15	\$ 18.66	\$ 9.18	\$ 11.47	\$ 14.48	\$ 19.71	\$ 25.36
Medical Appliance Technicians	51-9082	180	\$ 19.41	\$ 11.28	\$ 23.48	\$ 10.26	\$ 12.79	\$ 16.26	\$ 24.91	\$ 32.85
Ophthalmic Laboratory Technicians	51-9083	490	\$ 10.99	\$ 9.08	\$ 11.95	\$ 8.46	\$ 9.28	\$ 10.31	\$ 11.55	\$ 14.25
Packaging and Filling Machine Operators and Tenders	51-9111	5,670	\$ 13.41	\$ 9.45	\$ 15.39	\$ 8.95	\$ 10.11	\$ 12.46	\$ 16.21	\$ 18.39
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	51-9121	1,340	\$ 14.14	\$ 10.13	\$ 16.13	\$ 9.53	\$ 11.05	\$ 13.60	\$ 16.92	\$ 20.59
Painters, Transportation Equipment	51-9122	580	\$ 13.73	\$ 9.11	\$ 16.03	\$ 8.21	\$ 10.22	\$ 12.90	\$ 15.66	\$ 19.58

Occupation	Occupational Code	Estimated Employment	Mean Wage	Entry Wage	Experienced Wage	10th pct	25th pct	Median Wage	75th pct	90th pct
Painting, Coating, and Decorating Workers	51-9123	280	\$ 12.56	\$ 9.27	\$ 14.20	\$ 8.62	\$ 10.17	\$ 12.63	\$ 14.65	\$ 17.02
Photographic Process Workers	51-9131	630	\$ 8.35	\$ 6.27	\$ 9.39	\$ 5.97	\$ 6.59	\$ 7.72	\$ 9.32	\$ 11.86
Photographic Processing Machine Operators	51-9132	350	\$ 9.18	\$ 7.07	\$ 10.23	\$ 6.50	\$ 7.51	\$ 8.53	\$ 10.19	\$ 12.66
Cementing and Gluing Machine Operators and Tenders	51-9191	120	\$ 11.94	\$ 7.85	\$ 13.99	\$ 7.58	\$ 8.52	\$ 11.30	\$ 15.90	\$ 17.54
Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders	51-9192	420	\$ 11.77	\$ 8.96	\$ 13.16	\$ 8.21	\$ 9.46	\$ 10.71	\$ 12.95	\$ 18.69
Cooling and Freezing Equipment Operators and Tenders	51-9193	200	\$ 13.35	\$ 10.09	\$ 14.98	\$ 9.48	\$ 11.11	\$ 14.03	\$ 15.85	\$ 17.02
Etchers and Engravers	51-9194	110	\$ 11.69	\$ 7.93	\$ 13.57	\$ 7.61	\$ 8.63	\$ 10.78	\$ 13.87	\$ 18.13
Molders, Shapers, and Casters, Except Metal and Plastic	51-9195	870	\$ 10.34	\$ 7.25	\$ 11.88	\$ 6.41	\$ 8.31	\$ 10.22	\$ 12.06	\$ 14.34
Paper Goods Machine Setters, Operators, and Tenders	51-9196	1,060	\$ 15.43	\$ 11.47	\$ 17.41	\$ 10.57	\$ 12.98	\$ 15.56	\$ 17.62	\$ 20.54
Tire Builders	51-9197	1,540	\$ 15.24	\$ 14.77	\$ 15.49	\$ 13.96	\$ 14.54	\$ 15.50	\$ 16.45	\$ 17.04
Helpers--Production Workers	51-9198	3,880	\$ 11.24	\$ 7.80	\$ 12.96	\$ 7.39	\$ 8.53	\$ 10.49	\$ 13.63	\$ 16.76
Production Workers, All Other	51-9199	6,690	\$ 13.08	\$ 8.36	\$ 15.43	\$ 7.74	\$ 9.30	\$ 13.36	\$ 16.46	\$ 18.02
TRANSPORTATION AND MATERIAL MOVING OCCUPATIONS	53-0000	116,940	\$ 13.40	\$ 8.24	\$ 15.98	\$ 7.23	\$ 9.41	\$ 12.25	\$ 16.47	\$ 21.16
Aircraft Cargo Handling Supervisors	53-1011	60	\$ 16.43	\$ 11.62	\$ 18.84	\$ 10.58	\$ 12.67	\$ 15.80	\$ 18.87	\$ 22.95
First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	53-1021	1,730	\$ 18.63	\$ 12.66	\$ 21.62	\$ 11.51	\$ 14.17	\$ 17.95	\$ 21.91	\$ 27.41
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	53-1031	3,420	\$ 21.27	\$ 13.82	\$ 24.99	\$ 12.80	\$ 15.53	\$ 19.33	\$ 25.28	\$ 29.94
Airline Pilots, Copilots, and Flight Engineers	53-2011	60	\$ 54,077.00	\$ 29,067.00	\$ 66,582.00	\$ 29,198.00	\$ 32,906.00	\$ 41,774.00	\$ 78,929.00	\$ 95,098.00
Commercial Pilots	53-2012	190	\$ 53,482.00	\$ 23,692.00	\$ 68,377.00	\$ 18,304.00	\$ 30,818.00	\$ 56,174.00	\$ 72,437.00	\$ 88,053.00
Air Traffic Controllers	53-2021	110	\$ 36.29	\$ 26.71	\$ 41.08	\$ 23.41	\$ 30.94	\$ 37.88	\$ 42.62	\$ 47.55
Airfield Operations Specialists	53-2022	40	\$ 13.45	\$ 6.68	\$ 16.84	\$ 6.17	\$ 7.11	\$ 11.15	\$ 20.14	\$ 22.76
Ambulance Drivers and Attendants, Except Emergency Medical Technicians	53-3011	120	\$ 9.85	\$ 6.19	\$ 11.69	\$ 5.92	\$ 6.57	\$ 8.53	\$ 10.77	\$ 18.53
Bus Drivers, Transit and Intercity	53-3021	1,800	\$ 12.52	\$ 8.32	\$ 14.60	\$ 7.43	\$ 9.56	\$ 12.50	\$ 15.23	\$ 17.96
Bus Drivers, School	53-3022	4,750	\$ 11.83	\$ 6.47	\$ 14.50	\$ 6.07	\$ 6.99	\$ 12.09	\$ 14.34	\$ 17.71
Driver/Sales Workers	53-3031	3,570	\$ 12.66	\$ 6.61	\$ 15.69	\$ 6.12	\$ 7.21	\$ 11.24	\$ 16.82	\$ 21.28
Truck Drivers, Heavy and Tractor-Trailer	53-3032	32,550	\$ 15.58	\$ 10.32	\$ 18.20	\$ 9.54	\$ 11.52	\$ 15.34	\$ 19.03	\$ 22.35
Truck Drivers, Light or Delivery Services	53-3033	9,050	\$ 12.94	\$ 8.11	\$ 15.35	\$ 7.12	\$ 9.25	\$ 11.83	\$ 15.43	\$ 20.82
Taxi Drivers and Chauffeurs	53-3041	1,150	\$ 9.00	\$ 6.70	\$ 10.16	\$ 6.23	\$ 7.27	\$ 9.16	\$ 10.52	\$ 11.68
Motor Vehicle Operators, All Other	53-3099	1,000	\$ 9.57	\$ 6.16	\$ 11.26	\$ 5.90	\$ 6.55	\$ 8.07	\$ 11.28	\$ 16.24
Locomotive Engineers	53-4011	830	\$ 26.54	\$ 17.79	\$ 30.92	\$ 16.20	\$ 19.26	\$ 22.40	\$ 34.31	\$ 42.67
Rail Yard Engineers, Dinkey Operators, and Hostlers	53-4013	40	\$ 17.63	\$ 13.09	\$ 19.91	\$ 10.74	\$ 15.39	\$ 18.74	\$ 20.93	\$ 22.25
Railroad Brake, Signal, and Switch Operators	53-4021	470	\$ 25.16	\$ 18.32	\$ 28.58	\$ 16.75	\$ 19.82	\$ 24.04	\$ 29.84	\$ 36.13
Railroad Conductors and Yardmasters	53-4031	660	\$ 26.17	\$ 17.15	\$ 30.69	\$ 15.75	\$ 18.78	\$ 27.22	\$ 33.44	\$ 36.44
Sailors and Marine Oilers	53-5011	270	\$ 10.55	\$ 8.96	\$ 11.35	\$ 8.28	\$ 9.28	\$ 10.32	\$ 11.49	\$ 13.48
Captains, Mates, and Pilots of Water Vessels	53-5021	130	\$ 25.50	\$ 16.78	\$ 29.85	\$ 15.31	\$ 18.48	\$ 23.85	\$ 33.06	\$ 37.20
Ship Engineers	53-5031	20	\$ 26.63	\$ 13.53	\$ 33.16	\$ 12.79	\$ 14.33	\$ 29.71	\$ 37.67	\$ 42.43
Bridge and Lock Tenders	53-6011	60	\$ 22.77	\$ 18.72	\$ 24.80	\$ 17.95	\$ 20.54	\$ 23.48	\$ 25.74	\$ 27.10
Parking Lot Attendants	53-6021	450	\$ 8.21	\$ 6.21	\$ 9.22	\$ 5.91	\$ 6.49	\$ 7.52	\$ 8.92	\$ 11.87
Service Station Attendants	53-6031	400	\$ 8.43	\$ 6.00	\$ 9.65	\$ 5.81	\$ 6.52	\$ 7.99	\$ 9.94	\$ 12.30
Traffic Technicians	53-6041	40	\$ 21.31	\$ 14.64	\$ 24.65	\$ 13.37	\$ 16.86	\$ 20.88	\$ 25.25	\$ 29.26

Occupation	Occupational Code	Employment	Estimated	Mean Wage	Entry Wage	Experienced Wage	10th pct	25th pct	Median Wage	75th pct	90th pct							
Transportation Inspectors	53-6051	160	\$	25.66	\$	17.45	\$	29.75	\$	15.80	\$	19.46	\$	22.65	\$	32.92	\$	40.36
Transportation Workers, All Other	53-6099	110	\$	13.06	\$	9.46	\$	14.87	\$	9.13	\$	10.09	\$	11.73	\$	14.06	\$	21.63
Conveyor Operators and Tenders	53-7011	1,250	\$	12.02	\$	9.90	\$	13.09	\$	9.34	\$	10.00	\$	11.11	\$	13.59	\$	16.40
Crane and Tower Operators	53-7021	500	\$	19.15	\$	12.87	\$	22.28	\$	11.35	\$	14.47	\$	18.11	\$	22.73	\$	26.86
Dredge Operators	53-7031	70	\$	14.32	\$	10.55	\$	16.21	\$	9.80	\$	11.97	\$	15.44	\$	16.95	\$	17.88
Excavating and Loading Machine and Dragline Operators	53-7032	860	\$	15.55	\$	11.53	\$	17.56	\$	10.83	\$	12.90	\$	15.53	\$	17.44	\$	20.63
Hoist and Winch Operators	53-7041	N.A.	\$	13.76	\$	10.41	\$	15.44	\$	9.78	\$	10.52	\$	11.83	\$	16.92	\$	21.15
Industrial Truck and Tractor Operators	53-7051	9,820	\$	13.38	\$	9.76	\$	15.19	\$	9.31	\$	10.65	\$	12.95	\$	15.91	\$	18.30
Cleaners of Vehicles and Equipment	53-7061	3,330	\$	9.56	\$	6.88	\$	10.91	\$	6.34	\$	7.44	\$	9.12	\$	11.08	\$	13.47
Laborers and Freight, Stock, and Material Movers, Hand	53-7062	24,040	\$	10.79	\$	7.67	\$	12.36	\$	7.17	\$	8.52	\$	10.41	\$	12.86	\$	15.54
Machine Feeders and Offbearers	53-7063	1,440	\$	11.27	\$	8.70	\$	12.55	\$	8.01	\$	9.36	\$	11.31	\$	12.89	\$	13.89
Packers and Packagers, Hand	53-7064	9,330	\$	9.06	\$	6.24	\$	10.47	\$	5.95	\$	6.79	\$	8.46	\$	10.58	\$	13.35
Gas Compressor and Gas Pumping Station Operators	53-7071	60	\$	24.67	\$	19.39	\$	27.31	\$	19.05	\$	21.09	\$	24.51	\$	27.89	\$	31.98
Pump Operators, Except Wellhead Pumpers	53-7072	20	\$	12.58	\$	8.22	\$	14.75	\$	7.85	\$	8.75	\$	10.62	\$	17.07	\$	21.42
Refuse and Recyclable Material Collectors	53-7081	1,530	\$	12.93	\$	7.95	\$	15.42	\$	7.21	\$	8.94	\$	12.36	\$	16.75	\$	20.33
Tank Car, Truck, and Ship Loaders	53-7121	150	\$	15.49	\$	11.19	\$	17.63	\$	10.28	\$	12.17	\$	15.56	\$	19.17	\$	21.08

Job Outlook and Projections

Iowa Job Outlook

A summary of information about the Iowa job market and economy for ten years, from 2002 to 2012. This information is available by county, statewide and Iowa Workforce Development (IWD) Region.

<http://www.iowaworkforce.org/lmi/occupations/outlook/index.html>

Iowa Statewide Occupational Projections

The occupational projections are produced by applying the Occupational Employment Statistics (OES) wage survey's staffing patterns of an industry to the industry employment totals which result in a distribution of occupations over the period 2002 to 2012. This information is also available by IWD Region.

<http://www.iowaworkforce.org/lmi/occupations/projections/index.html>

2012

Statewide Iowa Job Outlook

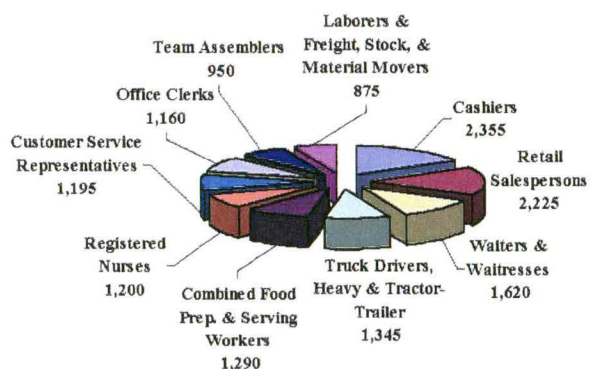
The 2012 Job Outlook presents a summary of information about the Iowa job market and economy for ten years from 2002 to 2012. Graphs and tables depict information on industries and occupations that will impact our state's economic outlook through the year 2012. Detailed information for industry and occupational projections for 2012 and other labor market information may be requested by sending an e-mail to iwd.lmi@iwd.state.ia.us



**Industries with the Most Openings
2002-2012**



**Occupations with the Most Annual Openings
2002-2012**

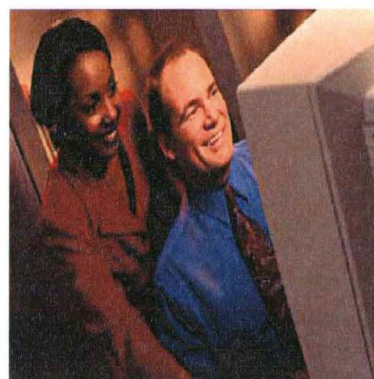


The Iowa economy is expected to generate 220,500 jobs which includes new jobs and replacements between the years 2002 and 2012. This will result in 60,600 annual new jobs for Iowa. The state's projected rate of growth is 13.5%. Health care and the service industries are expected to be the leaders in job creation. Many industries, such as educational services and health care, will also replace workers due to retirement or other reasons that may cause workers to leave the workforce on a permanent basis.

Iowa — Occupations With Largest Total

Less Than High School

Estimated Annual Openings 2002-2012	Occupational Title	Iowa 2005 Average Hourly Wage
2,355	Cashiers	\$7.60
2,225	Retail Salespersons	10.29
1,620	Waiters & Waitresses	6.84
1,290	Food Preparation & Serving Workers	7.06
1,160	Office Clerks, General	10.97
875	Laborers & Freight, Stock & Material Movers	10.79
825	Janitors & Cleaners	9.76
715	Child Care Workers	7.86
650	Nursing Aides, Orderlies & Attendants	10.65
640	Stock Clerks & Order Fillers	10.06
635	Food Preparation Workers	7.98
510	Teacher Assistants	17,322*
*Average annual wage		



High School or GED

Occupations that require a high school education or less provide opportunities to learn the basic skills associated with being a good employee such as listening, speaking, writing, and reading.

The more education obtained the wider the door opens to career choices and the possibility for increased wages.

Estimated Annual Openings 2002-2012	Occupational Title	Iowa 2005 Average Hourly Wage
1,345	Truck Drivers, Heavy & Tractor-Trailer	\$15.58
1,195	Customer Service Representatives	12.73
950	Team Assemblers	12.86
595	Bookkeeping, Accounting & Auditing Clerks	13.00
545	Sales Reps. Whsl. & Mfg. except Technical & Scientific Products	24.57
480	Maintenance & Repair Workers, General	15.28
450	Slaughterers & Meat Packers	11.85
435	Secretaries, except Legal, Medical & Executive	12.21
325	Social & Human Service Assistants	12.39
325	Executive Secretaries & Administrative Assistants	15.99
265	Construction Laborers	14.39
260	Cooks, Institution & Cafeteria	9.36

Annual Openings By Education Level

Postsecondary Education Training

Estimated Annual Openings 2002-2012	Occupational Title	Iowa 2005 Average Hourly Wage
1,200	Registered Nurses	\$21.42
760	Supervisors/Managers of Retail Sales Workers	16.89
460	Automotive Service Technicians & Mechanics	14.32
425	Supervisors/Managers of Production & Operating Workers	22.70
415	Supervisors/Managers of Office & Administrative Support Workers	19.81
355	Carpenters	16.11
345	Welders, Cutters, Solderers & Brazers	14.88
325	Cooks, Restaurant	8.88
300	Electricians	19.29
280	Supervisors/Managers of Food Preparation & Serving Workers	12.62
255	Supervisors/Managers of Non-Retail Sales Workers	28.37
250	Licensed Practical & Licensed Vocational Nurses	15.22
230	Supervisors/Managers of Mechanics, Installers & Repairers	23.43
225	Hairdressers, Hairstylists & Cosmetologists	11.02
210	Plumbers, Pipefitters & Steamfitters	18.93

In Iowa, almost 45% of all occupations will require a postsecondary education or above.

The most frequent skills associated with these education levels are problem solving, social skills and resource management.

Bachelor Degree or Above

Estimated Annual Openings 2002-2012	Occupational Title	Iowa 2005 Average Hourly Wage
615	General & Operations Managers	\$40.04
550	Secondary School Teachers, except Special & Vocational Ed.	35,482*
500	Elementary School Teachers, except Special Ed.	35,067*
360	Accountants & Auditors	25.15
260	Insurance Sales Agents	22.50
240	Computer Systems Analysts	29.74
190	Medical & Health Services Managers	29.26
190	Recreation Workers	9.79
180	Middle School Teachers, except Special & Vocational Ed.	35,797*
175	Financial Managers	41.68
155	Sales Managers	39.77
140	Lawyers	42.31
140	Management Analysts	29.42
*Average annual wage		



Growing and Declining Occupations

Growing Occupations

Occupational Title	2002 Estimated Employment	2012 Projected Employment	Annual Growth Rate (%)
Medical Assistants	2,115	3,120	4.8
Network Systems & Data Communications Analysts	1,465	2,090	4.3
Medical Records & Health Information Technicians	1,880	2,635	4.0
Database Administrators	670	935	4.0
Computer Software Engineers, Applications	2,240	3,115	3.9
Physician Assistants	705	980	3.9
Home Health Aides	6,940	9,580	3.8
Set & Exhibit Designers	240	330	3.8
Social & Human Service Assistants	5,950	8,175	3.7
Physical Therapist Assistants	620	850	3.7
Computer Systems Analysts	5,135	6,955	3.5
Personal & Home Care Aides	6,360	8,595	3.5
Philosophy & Religion Teachers, Postsecondary	305	410	3.4
Mental Health & Substance Abuse Social Workers	645	865	3.4
Self-Enrichment Education Teachers	2,160	2,895	3.4
Physical Therapist Aides	445	595	3.4
Sales Managers	2,985	3,970	3.3
Residential Advisors	700	930	3.3
Computer & Information Systems Managers	2,380	3,155	3.3
Computer Software Engineers, Systems Software	2,120	2,810	3.3

Growing occupations are occupations whose growth rate is above average and are expected to have the largest percentage of growth between 2002 and 2012

However, even though an occupation is expected to grow rapidly it may not necessarily provide the largest number of job openings. It is therefore recommended that consideration also be given to employment levels.

Declining occupations show the expected reduction rate for occupations that may occur due to declining industry employment and technological change.

Declining occupations may still be considered a source for occupational employment. However, careful thought should be given to training time and costs.

Declining Occupations

Occupation Title	2002 Estimated Employment	2012 Projected Employment	Annual Growth Rate (%)
Word Processors & Typists	2,250	1,740	-2.3
Electrical & Electronic Equipment Assemblers	2,755	2,305	-1.6
Loan Interviewers & Clerks	1,260	1,100	-1.3
Computer Operators	2,510	2,195	-1.3
Postal Service Mail Sorters, Processors & Machine Operators	3,050	2,670	-1.2
Travel Agents	620	545	-1.2
Farmers & Ranchers	90,055	79,710	-1.1
Meter Readers, Utilities	765	680	-1.1
Order Clerks	2,530	2,285	-1.0
Coil Winders, Tapers & Finishers	375	340	-0.9
Prepress Technicians & Workers	1,230	1,125	-0.9
Locomotive Engineers	850	780	-0.8
Announcers	1,295	1,200	-0.7
Procurement Clerks	615	575	-0.7
Credit Authorizers, Checkers & Clerks	985	925	-0.6
Electrical Power-Line Installers & Repairers	1,400	1,320	-0.6
Bindery Workers	1,160	1,100	-0.5
Railroad Conductors & Yardmasters	685	650	-0.5



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IOWA STATEWIDE OCCUPATIONAL PROJECTIONS: 2002-2012, LISTED BY OCCUPATIONAL GROUPS

SOC Code	Occupation Title	2002 Estimated Employment	2012 Projected Employment	2002-2012 Employment Change	Annual New Jobs	Annual Replaces- ments	Total Annual Openings
	Total, All Occupations	1,680,865	1,885,070	220,465	22,045	38,585	60,630
11-0000	Management Occupations	169,635	172,145	12,885	1,290	2,025	3,310
11-1011	Chief Executives	3,710	4,345	635	65	70	135
11-1021	General and Operations Managers	17,435	20,305	2,870	285	330	615
11-1031	Legislators	1,690	1,735	45	5	20	25
11-2011	Advertising and Promotions Managers	680	810	130	15	10	25
11-2021	Marketing Managers	1,570	1,890	320	30	30	60
11-2022	Sales Managers	2,985	3,970	985	100	55	155
11-2031	Public Relations Managers	590	690	100	10	10	20
11-3011	Administrative Services Managers	4,045	4,600	555	55	80	135
11-3021	Computer and Information Systems Managers	2,380	3,155	775	80	45	120
11-3031	Financial Managers	5,410	6,370	960	95	80	175
11-3040	Human Resources Managers	1,475	1,780	305	30	25	55
11-3051	Industrial Production Managers	2,240	2,590	355	35	45	80
11-3061	Purchasing Managers	790	830	40	5	15	20
11-3071	Transportation, Storage, and Distribution Managers	975	1,165	190	20	20	40
11-9011	Farm, Ranch, and Other Agricultural Managers	1,820	2,215	390	40	30	70
11-9012	Farmers and Ranchers	90,055	79,710	0	0	530	530
11-9021	Construction Managers	3,270	3,595	325	35	60	90
11-9031	Education Administrators, Preschool and Child Care Center/Program	570	705	135	15	15	30
11-9032	Education Administrators, Elementary and Secondary School	2,570	2,880	310	30	65	95
11-9033	Education Administrators, Postsecondary	1,470	1,720	250	25	35	60
11-9039	Education Administrators, All Other	480	525	45	5	10	15
11-9041	Engineering Managers	1,785	1,965	185	20	35	55
11-9051	Food Service Managers	3,245	3,570	325	30	55	85
11-9061	Funeral Directors	530	525	0	0	15	15
11-9081	Lodging Managers	830	890	60	5	15	20
11-9111	Medical and Health Services Managers	4,560	5,595	1,035	105	90	190
11-9121	Natural Sciences Managers	350	385	35	5	5	10
11-9131	Postmasters and Mail Superintendents	845	820	0	0	15	15
11-9141	Property, Real Estate, and Community Association Managers	1,180	1,330	155	15	20	35
11-9151	Social and Community Service Managers	2,040	2,440	400	40	40	80
11-9199	Managers, All Other	7,895	8,835	940	95	155	250
13-0000	Business and Financial Operations Occupations	59,755	72,490	12,735	1,275	1,070	2,345
13-1021	Purchasing Agents and Buyers, Farm Products	905	960	55	5	30	35
13-1022	Wholesale and Retail Buyers, Except Farm Products	1,880	2,010	130	15	50	60
13-1023	Purchasing Agents, Except Wholesale, Retail, and Farm Products	1,900	2,155	255	25	45	75
13-1031	Claims Adjusters, Examiners, and Investigators	2,655	3,300	645	65	35	95
13-1041	Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	1,650	1,840	190	20	40	60
13-1051	Cost Estimators	1,815	2,165	350	35	40	75
13-1071	Employment, Recruitment, and Placement Specialists	1,825	2,275	450	45	30	75
13-1072	Compensation, Benefits, and Job Analysis Specialists	970	1,230	255	25	15	40
13-1073	Training and Development Specialists	2,230	2,930	705	70	35	105
13-1111	Management Analysts	4,155	4,960	805	80	55	140
13-1121	Meeting and Convention Planners	285	325	40	5	5	10

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SOC Code	Occupation Title	2002 Estimated Employment	2012 Projected Employment	2002-2012 Employment Change	Annual New Jobs	Annual Replace- ments	Total Annual Openings
	Total, All Occupations	1,680,865	1,885,070	220,465	22,045	38,585	60,630
13-1199	Business Operations Specialists, All Other	14,890	19,110	4,220	420	255	675
13-2011	Accountants and Auditors	9,355	11,210	1,855	185	175	360
13-2021	Appraisers and Assessors of Real Estate	1,805	1,980	175	20	40	55
13-2041	Credit Analysts	765	920	155	15	10	25
13-2051	Financial Analysts	2,135	2,600	470	45	30	80
13-2052	Personal Financial Advisors	1,045	1,310	270	25	15	40
13-2053	Insurance Underwriters	1,975	2,390	415	40	35	75
13-2061	Financial Examiners	490	540	45	5	10	15
13-2071	Loan Counselors	405	475	70	5	5	15
13-2072	Loan Officers	3,595	4,260	665	65	60	125
13-2081	Tax Examiners, Collectors, and Revenue Agents	325	325	0	0	10	10
13-2082	Tax Preparers	1,040	1,265	225	25	15	40
13-2099	Financial Specialists, All Other	1,150	1,375	220	20	20	40
15-0000	Computer and Mathematical Occupations	23,595	30,660	7,065	705	325	1,035
15-1021	Computer Programmers	3,590	4,100	510	50	85	135
15-1031	Computer Software Engineers, Applications	2,240	3,115	880	90	20	110
15-1032	Computer Software Engineers, Systems Software	2,120	2,810	690	70	20	90
15-1041	Computer Support Specialists	4,175	5,365	1,195	120	50	170
15-1051	Computer Systems Analysts	5,135	6,955	1,815	180	60	240
15-1061	Database Administrators	670	935	270	25	5	35
15-1071	Network and Computer Systems Administrators	1,985	2,590	605	60	20	85
15-1081	Network Systems and Data Communications Analysts	1,465	2,090	620	60	15	80
15-1099	Computer Specialists, All Other	1,075	1,430	355	35	10	50
15-2011	Actuaries	285	350	65	5	10	20
15-2031	Operations Research Analysts	695	740	45	5	15	20
17-0000	Architecture and Engineering Occupations	19,020	21,435	2,420	240	435	675
17-1011	Architects, Except Landscape and Naval	765	905	140	15	10	25
17-1022	Surveyors	400	410	15	*	*	15
17-2021	Agricultural Engineers	225	245	20	*	*	10
17-2051	Civil Engineers	1,375	1,460	85	10	20	30
17-2061	Computer Hardware Engineers	590	595	5	*	*	10
17-2071	Electrical Engineers	1,375	1,495	120	10	25	40
17-2072	Electronics Engineers, Except Computer	535	610	75	5	10	20
17-2081	Environmental Engineers	230	295	70	5	5	10
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	290	330	40	5	5	10
17-2112	Industrial Engineers	1,655	2,005	350	35	40	75
17-2131	Materials Engineers	190	215	25	5	5	10
17-2141	Mechanical Engineers	2,350	2,705	355	35	65	100
17-2199	Engineers, All Other	1,135	1,260	125	15	20	35
17-3011	Architectural and Civil Drafters	920	950	30	5	25	30
17-3012	Electrical and Electronics Drafters	235	265	30	5	5	10
17-3013	Mechanical Drafters	980	1,130	155	15	30	45
17-3022	Civil Engineering Technicians	595	625	30	5	15	15

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	Total, All Occupations	1,680,865	1,885,070	220,465	22,045	38,585	60,630
17-3023	Electrical and Electronic Engineering Technicians	1,540	1,685	145	15	30	45
17-3024	Electro-Mechanical Technicians	305	335	30	5	5	10
17-3026	Industrial Engineering Technicians	560	675	115	10	10	25
17-3027	Mechanical Engineering Technicians	575	715	140	15	10	25
17-3031	Surveying and Mapping Technicians	540	650	115	10	20	30
17-3099	Drafters, Engineering, and Mapping Technicians, All Other (OES Only)	1,010	1,160	150	15	25	40
19-0000	Life, Physical, and Social Science Occupations	11,070	12,340	1,270	125	255	380
19-1010	Agricultural and Food Scientists	985	1,045	60	5	20	25
19-1022	Microbiologists	195	240	45	5	5	10
19-1031	Conservation Scientists	355	355	0	0	10	10
19-1099	Life Scientists, All Other	560	625	65	5	10	15
19-2031	Chemists	315	370	50	5	10	15
19-3021	Market Research Analysts	1,550	1,850	300	30	40	70
19-3022	Survey Researchers	190	250	60	5	5	10
19-3031	Clinical, Counseling, and School Psychologists	985	1,110	125	15	20	35
19-3051	Urban and Regional Planners	205	215	10	*	*	10
19-3099	Social Scientists and Related Workers, All Other	275	300	25	5	5	10
19-4011	Agricultural and Food Science Technicians	905	975	65	5	20	25
19-4021	Biological Technicians	855	1,035	175	20	15	30
19-4031	Chemical Technicians	245	265	20	*	*	10
19-4091	Environmental Science and Protection Technicians, Including Health	275	285	10	*	*	10
19-4093	Forest and Conservation Technicians	405	405	0	0	10	10
19-4099	Life, Physical, and Social Science Technicians, All Other	1,655	1,790	135	15	40	50
21-0000	Community and Social Services Occupations	23,230	29,025	5,795	580	450	1,025
21-1011	Substance Abuse and Behavioral Disorder Counselors	1,245	1,430	185	20	30	45
21-1012	Educational, Vocational, and School Counselors	2,480	2,640	155	15	55	70
21-1013	Marriage and Family Therapists	600	725	125	15	15	25
21-1014	Mental Health Counselors	825	1,035	210	20	20	40
21-1015	Rehabilitation Counselors	1,790	2,255	460	45	40	85
21-1021	Child, Family, and School Social Workers	3,105	3,695	585	60	55	110
21-1022	Medical and Public Health Social Workers	1,235	1,525	295	30	20	50
21-1023	Mental Health and Substance Abuse Social Workers	645	865	220	20	10	35
21-1091	Health Educators	245	280	35	5	5	10
21-1092	Probation Officers and Correctional Treatment Specialists	385	400	15	*	*	10
21-1093	Social and Human Service Assistants	5,950	8,175	2,225	220	105	325
21-2011	Clergy	405	410	5	0	10	10
21-9099	Counselors, Social, and Religious Workers, All Other (OES Only)	4,235	5,505	1,270	125	80	205
23-0000	Legal Occupations	9,205	10,380	1,170	115	105	225
23-1011	Lawyers	4,885	5,645	760	75	65	140
23-2011	Paralegals and Legal Assistants	1,250	1,560	310	30	10	40

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	Total, All Occupations	1,680,865	1,885,070	220,465	22,045	38,585	60,630
23-2093	Title Examiners, Abstractors, and Searchers	805	820	15	*	*	10
23-9099	Legal and Related Workers, All Other (OES Only)	1,195	1,235	40	5	15	15
25-0000	Education, Training, and Library Occupations	99,250	113,460	14,210	1,420	2,125	3,550
25-1011	Business Teachers, Postsecondary	1,055	1,360	310	30	25	55
25-1021	Computer Science Teachers, Postsecondary	420	540	120	10	10	20
25-1022	Mathematical Science Teachers, Postsecondary	575	725	150	15	15	30
25-1032	Engineering Teachers, Postsecondary	530	670	140	15	10	25
25-1041	Agricultural Sciences Teachers, Postsecondary	255	320	65	5	5	10
25-1042	Biological Science Teachers, Postsecondary	685	865	185	20	15	35
25-1052	Chemistry Teachers, Postsecondary	230	295	65	5	5	10
25-1054	Physics Teachers, Postsecondary	210	270	60	5	5	10
25-1063	Economics Teachers, Postsecondary	210	270	60	5	5	10
25-1065	Political Science Teachers, Postsecondary	165	215	50	5	5	10
25-1066	Psychology Teachers, Postsecondary	340	440	100	10	10	20
25-1067	Sociology Teachers, Postsecondary	210	265	60	5	5	10
25-1071	Health Specialties Teachers, Postsecondary	1,075	1,380	305	30	25	55
25-1072	Nursing Instructors and Teachers, Postsecondary	470	595	125	10	10	25
25-1081	Education Teachers, Postsecondary	850	1,095	250	25	20	45
25-1121	Art, Drama, and Music Teachers, Postsecondary	910	1,190	280	30	20	50
25-1122	Communications Teachers, Postsecondary	410	525	115	10	10	20
25-1123	English Language and Literature Teachers, Postsecondary	655	830	180	20	15	35
25-1124	Foreign Language and Literature Teachers, Postsecondary	295	385	90	10	5	15
25-1125	History Teachers, Postsecondary	220	280	60	5	5	10
25-1126	Philosophy and Religion Teachers, Postsecondary	305	410	100	10	5	15
25-1191	Graduate Teaching Assistants	570	710	140	15	15	25
25-1193	Recreation and Fitness Studies Teachers, Postsecondary	245	310	65	5	5	10
25-1194	Vocational Education Teachers, Postsecondary	955	1,230	275	25	20	50
25-1199	Postsecondary Teachers, All Other	2,835	3,585	750	75	65	140
25-2011	Preschool Teachers, Except Special Education	3,710	4,715	1,005	100	45	145
25-2012	Kindergarten Teachers, Except Special Education	1,515	1,790	275	30	20	45
25-2021	Elementary School Teachers, Except Special Education	17,630	18,715	1,085	110	390	500
25-2022	Middle School Teachers, Except Special and Vocational Education	7,885	7,925	40	5	175	180
25-2031	Secondary School Teachers, Except Special and Vocational Education	14,705	16,045	1,345	135	415	550
25-2032	Vocational Education Teachers, Secondary School	1,550	1,585	30	5	45	45
25-2041	Special Education Teachers, Preschool, Kindergarten, and Elementary School	2,185	2,620	430	45	50	95
25-2042	Special Education Teachers, Middle School	1,160	1,400	240	25	30	50
25-2043	Special Education Teachers, Secondary School	1,985	2,355	370	35	45	85
25-3011	Adult Literacy, Remedial Education, and GED Teachers and Instructors	670	760	85	10	10	15
25-3021	Self-Enrichment Education Teachers	2,160	2,895	735	75	25	100
25-3999	Teachers, Primary, Secondary, and Adult, All Other (OES Only)	6,350	7,975	1,625	160	80	240
25-4010	Archivists, Curators, and Museum Technicians	225	250	25	5	5	10
25-4021	Librarians	1,755	1,765	10	*	*	45
25-4031	Library Technicians	1,545	1,670	125	10	55	70
25-9031	Instructional Coordinators	1,575	1,795	215	20	25	45
25-9041	Teacher Assistants	15,645	17,705	2,060	205	300	510
25-9199	Library, Museum, Training, and Other Education Workers, All Other (OES Only)	980	1,135	155	15	15	30

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SOC Code	Occupation Title	2002 Estimated Employment	2012 Projected Employment	2002-2012 Employment Change	Annual New Jobs	Annual Replace- ments	Total Annual Openings
	Total, All Occupations	1,680,865	1,885,070	220,465	22,045	38,585	60,630
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	25,695	28,890	3,295	330	485	815
27-1011	Art Directors	225	250	25	5	5	10
27-1013	Fine Artists, Including Painters, Sculptors, and Illustrators	305	340	35	5	5	10
27-1014	Multi-Media Artists and Animators	250	285	35	5	5	10
27-1021	Commercial and Industrial Designers	525	580	60	5	5	15
27-1023	Floral Designers	1,220	1,295	75	10	15	25
27-1024	Graphic Designers	2,730	3,235	505	50	35	85
27-1025	Interior Designers	590	695	110	10	10	20
27-1026	Merchandise Displayers and Window Trimmers	1,355	1,610	255	25	20	45
27-1027	Set and Exhibit Designers	240	330	90	10	5	10
27-1099	Art and Design Workers, All Other (OES Only)	1,570	1,735	165	15	30	45
27-2012	Producers and Directors	520	555	35	5	10	10
27-2022	Coaches and Scouts	3,280	3,700	420	40	65	105
27-2031	Dancers	175	190	15	*	*	10
27-2032	Choreographers	360	390	25	5	20	25
27-2042	Musicians and Singers	365	380	15	*	*	10
27-3010	Announcers	1,295	1,200	0	0	35	35
27-3020	News Analysts, Reporters and Correspondents	925	1,005	85	10	20	30
27-3031	Public Relations Specialists	1,570	1,945	375	35	25	60
27-3041	Editors	1,315	1,445	130	15	30	45
27-3042	Technical Writers	455	550	95	10	15	25
27-3043	Writers and Authors	1,980	2,155	175	20	35	50
27-3091	Interpreters and Translators	305	350	45	5	5	10
27-3099	Media and Communication Workers, All Other	545	600	55	5	5	10
27-4011	Audio and Video Equipment Technicians	205	230	25	5	5	10
27-4012	Broadcast Technicians	235	255	20	*	*	10
27-4021	Photographers	1,875	2,115	235	25	40	60
27-4031	Camera Operators, Television, Video, and Motion Picture	405	470	65	5	10	15
29-0000	Healthcare Practitioners and Technical Occupations	70,915	85,640	14,720	1,470	1,365	2,835
29-1011	Chiropractors	915	1,050	135	15	15	30
29-1020	Dentists	1,545	1,605	60	5	25	30
29-1031	Dietitians and Nutritionists	650	725	75	5	15	25
29-1041	Optometrists	420	480	60	5	10	20
29-1051	Pharmacists	2,840	3,575	735	75	55	130
29-1062	Family and General Practitioners	1,960	2,320	360	35	25	60
29-1063	Internists, General	260	305	45	5	5	10
29-1064	Obstetricians and Gynecologists	265	315	50	5	5	10
29-1066	Psychiatrists	370	445	75	10	5	15
29-1067	Surgeons	350	415	65	5	5	10
29-1069	Physicians and Surgeons, All Other	1,200	1,355	155	15	15	30
29-1071	Physician Assistants	705	980	270	25	10	40
29-1111	Registered Nurses	27,485	33,755	6,265	625	575	1,200
29-1121	Audiologists	210	240	35	5	5	10
29-1122	Occupational Therapists	645	805	160	15	10	25

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	Total, All Occupations	1,680,865	1,885,070	220,465	22,045	38,585	60,630
29-1123	Physical Therapists	1,305	1,650	345	35	15	45
29-1125	Recreational Therapists	420	440	25	*	*	10
29-1126	Respiratory Therapists	720	920	200	20	25	45
29-1127	Speech-Language Pathologists	995	1,105	115	10	25	35
29-1131	Veterinarians	1,165	1,380	215	20	30	50
29-1199	Health Diagnosing and Treating Practitioners, All Other	405	495	90	10	10	20
29-2011	Medical and Clinical Laboratory Technologists	1,565	1,790	230	25	40	65
29-2012	Medical and Clinical Laboratory Technicians	1,620	1,815	195	20	45	65
29-2021	Dental Hygienists	1,695	2,230	535	55	15	70
29-2031	Cardiovascular Technologists and Technicians	370	475	105	10	5	15
29-2032	Diagnostic Medical Sonographers	470	545	80	10	10	15
29-2034	Radiologic Technologists and Technicians	1,810	2,135	325	35	35	65
29-2041	Emergency Medical Technicians and Paramedics	1,965	2,350	390	40	25	60
29-2051	Dietetic Technicians	320	375	55	5	5	10
29-2052	Pharmacy Technicians	2,435	3,060	625	65	30	95
29-2054	Respiratory Therapy Technicians	275	360	85	10	5	10
29-2055	Surgical Technologists	630	765	135	15	10	20
29-2056	Veterinary Technologists and Technicians	380	495	115	10	5	15
29-2061	Licensed Practical and Licensed Vocational Nurses	6,865	7,855	990	100	150	250
29-2071	Medical Records and Health Information Technicians	1,880	2,635	755	75	25	105
29-2081	Opticians, Dispensing	760	870	115	10	15	25
29-9010	Occupational Health and Safety Specialists and Technicians	270	300	25	5	5	10
29-9199	Health Professionals and Technicians, All Other (OES Only)	1,880	2,175	295	30	35	65
31-0000	Healthcare Support Occupations	39,680	49,725	10,045	1,005	610	1,615
31-1011	Home Health Aides	6,940	9,580	2,640	265	90	355
31-1012	Nursing Aides, Orderlies, and Attendants	19,680	23,585	3,905	390	260	650
31-2021	Physical Therapist Assistants	620	850	230	25	10	35
31-2022	Physical Therapist Aides	445	595	150	15	5	20
31-9011	Massage Therapists	1,250	1,410	160	15	25	40
31-9091	Dental Assistants	2,330	3,060	730	75	65	140
31-9092	Medical Assistants	2,115	3,120	1,005	100	40	140
31-9093	Medical Equipment Preparers	330	370	40	5	5	10
31-9094	Medical Transcriptionists	1,755	2,095	340	35	35	65
31-9095	Pharmacy Aides	655	755	100	10	10	20
31-9096	Veterinary Assistants and Laboratory Animal Caretakers	1,020	1,285	260	25	20	45
31-9099	Healthcare Support Workers, All Other	1,990	2,400	410	40	35	80
33-0000	Protective Service Occupations	22,195	24,955	2,760	275	680	960
33-1012	First-Line Supervisors/Managers of Police and Detectives	940	975	35	5	30	35
33-1021	First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	395	405	15	*	*	20
33-1099	First-Line Supervisors/Managers, Protective Service Workers, All Other	370	455	85	10	10	20
33-2011	Fire Fighters	1,965	2,030	65	5	55	65
33-3012	Correctional Officers and Jailers	2,710	2,850	145	15	55	70
33-3021	Detectives and Criminal Investigators	425	465	40	5	10	15

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	Total, All Occupations	1,680,865	1,885,070	220,465	22,045	38,585	60,630
33-3051	Police and Sheriff's Patrol Officers	5,120	5,305	185	20	135	150
33-9011	Animal Control Workers	170	180	10	*	*	15
33-9021	Private Detectives and Investigators	385	460	70	5	10	15
33-9032	Security Guards	5,920	7,730	1,810	180	130	310
33-9091	Crossing Guards	450	480	25	5	15	15
33-9099	Protective Service Workers, All Other	2,725	2,955	225	25	190	210
35-0000	Food Preparation and Serving Related Occupations	122,855	134,765	12,265	1,225	4,870	6,095
35-1011	Chefs and Head Cooks	1,150	1,285	135	15	35	50
35-1012	First-Line Supervisors/Managers of Food Preparation and Serving Workers	8,215	9,060	845	85	195	280
35-2011	Cooks, Fast Food	6,565	6,525	0	0	205	205
35-2012	Cooks, Institution and Cafeteria	8,380	8,070	0	0	260	260
35-2014	Cooks, Restaurant	7,900	8,680	780	80	245	325
35-2015	Cooks, Short Order	2,490	2,645	155	15	75	95
35-2021	Food Preparation Workers	12,510	14,450	1,940	195	445	635
35-3011	Bartenders	7,860	8,085	225	25	310	335
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	21,515	25,100	3,585	360	935	1,290
35-3022	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	5,110	5,725	615	60	335	395
35-3031	Waiters and Waitresses	25,990	28,840	2,850	285	1,335	1,620
35-3041	Food Servers, Nonrestaurant	2,510	2,690	180	20	85	100
35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	2,865	3,090	225	25	95	120
35-9021	Dishwashers	5,000	5,165	160	15	170	185
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	2,505	2,770	265	25	80	105
35-9099	Food Preparation and Serving Related Workers, All Other	2,250	2,550	295	30	70	100
37-0000	Building and Grounds Cleaning and Maintenance Occupations	54,180	62,755	8,580	860	1,085	1,945
37-1011	First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	2,315	2,630	315	30	55	85
37-1012	First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	1,080	1,240	160	15	10	25
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	24,485	28,110	3,625	360	465	825
37-2012	Maids and Housekeeping Cleaners	12,765	14,815	2,050	205	270	475
37-2021	Pest Control Workers	455	545	90	10	5	15
37-3011	Landscaping and Groundskeeping Workers	8,890	10,525	1,635	165	195	355
37-3012	Pesticide Handlers, Sprayers, and Applicators, Vegetation	605	680	75	5	15	20
37-3013	Tree Trimmers and Pruners	900	1,070	170	15	20	35
37-9099	Building and Grounds Cleaning and Maintenance Workers, All Other (OES Only)	2,680	3,145	465	45	55	100
39-0000	Personal Care and Service Occupations	53,520	62,900	9,385	940	1,280	2,220
39-1011	Gaming Supervisors	640	755	120	10	15	25
39-1012	Slot Key Persons	700	825	125	15	15	25
39-1021	First-Line Supervisors/Managers of Personal Service Workers	3,270	3,730	460	45	80	130
39-2021	Nonfarm Animal Caretakers	1,610	1,890	285	30	40	70
39-3011	Gaming Dealers	1,655	2,035	380	40	50	90

IOWA STATEWIDE OCCUPATIONAL PROJECTIONS: 2002-2012, LISTED BY OCCUPATIONAL GROUPS

SOC Code	Occupation Title	2002 Estimated Employment	2012 Projected Employment	2002-2012 Employment Change	Annual New Jobs	Annual Replace- ments	Total Annual Openings
	Total, All Occupations	1,680,865	1,885,070	220,465	22,045	38,585	60,630
39-3012	Gaming and Sports Book Writers and Runners	275	315	35	5	10	10
39-3031	Ushers, Lobby Attendants, and Ticket Takers	425	465	35	5	25	30
39-3091	Amusement and Recreation Attendants	2,180	2,560	380	40	65	100
39-3093	Locker Room, Coatroom, and Dressing Room Attendants	265	320	55	5	10	15
39-3199	Entertainment Attendants and Related Workers, All Other (OES Only)	425	505	75	10	15	20
39-4021	Funeral Attendants	485	505	20	*	*	10
39-5011	Barbers	895	955	60	5	25	30
39-5012	Hairdressers, Hairstylists, and Cosmetologists	8,135	8,840	705	70	155	225
39-6011	Baggage Porters and Bellhops	270	305	40	5	5	10
39-6021	Tour Guides and Escorts	190	220	30	5	5	10
39-9011	Child Care Workers	15,890	18,690	2,800	280	435	715
39-9021	Personal and Home Care Aides	6,360	8,595	2,235	225	100	325
39-9031	Fitness Trainers and Aerobics Instructors	2,170	2,555	385	40	50	90
39-9032	Recreation Workers	5,560	6,205	650	65	130	190
39-9041	Residential Advisors	700	930	230	25	15	40
39-9099	Personal Care and Service Workers, All Other	540	735	195	20	10	30
41-0000	Sales and Related Occupations	176,000	198,835	23,110	2,310	5,530	7,840
41-1011	First-Line Supervisors/Managers of Retail Sales Workers	24,575	27,765	3,190	320	440	760
41-1012	First-Line Supervisors/Managers of Non-Retail Sales Workers	7,440	8,590	1,150	115	140	255
41-2011	Cashiers	38,845	43,505	4,665	465	1,890	2,355
41-2012	Gaming Change Persons and Booth Cashiers	470	560	90	10	25	30
41-2021	Counter and Rental Clerks	4,400	5,235	835	85	170	250
41-2022	Parts Salespersons	3,655	3,605	0	0	105	105
41-2031	Retail Salespersons	44,915	50,860	5,940	595	1,635	2,225
41-3011	Advertising Sales Agents	1,870	2,105	235	25	35	60
41-3021	Insurance Sales Agents	6,095	7,255	1,160	115	145	260
41-3031	Securities, Commodities, and Financial Services Sales Agents	2,305	2,635	330	35	25	60
41-3041	Travel Agents	620	545	0	0	15	15
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	4,515	5,300	785	80	120	195
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	12,430	14,600	2,170	215	325	545
41-9011	Demonstrators and Product Promoters	4,645	5,465	820	80	105	185
41-9021	Real Estate Brokers	635	710	75	5	15	20
41-9022	Real Estate Sales Agents	2,060	2,310	250	25	40	65
41-9031	Sales Engineers	325	380	55	5	10	15
41-9041	Telemarketers	8,900	8,750	0	0	145	145
41-9091	Door-To-Door Sales Workers, News and Street Vendors, and Related Workers	2,245	2,425	180	20	55	70
41-9099	Sales and Related Workers, All Other	5,035	6,220	1,185	120	95	215
43-0000	Office and Administrative Support Occupations	251,810	271,310	23,400	2,340	5,805	8,145
43-1011	First-Line Supervisors/Managers of Office and Administrative Support Workers	14,820	15,805	985	100	320	415
43-2011	Switchboard Operators, Including Answering Service	1,575	1,510	0	0	40	40
43-3011	Bill and Account Collectors	3,175	3,945	770	75	60	135
43-3021	Billing and Posting Clerks and Machine Operators	4,130	4,370	245	25	70	95
43-3031	Bookkeeping, Accounting, and Auditing Clerks	24,655	26,000	1,350	135	460	595

IOWA STATEWIDE OCCUPATIONAL PROJECTIONS: 2002-2012, LISTED BY OCCUPATIONAL GROUPS							
SOC Code	Occupation Title	2002 Estimated Employment	2012 Projected Employment	2002-2012 Employment Change	Annual New Jobs	Annual Replace- ments	Total Annual Openings
	Total, All Occupations	1,680,865	1,885,070	220,465	22,045	38,585	60,630
43-3041	Gaming Cage Workers	330	365	35	5	15	20
43-3051	Payroll and Timekeeping Clerks	1,735	1,840	100	10	45	55
43-3061	Procurement Clerks	615	575	0	0	15	15
43-3071	Tellers	8,125	8,975	850	85	400	485
43-4021	Correspondence Clerks	280	295	15	*	*	10
43-4031	Court, Municipal, and License Clerks	910	930	20	*	*	20
43-4041	Credit Authorizers, Checkers, and Clerks	985	925	0	0	20	20
43-4051	Customer Service Representatives	26,225	34,265	8,040	805	390	1,195
43-4061	Eligibility Interviewers, Government Programs	820	830	10	*	*	25
43-4071	File Clerks	1,530	1,505	0	0	45	45
43-4081	Hotel, Motel, and Resort Desk Clerks	2,165	2,625	460	45	95	145
43-4111	Interviewers, Except Eligibility and Loan	780	980	205	20	20	40
43-4121	Library Assistants, Clerical	2,070	2,185	115	10	85	95
43-4131	Loan Interviewers and Clerks	1,260	1,100	0	0	15	15
43-4141	New Accounts Clerks	1,260	1,410	150	15	30	45
43-4151	Order Clerks	2,530	2,285	0	0	55	55
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	1,220	1,465	245	25	25	50
43-4171	Receptionists and Information Clerks	10,105	12,485	2,380	240	250	485
43-4181	Reservation and Transportation Ticket Agents and Travel Clerks	325	410	90	10	10	15
43-4999	Financial, Information, and Record Clerks, All Other (OES Only)	1,975	1,990	20	*	*	35
43-5011	Cargo and Freight Agents	285	330	45	5	5	10
43-5021	Couriers and Messengers	1,365	1,470	105	10	30	40
43-5031	Police, Fire, and Ambulance Dispatchers	940	990	50	5	20	25
43-5032	Dispatchers, Except Police, Fire, and Ambulance	1,515	1,765	245	25	35	55
43-5041	Meter Readers, Utilities	765	680	0	0	25	25
43-5051	Postal Service Clerks	455	440	0	0	10	10
43-5052	Postal Service Mail Carriers	4,175	4,060	0	0	130	130
43-5053	Postal Service Mail Sorters, Processors, and Processing Machine Operators	3,050	2,670	0	0	80	80
43-5061	Production, Planning, and Expediting Clerks	3,310	4,105	795	80	80	160
43-5071	Shipping, Receiving, and Traffic Clerks	7,230	7,620	390	40	150	190
43-5081	Stock Clerks and Order Fillers	17,290	16,695	0	0	640	640
43-5111	Weighers, Measurers, Checkers, and Samplers, Recordkeeping	1,845	2,110	270	25	45	75
43-6011	Executive Secretaries and Administrative Assistants	12,005	12,955	950	95	230	325
43-6012	Legal Secretaries	2,105	2,515	415	40	40	80
43-6013	Medical Secretaries	4,065	4,385	320	30	80	110
43-6014	Secretaries, Except Legal, Medical, and Executive	22,775	21,830	0	0	435	435
43-9011	Computer Operators	2,510	2,195	0	0	55	55
43-9021	Data Entry Keyers	2,905	3,020	115	10	70	80
43-9022	Word Processors and Typists	2,250	1,740	0	0	50	50
43-9031	Desktop Publishers	435	555	120	10	10	20
43-9041	Insurance Claims and Policy Processing Clerks	2,785	3,140	360	35	45	80
43-9051	Mail Clerks and Mail Machine Operators, Except Postal Service	1,400	1,370	0	0	40	40
43-9061	Office Clerks, General	38,210	41,340	3,130	315	845	1,160
43-9071	Office Machine Operators, Except Computer	1,020	1,010	0	0	25	25
43-9999	Secretaries, Administrative Assistants, and Other Office Support Workers, All Other (OES Only)	2,225	2,135	0	0	45	45

IOWA STATEWIDE OCCUPATIONAL PROJECTIONS: 2002-2012, LISTED BY OCCUPATIONAL GROUPS

SOC Code	Occupation Title	2002 Estimated Employment	2012 Projected Employment	2002-2012 Employment Change	Annual New Jobs	Annual Replace- ments	Total Annual Openings
	Total, All Occupations	1,680,865	1,885,070	220,465	22,045	38,585	60,630
45-0000	Farming, Fishing, and Forestry Occupations	13,850	16,080	2,230	225	375	595
45-1011	First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	1,405	1,575	170	15	30	50
45-2041	Graders and Sorters, Agricultural Products	910	935	25	5	25	25
45-2091	Agricultural Equipment Operators	1,535	1,700	165	15	45	60
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	3,370	3,975	605	60	95	155
45-2093	Farmworkers, Farm and Ranch Animals	4,830	5,905	1,075	110	135	245
45-4011	Forest and Conservation Workers	360	365	10	*	*	10
45-9099	Farming, Fishing, and Forestry Workers, All Other (OES Only)	910	1,040	125	15	20	35
47-0000	Construction and Extraction Occupations	75,235	85,790	10,605	1,060	1,435	2,495
47-1011	First-Line Supervisors/Managers of Construction Trades and Extraction Workers	7,055	7,825	770	75	120	195
47-2011	Boilermakers	310	320	10	*	*	10
47-2021	Brickmasons and Blockmasons	1,850	2,130	280	30	30	55
47-2022	Stonemasons	275	310	40	5	5	10
47-2031	Carpenters	12,850	14,325	1,475	150	210	355
47-2041	Carpet Installers	1,210	1,365	150	15	20	35
47-2044	Tile and Marble Setters	210	265	55	5	5	10
47-2051	Cement Masons and Concrete Finishers	3,420	4,325	905	90	70	160
47-2061	Construction Laborers	10,325	11,620	1,295	130	140	265
47-2071	Paving, Surfacing, and Tamping Equipment Operators	810	890	80	10	10	20
47-2073	Operating Engineers and Other Construction Equipment Operators	3,850	4,150	300	30	100	130
47-2081	Drywall and Ceiling Tile Installers	1,150	1,385	240	25	25	50
47-2082	Tapers	275	335	55	5	5	10
47-2111	Electricians	6,960	8,560	1,605	160	140	300
47-2121	Glaziers	510	600	95	10	10	20
47-2130	Insulation Workers	535	620	85	10	15	25
47-2141	Painters, Construction and Maintenance	3,825	4,270	445	45	60	105
47-2151	Pipelayers	845	920	75	10	20	25
47-2152	Plumbers, Pipefitters, and Steamfitters	4,835	5,840	1,005	100	110	210
47-2161	Plasterers and Stucco Masons	260	295	35	5	5	10
47-2181	Roofers	2,015	2,305	290	30	45	75
47-2211	Sheet Metal Workers	1,905	2,305	400	40	45	85
47-2221	Structural Iron and Steel Workers	905	1,000	95	10	20	25
47-3011	Helpers—Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	480	485	10	*	*	20
47-3012	Helpers—Carpenters	475	525	50	5	20	25
47-3013	Helpers—Electricians	725	855	130	15	30	45
47-3015	Helpers—Pipelayers, Plumbers, Pipefitters, and Steamfitters	430	480	50	5	20	25
47-3016	Helpers—Roofers	195	230	35	5	10	10
47-3019	Helpers, Construction Trades, All Other	335	365	35	5	15	15
47-4011	Construction and Building Inspectors	550	580	30	5	10	15
47-4031	Fence Erectors	680	810	125	15	10	25
47-4051	Highway Maintenance Workers	2,685	2,770	85	10	40	50
47-4071	Septic Tank Servicers and Sewer Pipe Cleaners	270	305	40	5	5	10
47-4999	Construction Trades and Related Workers, All Other (OES Only)	635	730	95	10	10	20

IOWA STATEWIDE OCCUPATIONAL PROJECTIONS: 2002-2012, LISTED BY OCCUPATIONAL GROUPS							
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	Total, All Occupations	1,680,865	1,885,070	220,465	22,045	38,585	60,630
49-0000	Installation, Maintenance, and Repair Occupations	66,680	75,755	9,220	920	1,530	2,455
49-1011	First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	5,760	6,600	840	85	145	230
49-2011	Computer, Automated Teller, and Office Machine Repairers	1,510	1,705	195	20	20	40
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	3,610	3,635	25	5	75	75
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	785	845	60	5	15	25
49-2096	Electronic Equipment Installers and Repairers, Motor Vehicles	170	205	35	5	5	10
49-2097	Electronic Home Entertainment Equipment Installers and Repairers	625	730	105	10	10	25
49-2099	Electrical and Electronic Equipment Mechanics, Installers, and Repairers, All Other (OES Only)	265	350	85	10	5	15
49-3011	Aircraft Mechanics and Service Technicians	395	425	35	5	10	15
49-3021	Automotive Body and Related Repairers	2,115	2,415	300	30	45	75
49-3022	Automotive Glass Installers and Repairers	275	300	25	5	5	10
49-3023	Automotive Service Technicians and Mechanics	11,305	12,900	1,595	160	300	460
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	4,420	5,035	615	60	115	175
49-3041	Farm Equipment Mechanics	1,790	1,900	110	10	40	50
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	1,425	1,545	120	10	30	45
49-3051	Motorboat Mechanics	305	380	70	5	10	15
49-3052	Motorcycle Mechanics	265	325	60	5	5	15
49-3053	Outdoor Power Equipment and Other Small Engine Mechanics	470	535	65	5	10	20
49-3093	Tire Repairers and Changers	735	820	80	10	30	40
49-3099	Vehicle and Mobile Equipment Mechanics, Installers, and Repairers, All Other (OES Only)	210	245	30	5	5	10
49-9012	Control and Valve Installers and Repairers, Except Mechanical Door	390	385	0	0	10	10
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	2,230	2,890	660	65	30	95
49-9031	Home Appliance Repairers	565	620	60	5	15	20
49-9041	Industrial Machinery Mechanics	2,705	3,255	545	55	55	110
49-9042	Maintenance and Repair Workers, General	13,825	15,950	2,125	215	265	480
49-9043	Maintenance Workers, Machinery	1,890	2,135	245	25	45	65
49-9044	Millwrights	855	975	115	10	20	35
49-9051	Electrical Power-Line Installers and Repairers	1,400	1,320	0	0	45	45
49-9052	Telecommunications Line Installers and Repairers	955	1,140	185	20	25	45
49-9062	Medical Equipment Repairers	310	350	40	5	10	15
49-9091	Coin, Vending, and Amusement Machine Servicers and Repairers	385	440	60	5	10	15
49-9094	Locksmiths and Safe Repairers	220	270	50	5	5	15
49-9095	Manufactured Building and Mobile Home Installers	195	250	55	5	5	10
49-9098	Helpers--Installation, Maintenance, and Repair Workers	815	990	175	20	30	45
49-9099	Installation, Maintenance, and Repair Workers, All Other	1,585	1,875	290	30	35	65
51-0000	Production Occupations	168,185	183,990	16,605	1,660	4,050	5,710
51-1011	First-Line Supervisors/Managers of Production and Operating Workers	11,720	13,535	1,815	180	245	425
51-2021	Coil Winders, Tapers, and Finishers	375	340	0	0	10	10
51-2022	Electrical and Electronic Equipment Assemblers	2,755	2,305	0	0	65	65
51-2031	Engine and Other Machine Assemblers	380	395	15	*	*	10
51-2041	Structural Metal Fabricators and Fitters	1,405	1,470	65	5	35	40
51-2091	Fiberglass Laminators and Fabricators	1,255	1,525	265	25	35	60
51-2092	Team Assemblers	30,695	32,265	1,570	155	795	950
51-2093	Timing Device Assemblers, Adjusters, and Calibrators	365	395	30	5	10	15

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	Total, All Occupations	1,680,865	1,885,070	220,465	22,045	38,585	60,630
51-2099	Assemblers and Fabricators, All Other	3,760	4,090	330	35	95	130
51-3011	Bakers	1,925	2,120	195	20	45	65
51-3021	Butchers and Meat Cutters	3,755	4,095	340	35	80	115
51-3022	Meat, Poultry, and Fish Cutters and Trimmers	2,005	2,285	280	30	45	70
51-3023	Slaughterers and Meat Packers	11,710	13,625	1,910	190	255	450
51-3091	Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders	355	375	20	*	*	10
51-3092	Food Batchmakers	1,650	1,720	70	5	40	50
51-3093	Food Cooking Machine Operators and Tenders	575	600	30	5	15	15
51-3099	Food Processing Workers, All Other (OES Only)	2,710	2,930	225	20	60	80
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	1,690	1,890	200	20	30	50
51-4012	Numerical Tool and Process Control Programmers	740	860	120	10	10	25
51-4021	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	730	810	80	10	25	30
51-4022	Forging Machine Setters, Operators, and Tenders, Metal and Plastic	620	660	40	5	10	15
51-4023	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	550	580	30	5	10	15
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	4,180	4,510	330	35	95	130
51-4032	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	1,035	1,085	50	5	30	35
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	935	1,010	80	10	20	25
51-4034	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	930	965	35	5	20	20
51-4035	Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	650	665	15	*	*	15
51-4041	Machinists	5,900	6,545	640	65	140	200
51-4051	Metal-Refining Furnace Operators and Tenders	295	315	20	*	*	10
51-4052	Pourers and Casters, Metal	355	365	10	*	*	10
51-4071	Foundry Mold and Coremakers	635	700	65	5	15	20
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	1,800	2,035	235	25	45	70
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	1,840	2,205	365	35	50	85
51-4111	Tool and Die Makers	1,610	1,720	110	10	35	45
51-4121	Welders, Cutters, Solderers, and Brazers	6,990	8,455	1,465	145	195	345
51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	1,130	1,240	110	10	30	45
51-4191	Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	355	365	10	*	*	10
51-4193	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	415	430	15	*	*	10
51-4194	Tool Grinders, Filers, and Sharpeners	350	340	0	0	10	10
51-4199	Metal Workers and Plastic Workers, All Other	910	985	75	5	20	30
51-5011	Bindery Workers	1,160	1,100	0	0	30	30
51-5021	Job Printers	940	1,065	120	10	20	35
51-5022	Prepress Technicians and Workers	1,230	1,125	0	0	30	30
51-5023	Printing Machine Operators	3,095	3,370	275	25	70	100
51-6011	Laundry and Dry-Cleaning Workers	2,945	3,140	195	20	80	100
51-6021	Pressers, Textile, Garment, and Related Materials	700	685	0	0	10	10
51-6031	Sewing Machine Operators	1,990	2,025	35	5	25	30
51-6052	Tailors, Dressmakers, and Custom Sewers	795	770	0	0	15	15
51-6091	Extruding and Forming Machine Setters, Operators, and Tenders, Synthetic and Glass Fibers	230	290	55	5	5	10
51-6093	Upholsterers	335	330	0	0	10	10
51-6099	Textile, Apparel, and Furnishings Workers, All Other	250	270	20	*	*	10
51-7011	Cabinetmakers and Bench Carpenters	915	1,085	170	15	25	40
51-7021	Furniture Finishers	645	740	95	10	15	20
51-7041	Sawing Machine Setters, Operators, and Tenders, Wood	1,440	1,545	105	10	40	50
51-7042	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	1,395	1,625	230	25	35	60
51-7099	Woodworkers, All Other	215	255	35	5	5	10

IOWA STATEWIDE OCCUPATIONAL PROJECTIONS: 2002-2012, LISTED BY OCCUPATIONAL GROUPS

SOC Code	Occupation Title	2002 Estimated Employment	2012 Projected Employment	2002-2012 Employment Change	Annual New Jobs	Annual Replace- ments	Total Annual Openings
	Total, All Occupations	1,680,865	1,885,070	220,465	22,045	38,585	60,630
51-8013	Power Plant Operators	485	465	0	0	15	15
51-8031	Water and Liquid Waste Treatment Plant and System Operators	1,640	1,770	125	15	55	70
51-8091	Chemical Plant and System Operators	855	845	0	0	25	25
51-8099	Plant and System Operators, All Other	315	320	5	0	10	10
51-9011	Chemical Equipment Operators and Tenders	675	745	75	5	20	30
51-9012	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	650	650	0	0	20	20
51-9021	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	520	500	0	0	15	15
51-9022	Grinding and Polishing Workers, Hand	235	255	20	*	*	10
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	1,280	1,295	15	*	*	35
51-9031	Cutters and Trimmers, Hand	210	260	55	5	5	10
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	935	1,110	175	20	20	35
51-9041	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	905	990	85	10	25	30
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	4,405	4,720	315	30	100	130
51-9081	Dental Laboratory Technicians	420	405	0	0	10	10
51-9083	Ophthalmic Laboratory Technicians	310	335	20	*	*	10
51-9111	Packaging and Filling Machine Operators and Tenders	4,505	5,100	600	60	90	150
51-9121	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	1,630	1,985	355	35	45	80
51-9122	Painters, Transportation Equipment	435	545	110	10	10	20
51-9123	Painting, Coating, and Decorating Workers	435	505	70	5	10	20
51-9131	Photographic Process Workers	510	530	20	*	*	15
51-9132	Photographic Processing Machine Operators	295	300	5	*	*	10
51-9191	Cementing and Gluing Machine Operators and Tenders	280	345	60	5	10	15
51-9192	Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders	345	370	25	5	10	15
51-9195	Molders, Shapers, and Casters, Except Metal and Plastic	1,660	1,760	105	10	40	50
51-9196	Paper Goods Machine Setters, Operators, and Tenders	760	830	70	5	15	25
51-9197	Tire Builders	555	610	55	5	15	20
51-9198	Helpers--Production Workers	2,930	3,090	160	15	80	100
51-9199	Production Workers, All Other	6,580	7,875	1,290	130	155	285
53-0000	Transportation and Material Moving Occupations	125,300	141,745	16,695	1,670	2,700	4,365
53-1021	First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	1,875	2,140	265	25	45	70
53-1031	First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	3,110	3,485	375	35	75	110
53-3021	Bus Drivers, Transit and Intercity	1,800	1,920	120	10	40	50
53-3022	Bus Drivers, School	7,880	8,275	390	40	170	210
53-3031	Driver/Sales Workers	3,820	3,880	60	5	60	70
53-3032	Truck Drivers, Heavy and Tractor-Trailer	35,530	43,200	7,670	765	580	1,345
53-3033	Truck Drivers, Light or Delivery Services	10,515	12,805	2,290	230	95	325
53-3041	Taxi Drivers and Chauffeurs	835	965	125	15	10	20
53-3099	Motor Vehicle Operators, All Other	1,020	1,215	195	20	15	35
53-4011	Locomotive Engineers	850	780	0	0	25	25
53-4031	Railroad Conductors and Yardmasters	685	650	0	0	20	20
53-5011	Sailors and Marine Oilers	395	480	85	10	15	20
53-5021	Captains, Mates, and Pilots of Water Vessels	220	255	40	5	5	10
53-6021	Parking Lot Attendants	460	515	55	5	15	20
53-6031	Service Station Attendants	610	625	15	*	*	30

IOWA STATEWIDE OCCUPATIONAL PROJECTIONS: 2002-2012, LISTED BY OCCUPATIONAL GROUPS

SOC Code	Occupation Title	2002 Estimated Employment	2012 Projected Employment	2002-2012 Employment Change	Annual New Jobs	Annual Replace- ments	Total Annual Openings
	Total, All Occupations	1,680,865	1,885,070	220,465	22,045	38,585	60,630
53-7011	Conveyor Operators and Tenders	1,370	1,350	0	0	40	40
53-7021	Crane and Tower Operators	645	725	80	10	15	20
53-7032	Excavating and Loading Machine and Dragline Operators	1,015	1,135	115	10	30	40
53-7041	Hoist and Winch Operators	210	240	30	5	5	10
53-7051	Industrial Truck and Tractor Operators	9,500	10,780	1,280	130	180	310
53-7061	Cleaners of Vehicles and Equipment	4,120	4,525	405	40	145	185
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	23,435	24,540	1,100	110	765	875
53-7063	Machine Feeders and Offbearers	1,535	1,570	35	5	40	45
53-7064	Packers and Packagers, Hand	9,450	10,835	1,385	140	175	315
53-7081	Refuse and Recyclable Material Collectors	1,345	1,455	105	10	35	45
53-7199	Material Moving Workers, All Other	1,030	1,310	280	30	30	55
	*Indicates the value has been suppressed						
	Note: Occupations will not equal totals due to suppression of occupations with less than ten annual openings.						

Statewide Job Applicants/Openings

A quarterly publication containing data tables on characteristics of Workforce Development Center applicants, job applicants and openings by occupation, and job openings by industry. Available statewide and by IWD Region.

<http://www.iowaworkforce.org/lmi/publications/applicants/index.html>

Job Applicants and Openings for Iowa Statewide (Fourth Quarter 2005)



Source: Labor Market and Economic Research Bureau, Iowa Workforce Development, 1000 E. Grand Ave., Des Moines, IA 50319, 515-281-5116

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INTRODUCTION

Job Applicants and Openings for IWD Regions provides a quarterly overview of labor supply and demand within 16 Iowa Workforce Development (IWD) Regions in Iowa. The most recent 3 months of data* recorded by several IWD Center offices within each region are combined to produce the tables for this report. Although Center activity does not reflect the total labor market in Iowa, the data can help to determine labor shortages, surpluses, or to prompt training needs.

This site will be updated roughly in the middle of the following months (possibly earlier):

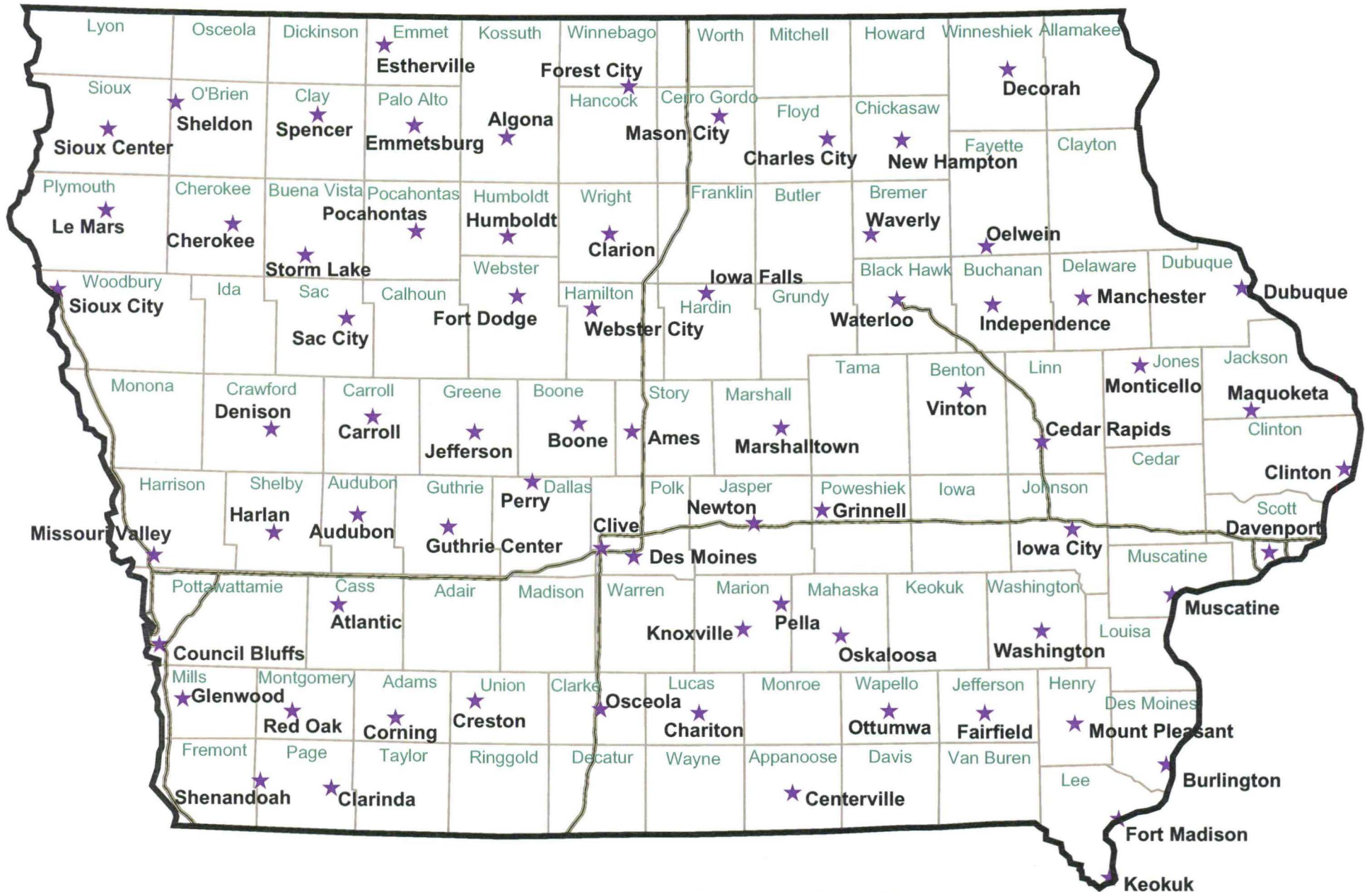
Quarter 1	May
Quarter 2	August
Quarter 3	November
Quarter 4	February

Bookmarks along the left side of each .PDF can be used to find your desired table or map. All pages are printable, if you prefer to have a hard copy to view. If your highest screen resolution capability is 800X600 pixels, you may find a printed copy is easier to read. *We thank you for saving the State the costs of printing and mailing these reports.*

Please direct comments or questions regarding this site to wendy.gerrish@iwd.iowa.gov or by calling (515) 281-5116.

*NOTE: Due to a mid-June switchover to a new labor exchange system, IWORKS, some of the measures are not directly comparable to previous quarters of this publication. In the new system, applicants can list any number of occupations compared to the old system which only allowed one primary occupation. As a result, applicants are counted for each occupation that they listed within IWORKS but are only counted once for the total of each occupational group. The Grand Total is represented by an unduplicated count of applicants within the state/region.

Location of Iowa Workforce Development Centers



Source: Labor Market Information Bureau, Iowa Workforce Development

Characteristics of Iowa Workforce Development Clients
(October 1, 2005 - December 31, 2005)
STATE OF IOWA

Characteristic	Number	Percent	Characteristic	Number	Percent
Total	44,347	100.0			
Age Group			Education		
15 and Under	238	1.0	7 or Less	416	0.9
16 to 19	1,601	4.0	8 - 11	4,309	9.7
20 to 21	3,032	7.0	High School or GED	21,705	48.9
22 to 39	22,940	52.0	13 - 14	2,950	6.7
40 to 54	12,242	28.0	15 - 16	1,964	4.4
55 and Over	3,922	9.0	17 +	466	1.1
Not Reported	372	1.0	Post High School Certificate	49	0.1
			Associate Degree	4,200	9.5
Gender			Bachelors Degree	2,858	6.4
Male	23,825	54.0	Masters Degree	411	0.9
Female	20,521	46.0	Doctorate	57	0.1
Ethnic Group			Miscellaneous		
White	28,569	64.0	Claimants	8,494	19.2
Black	2,708	6.0	Veterans	4,230	9.50
Hispanic	2,338	5.0	Work Related Disability	85	0.20
American Indian	1,086	2.0	ADA Disability	961	2.20
Asian/Pacific Islander	512	1.0	Dislocated Worker	69	0.20
Not Reported	11,472	26.0			

Source: Labor Market and Economic Research Bureau, Iowa Workforce Development

Job Openings and Clients by Occupation (October 1, 2005 - December 31, 2005)
STATE OF IOWA

O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
11-1011.00	Chief Executives	17	3	5.67
11-1011.01	Government Service Executives	40	7	5.71
11-1011.02	Private Sector Executives	170	25	6.80
11-1021.00	General and Operations Managers	238	22	10.82
11-2011.00	Advertising and Promotions Managers	102	21	4.86
11-2021.00	Marketing Managers	123	43	2.86
11-2022.00	Sales Managers	373	44	8.48
11-2031.00	Public Relations Managers	63	17	3.71
11-3011.00	Administrative Services Managers	557	41	13.59
11-3021.00	Computer and Information Systems Managers	52	38	1.37
11-3031.00	Financial Managers	28	5	5.60
11-3031.01	Treasurers, Controllers, and Chief Financial Officers	15	9	1.67
11-3031.02	Financial Managers, Branch or Department	64	21	3.05
11-3040.00	Human Resources Managers	187	21	8.90
11-3041.00	Compensation and Benefits Managers	17	2	8.50
11-3042.00	Training and Development Managers	41	5	8.20
11-3049.99	Human Resources Managers, All Other	37	2	18.50
11-3051.00	Industrial Production Managers	355	44	8.07
11-3061.00	Purchasing Managers	50	10	5.00
11-3071.00	Transportation, Storage, and Distribution Managers	29	22	1.32
11-3071.01	Transportation Managers	74	13	5.69
11-3071.02	Storage and Distribution Managers	94	17	5.53
11-9011.00	Farm, Ranch, and Other Agricultural Managers	18	0	0.00
11-9011.01	Nursery and Greenhouse Managers	14	0	0.00
11-9011.02	Agricultural Crop Farm Managers	15	2	7.50
11-9011.03	Fish Hatchery Managers	3	0	0.00
11-9012.00	Farmers and Ranchers	109	19	5.74
11-9021.00	Construction Managers	93	14	6.64
11-9031.00	Education Administrators, Preschool and Child Care Center/Program	13	5	2.60
11-9032.00	Education Administrators, Elementary and Secondary School	4	2	2.00
11-9033.00	Education Administrators, Postsecondary	12	19	0.63
11-9039.99	Education Administrators, All Other	10	7	1.43
11-9041.00	Engineering Managers	26	15	1.73
11-9051.00	Food Service Managers	535	51	10.49
11-9061.00	Funeral Directors	2	1	2.00
11-9071.00	Gaming Managers	14	3	4.67
11-9081.00	Lodging Managers	82	8	10.25

Job Openings and Clients by Occupation (October 1, 2005 - December 31, 2005) **STATE OF IOWA**

O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
11-9111.00	Medical and Health Services Managers	43	130	0.33
11-9121.00	Natural Sciences Managers	1	0	0.00
11-9131.00	Postmasters and Mail Superintendents	7	1	7.00
11-9141.00	Property, Real Estate, and Community Association Managers	168	12	14.00
11-9151.00	Social and Community Service Managers	53	25	2.12
11-9199.99	Managers, All Other	826	332	2.49
13-1011.00	Agents and Business Managers of Artists, Performers, and Athletes	19	0	0.00
13-1021.00	Purchasing Agents and Buyers, Farm Products	13	5	2.60
13-1022.00	Wholesale and Retail Buyers, Except Farm Products	77	18	4.28
13-1023.00	Purchasing Agents, Except Wholesale, Retail, and Farm Products	112	17	6.59
13-1031.00	Claims Adjusters, Examiners, and Investigators	23	3	7.67
13-1031.01	Claims Examiners, Property and Casualty Insurance	14	6	2.33
13-1031.02	Insurance Adjusters, Examiners, and Investigators	45	10	4.50
13-1032.00	Insurance Appraisers, Auto Damage	7	1	7.00
13-1041.00	Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	5	1	5.00
13-1041.01	Environmental Compliance Inspectors	18	0	0.00
13-1041.02	Licensing Examiners and Inspectors	5	1	5.00
13-1041.03	Equal Opportunity Representatives and Officers	5	0	0.00
13-1041.04	Government Property Inspectors and Investigators	16	3	5.33
13-1041.05	Pressure Vessel Inspectors	1	0	0.00
13-1051.00	Cost Estimators	31	7	4.43
13-1061.00	Emergency Management Specialists	3	0	0.00
13-1071.00	Employment, Recruitment, and Placement Specialists	42	9	4.67
13-1071.01	Employment Interviewers, Private or Public Employment Service	73	57	1.28
13-1071.02	Personnel Recruiters	59	13	4.54
13-1072.00	Compensation, Benefits, and Job Analysis Specialists	22	10	2.20
13-1073.00	Training and Development Specialists	56	15	3.73
13-1079.99	Human Resources, Training, and Labor Relations Specialists, All Other	135	30	4.50
13-1081.00	Logisticians	18	2	9.00
13-1111.00	Management Analysts	25	6	4.17
13-1121.00	Meeting and Convention Planners	29	2	14.50
13-1199.99	Business Operations Specialists, All Other	87	24	3.63
13-2011.00	Accountants and Auditors	62	14	4.43
13-2011.01	Accountants	270	84	3.21
13-2011.02	Auditors	26	55	0.47
13-2021.00	Appraisers and Assessors of Real Estate	7	0	0.00
13-2021.01	Assessors	2	3	0.67
13-2021.02	Appraisers, Real Estate	9	0	0.00
13-2031.00	Budget Analysts	23	3	7.67

Job Openings and Clients by Occupation (October 1, 2005 - December 31, 2005)
STATE OF IOWA

O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
13-2041.00	Credit Analysts	32	11	2.91
13-2051.00	Financial Analysts	27	17	1.59
13-2052.00	Personal Financial Advisors	22	20	1.10
13-2053.00	Insurance Underwriters	27	31	0.87
13-2061.00	Financial Examiners	5	2	2.50
13-2071.00	Loan Counselors	10	1	10.00
13-2072.00	Loan Officers	138	51	2.71
13-2081.00	Tax Examiners, Collectors, and Revenue Agents	10	0	0.00
13-2082.00	Tax Preparers	51	76	0.67
13-2099.99	Financial Specialists, All Other	32	7	4.57
Total for Management, Business, Financial Occupations		4,489	1,693	2.65
15-1011.00	Computer and Information Scientists, Research	20	9	2.22
15-1021.00	Computer Programmers	171	55	3.11
15-1031.00	Computer Software Engineers, Applications	48	53	0.91
15-1032.00	Computer Software Engineers, Systems Software	29	52	0.56
15-1041.00	Computer Support Specialists	372	61	6.10
15-1051.00	Computer Systems Analysts	124	141	0.88
15-1061.00	Database Administrators	69	18	3.83
15-1071.00	Network and Computer Systems Administrators	125	23	5.43
15-1071.01	Computer Security Specialists	32	2	16.00
15-1081.00	Network Systems and Data Communications Analysts	50	19	2.63
15-1099.99	Computer Specialists, All Other	129	15	8.60
15-2011.00	Actuaries	6	0	0.00
15-2021.00	Mathematicians	6	2	3.00
15-2031.00	Operations Research Analysts	14	3	4.67
15-2041.00	Statisticians	7	3	2.33
15-2099.99	Mathematical Science Occupations, All Other	3	0	0.00
15-3011.00	Mathematical Technicians	2	0	0.00
17-1011.00	Architects, Except Landscape and Naval	38	17	2.24
17-1012.00	Landscape Architects	15	12	1.25
17-1021.00	Cartographers and Photogrammetrists	3	3	1.00
17-1022.00	Surveyors	17	0	0.00
17-2011.00	Aerospace Engineers	2	0	0.00
17-2021.00	Agricultural Engineers	3	1	3.00
17-2031.00	Biomedical Engineers	3	1	3.00
17-2041.00	Chemical Engineers	6	9	0.67

Job Openings and Clients by Occupation (October 1, 2005 - December 31, 2005)
STATE OF IOWA

O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
17-2051.00	Civil Engineers	24	39	0.62
17-2061.00	Computer Hardware Engineers	22	4	5.50
17-2071.00	Electrical Engineers	23	25	0.92
17-2072.00	Electronics Engineers, Except Computer	19	2	9.50
17-2081.00	Environmental Engineers	8	2	4.00
17-2111.00	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	2	0	0.00
17-2111.01	Industrial Safety and Health Engineers	12	8	1.50
17-2111.02	Fire-Prevention and Protection Engineers	3	0	0.00
17-2111.03	Product Safety Engineers	2	0	0.00
17-2112.00	Industrial Engineers	89	49	1.82
17-2131.00	Materials Engineers	9	5	1.80
17-2141.00	Mechanical Engineers	48	40	1.20
17-2161.00	Nuclear Engineers	2	0	0.00
17-2171.00	Petroleum Engineers	1	1	1.00
17-2199.99	Engineers, All Other	18	11	1.64
17-3011.00	Architectural and Civil Drafters	9	2	4.50
17-3011.01	Architectural Drafters	45	3	15.00
17-3011.02	Civil Drafters	12	3	4.00
17-3012.00	Electrical and Electronics Drafters	5	0	0.00
17-3012.01	Electronic Drafters	60	2	30.00
17-3012.02	Electrical Drafters	6	3	2.00
17-3013.00	Mechanical Drafters	84	81	1.04
17-3019.99	Drafters, All Other	24	11	2.18
17-3021.00	Aerospace Engineering and Operations Technicians	1	1	1.00
17-3022.00	Civil Engineering Technicians	10	5	2.00
17-3023.00	Electrical and Electronic Engineering Technicians	14	6	2.33
17-3023.01	Electronics Engineering Technicians	124	5	24.80
17-3023.02	Calibration and Instrumentation Technicians	15	1	15.00
17-3023.03	Electrical Engineering Technicians	19	8	2.38
17-3024.00	Electro-Mechanical Technicians	7	1	7.00
17-3025.00	Environmental Engineering Technicians	8	0	0.00
17-3026.00	Industrial Engineering Technicians	36	16	2.25
17-3027.00	Mechanical Engineering Technicians	14	3	4.67
17-3029.99	Engineering Technicians, Except Drafters, All Other	12	2	6.00
17-3031.00	Surveying and Mapping Technicians	5	1	5.00
17-3031.01	Surveying Technicians	13	1	13.00
17-3031.02	Mapping Technicians	5	2	2.50
19-1011.00	Animal Scientists	10	2	5.00
19-1012.00	Food Scientists and Technologists	7	3	2.33

Job Openings and Clients by Occupation (October 1, 2005 - December 31, 2005)
STATE OF IOWA

O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
19-1013.00	Soil and Plant Scientists	2	0	0.00
19-1013.01	Plant Scientists	4	12	0.33
19-1013.02	Soil Scientists	1	6	0.17
19-1020.01	Biologists	13	4	3.25
19-1021.00	Biochemists and Biophysicists	2	0	0.00
19-1021.01	Biochemists	5	2	2.50
19-1022.00	Microbiologists	8	4	2.00
19-1023.00	Zoologists and Wildlife Biologists	10	0	0.00
19-1029.99	Biological Scientists, All Other	5	2	2.50
19-1031.00	Conservation Scientists	5	1	5.00
19-1031.01	Soil Conservationists	12	8	1.50
19-1031.02	Range Managers	2	0	0.00
19-1031.03	Park Naturalists	10	0	0.00
19-1032.00	Foresters	4	0	0.00
19-1042.00	Medical Scientists, Except Epidemiologists	0	5	0.00
19-1099.99	Life Scientists, All Other	2	0	0.00
19-2011.00	Astronomers	2	0	0.00
19-2012.00	Physicists	3	2	1.50
19-2021.00	Atmospheric and Space Scientists	0	2	0.00
19-2031.00	Chemists	14	9	1.56
19-2041.00	Environmental Scientists and Specialists, Including Health	16	8	2.00
19-2042.01	Geologists	4	0	0.00
19-2043.00	Hydrologists	2	1	2.00
19-3011.00	Economists	3	2	1.50
19-3021.00	Market Research Analysts	83	22	3.77
19-3022.00	Survey Researchers	6	0	0.00
19-3031.00	Clinical, Counseling, and School Psychologists	5	2	2.50
19-3031.01	Educational Psychologists	1	6	0.17
19-3031.02	Clinical Psychologists	4	7	0.57
19-3031.03	Counseling Psychologists	26	9	2.89
19-3032.00	Industrial-Organizational Psychologists	3	0	0.00
19-3039.99	Psychologists, All Other	4	5	0.80
19-3041.00	Sociologists	6	1	6.00
19-3051.00	Urban and Regional Planners	9	5	1.80
19-3091.00	Anthropologists and Archeologists	1	0	0.00
19-3091.01	Anthropologists	1	0	0.00
19-3091.02	Archeologists	4	0	0.00
19-3092.00	Geographers	4	0	0.00
19-3093.00	Historians	5	0	0.00

Job Openings and Clients by Occupation (October 1, 2005 - December 31, 2005) **STATE OF IOWA**

O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
19-3094.00	Political Scientists	4	0	0.00
19-3099.99	Social Scientists and Related Workers, All Other	10	0	0.00
19-4011.00	Agricultural and Food Science Technicians	6	5	1.20
19-4011.01	Agricultural Technicians	3	17	0.18
19-4011.02	Food Science Technicians	4	3	1.33
19-4021.00	Biological Technicians	22	2	11.00
19-4031.00	Chemical Technicians	75	21	3.57
19-4041.01	Geological Data Technicians	4	0	0.00
19-4041.02	Geological Sample Test Technicians	2	0	0.00
19-4051.02	Nuclear Monitoring Technicians	1	0	0.00
19-4061.00	Social Science Research Assistants	4	3	1.33
19-4061.01	City Planning Aides	6	1	6.00
19-4091.00	Environmental Science and Protection Technicians, Including Health	20	2	10.00
19-4092.00	Forensic Science Technicians	7	0	0.00
19-4093.00	Forest and Conservation Technicians	11	0	0.00
19-4099.99	Life, Physical, and Social Science Technicians, All Other	11	6	1.83
21-1011.00	Substance Abuse and Behavioral Disorder Counselors	57	16	3.56
21-1012.00	Educational, Vocational, and School Counselors	180	62	2.90
21-1013.00	Marriage and Family Therapists	8	4	2.00
21-1014.00	Mental Health Counselors	42	19	2.21
21-1015.00	Rehabilitation Counselors	33	60	0.55
21-1019.99	Counselors, All Other	91	135	0.67
21-1021.00	Child, Family, and School Social Workers	282	135	2.09
21-1022.00	Medical and Public Health Social Workers	37	14	2.64
21-1023.00	Mental Health and Substance Abuse Social Workers	59	11	5.36
21-1029.99	Social Workers, All Other	48	7	6.86
21-1091.00	Health Educators	22	4	5.50
21-1092.00	Probation Officers and Correctional Treatment Specialists	81	14	5.79
21-1093.00	Social and Human Service Assistants	220	40	5.50
21-1099.99	Community and Social Service Specialists, All Other	61	8	7.63
21-2011.00	Clergy	27	5	5.40
21-2021.00	Directors, Religious Activities and Education	28	1	28.00
21-2099.99	Religious Workers, All Other	11	2	5.50
23-1011.00	Lawyers	7	6	1.17
23-1021.00	Administrative Law Judges, Adjudicators, and Hearing Officers	12	0	0.00
23-1022.00	Arbitrators, Mediators, and Conciliators	4	0	0.00
23-1023.00	Judges, Magistrate Judges, and Magistrates	1	0	0.00
23-2011.00	Paralegals and Legal Assistants	74	3	24.67
23-2091.00	Court Reporters	12	3	4.00

Job Openings and Clients by Occupation (October 1, 2005 - December 31, 2005)
STATE OF IOWA

O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
23-2092.00	Law Clerks	18	6	3.00
23-2093.00	Title Examiners, Abstractors, and Searchers	9	0	0.00
23-2093.01	Title Searchers	5	0	0.00
23-2093.02	Title Examiners and Abstractors	4	0	0.00
23-2099.99	Legal Support Workers, All Other	44	3	14.67
25-1011.00	Business Teachers, Postsecondary	8	5	1.60
25-1021.00	Computer Science Teachers, Postsecondary	3	0	0.00
25-1022.00	Mathematical Science Teachers, Postsecondary	3	1	3.00
25-1032.00	Engineering Teachers, Postsecondary	4	6	0.67
25-1041.00	Agricultural Sciences Teachers, Postsecondary	5	3	1.67
25-1042.00	Biological Science Teachers, Postsecondary	4	6	0.67
25-1052.00	Chemistry Teachers, Postsecondary	1	1	1.00
25-1053.00	Environmental Science Teachers, Postsecondary	1	1	1.00
25-1054.00	Physics Teachers, Postsecondary	3	2	1.50
25-1061.00	Anthropology and Archeology Teachers, Postsecondary	2	1	2.00
25-1062.00	Area, Ethnic, and Cultural Studies Teachers, Postsecondary	1	2	0.50
25-1063.00	Economics Teachers, Postsecondary	2	1	2.00
25-1064.00	Geography Teachers, Postsecondary	1	0	0.00
25-1065.00	Political Science Teachers, Postsecondary	1	2	0.50
25-1066.00	Psychology Teachers, Postsecondary	6	1	6.00
25-1067.00	Sociology Teachers, Postsecondary	1	1	1.00
25-1069.99	Social Sciences Teachers, Postsecondary, All Other	4	4	1.00
25-1071.00	Health Specialties Teachers, Postsecondary	6	12	0.50
25-1072.00	Nursing Instructors and Teachers, Postsecondary	1	15	0.07
25-1081.00	Education Teachers, Postsecondary	20	6	3.33
25-1082.00	Library Science Teachers, Postsecondary	1	0	0.00
25-1111.00	Criminal Justice and Law Enforcement Teachers, Postsecondary	11	1	11.00
25-1113.00	Social Work Teachers, Postsecondary	1	0	0.00
25-1121.00	Art, Drama, and Music Teachers, Postsecondary	15	0	0.00
25-1122.00	Communications Teachers, Postsecondary	9	2	4.50
25-1123.00	English Language and Literature Teachers, Postsecondary	7	1	7.00
25-1124.00	Foreign Language and Literature Teachers, Postsecondary	3	1	3.00
25-1125.00	History Teachers, Postsecondary	3	1	3.00
25-1126.00	Philosophy and Religion Teachers, Postsecondary	5	2	2.50
25-1191.00	Graduate Teaching Assistants	16	1	16.00
25-1192.00	Home Economics Teachers, Postsecondary	2	1	2.00
25-1193.00	Recreation and Fitness Studies Teachers, Postsecondary	11	0	0.00
25-1194.00	Vocational Education Teachers Postsecondary	40	21	1.90
25-1199.99	Postsecondary Teachers, All Other	3	9	0.33

Job Openings and Clients by Occupation (October 1, 2005 - December 31, 2005) **STATE OF IOWA**

O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
25-2011.00	Preschool Teachers, Except Special Education	71	45	1.58
25-2012.00	Kindergarten Teachers, Except Special Education	6	4	1.50
25-2021.00	Elementary School Teachers, Except Special Education	59	10	5.90
25-2022.00	Middle School Teachers, Except Special and Vocational Education	43	3	14.33
25-2023.00	Vocational Education Teachers, Middle School	2	0	0.00
25-2031.00	Secondary School Teachers, Except Special and Vocational Education	63	8	7.88
25-2032.00	Vocational Education Teachers, Secondary School	4	2	2.00
25-2041.00	Special Education Teachers, Preschool, Kindergarten, and Elementary School	17	6	2.83
25-2042.00	Special Education Teachers, Middle School	13	2	6.50
25-2043.00	Special Education Teachers, Secondary School	19	0	0.00
25-3011.00	Adult Literacy, Remedial Education, and GED Teachers and Instructors	28	3	9.33
25-3021.00	Self-Enrichment Education Teachers	27	3	9.00
25-3099.99	Teachers and Instructors, All Other	40	27	1.48
25-4011.00	Archivists	2	0	0.00
25-4012.00	Curators	9	1	9.00
25-4013.00	Museum Technicians and Conservators	7	0	0.00
25-4021.00	Librarians	61	6	10.17
25-4031.00	Library Technicians	28	4	7.00
25-9011.00	Audio-Visual Collections Specialists	2	0	0.00
25-9021.00	Farm and Home Management Advisors	10	1	10.00
25-9031.00	Instructional Coordinators	16	8	2.00
25-9041.00	Teacher Assistants	303	91	3.33
25-9099.99	Education, Training, and Library Workers, All Other	82	14	5.86
27-1011.00	Art Directors	17	2	8.50
27-1012.00	Craft Artists	28	0	0.00
27-1013.00	Fine Artists, Including Painters, Sculptors, and Illustrators	15	0	0.00
27-1013.01	Painters and Illustrators	39	1	39.00
27-1013.02	Sketch Artists	10	0	0.00
27-1013.03	Cartoonists	10	0	0.00
27-1013.04	Sculptors	4	0	0.00
27-1014.00	Multi-Media Artists and Animators	10	1	10.00
27-1019.99	Artists and Related Workers, All Other	51	0	0.00
27-1021.00	Commercial and Industrial Designers	12	1	12.00
27-1022.00	Fashion Designers	6	0	0.00
27-1023.00	Floral Designers	125	9	13.89
27-1024.00	Graphic Designers	177	28	6.32
27-1025.00	Interior Designers	32	5	6.40
27-1026.00	Merchandise Displayers and Window Trimmers	23	56	0.41
27-1027.00	Set and Exhibit Designers	1	0	0.00

Job Openings and Clients by Occupation (October 1, 2005 - December 31, 2005)
STATE OF IOWA

O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
27-1027.01	Set Designers	4	0	0.00
27-1027.02	Exhibit Designers	5	0	0.00
27-1029.99	Designers, All Other	28	1	28.00
27-2011.00	Actors	36	0	0.00
27-2012.00	Producers and Directors	7	0	0.00
27-2012.01	Producers	15	22	0.68
27-2012.02	Directors- Stage, Motion Pictures, Television, and Radio	10	3	3.33
27-2012.03	Program Directors	16	8	2.00
27-2012.04	Talent Directors	2	0	0.00
27-2012.05	Technical Directors/Managers	6	1	6.00
27-2021.00	Athletes and Sports Competitors	13	0	0.00
27-2022.00	Coaches and Scouts	42	13	3.23
27-2023.00	Umpires, Referees, and Other Sports Officials	14	7	2.00
27-2031.00	Dancers	7	0	0.00
27-2032.00	Choreographers	2	0	0.00
27-2041.00	Music Directors and Composers	1	1	1.00
27-2041.01	Music Directors	1	1	1.00
27-2041.02	Music Arrangers and Orchestrators	4	0	0.00
27-2041.03	Composers	1	0	0.00
27-2042.00	Musicians and Singers	14	0	0.00
27-2042.01	Singers	13	0	0.00
27-2042.02	Musicians, Instrumental	25	0	0.00
27-2099.99	Entertainers and Performers, Sports and Related Workers, All Other	9	1	9.00
27-3011.00	Radio and Television Announcers	98	12	8.17
27-3012.00	Public Address System and Other Announcers	3	0	0.00
27-3021.00	Broadcast News Analysts	4	4	1.00
27-3022.00	Reporters and Correspondents	25	18	1.39
27-3031.00	Public Relations Specialists	121	21	5.76
27-3041.00	Editors	55	21	2.62
27-3042.00	Technical Writers	46	4	11.50
27-3043.00	Writers and Authors	30	1	30.00
27-3043.01	Poets and Lyricists	9	0	0.00
27-3043.02	Creative Writers	33	2	16.50
27-3043.03	Caption Writers	9	0	0.00
27-3043.04	Copy Writers	32	4	8.00
27-3091.00	Interpreters and Translators	85	15	5.67
27-3099.99	Media and Communication Workers, All Other	21	1	21.00
27-4011.00	Audio and Video Equipment Technicians	25	6	4.17
27-4012.00	Broadcast Technicians	19	16	1.19

Job Openings and Clients by Occupation (October 1, 2005 - December 31, 2005) **STATE OF IOWA**

O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
27-4013.00	Radio Operators	19	1	19.00
27-4014.00	Sound Engineering Technicians	11	0	0.00
27-4021.00	Photographers	65	27	2.41
27-4021.01	Professional Photographers	45	10	4.50
27-4021.02	Photographers, Scientific	2	0	0.00
27-4031.00	Camera Operators, Television, Video, and Motion Picture	29	7	4.14
27-4032.00	Film and Video Editors	11	1	11.00
27-4099.99	Media and Communication Equipment Workers, All Other	4	0	0.00
29-1011.00	Chiropractors	5	1	5.00
29-1021.00	Dentists, General	1	0	0.00
29-1029.99	Dentists, All Other Specialists	3	0	0.00
29-1031.00	Dietitians and Nutritionists	14	8	1.75
29-1041.00	Optometrists	1	0	0.00
29-1051.00	Pharmacists	3	11	0.27
29-1061.00	Anesthesiologists	2	4	0.50
29-1062.00	Family and General Practitioners	2	4	0.50
29-1063.00	Internists, General	1	1	1.00
29-1065.00	Pediatricians, General	1	0	0.00
29-1066.00	Psychiatrists	0	10	0.00
29-1069.99	Physicians and Surgeons, All Other	1	12	0.08
29-1071.00	Physician Assistants	6	6	1.00
29-1111.00	Registered Nurses	175	372	0.47
29-1121.00	Audiologists	1	0	0.00
29-1122.00	Occupational Therapists	2	8	0.25
29-1123.00	Physical Therapists	4	21	0.19
29-1124.00	Radiation Therapists	1	3	0.33
29-1125.00	Recreational Therapists	18	8	2.25
29-1126.00	Respiratory Therapists	9	7	1.29
29-1127.00	Speech-Language Pathologists	1	5	0.20
29-1129.99	Therapists, All Other	1	2	0.50
29-1131.00	Veterinarians	6	0	0.00
29-1199.99	Health Diagnosing and Treating Practitioners, All Other	3	1	3.00
29-2011.00	Medical and Clinical Laboratory Technologists	20	11	1.82
29-2012.00	Medical and Clinical Laboratory Technicians	55	143	0.38
29-2021.00	Dental Hygienists	10	0	0.00
29-2031.00	Cardiovascular Technologists and Technicians	4	6	0.67
29-2032.00	Diagnostic Medical Sonographers	2	1	2.00
29-2033.00	Nuclear Medicine Technologists	0	3	0.00
29-2034.00	Radiologic Technologists and Technicians	2	0	0.00

Job Openings and Clients by Occupation (October 1, 2005 - December 31, 2005) **STATE OF IOWA**

O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
29-2034.01	Radiologic Technologists	14	6	2.33
29-2034.02	Radiologic Technicians	14	1	14.00
29-2041.00	Emergency Medical Technicians and Paramedics	72	14	5.14
29-2051.00	Dietetic Technicians	38	11	3.45
29-2052.00	Pharmacy Technicians	106	8	13.25
29-2053.00	Psychiatric Technicians	10	0	0.00
29-2054.00	Respiratory Therapy Technicians	4	2	2.00
29-2055.00	Surgical Technologists	11	5	2.20
29-2056.00	Veterinary Technologists and Technicians	37	2	18.50
29-2061.00	Licensed Practical and Licensed Vocational Nurses	150	172	0.87
29-2071.00	Medical Records and Health Information Technicians	203	81	2.51
29-2081.00	Opticians, Dispensing	21	2	10.50
29-2091.00	Orthotists and Prosthetists	1	0	0.00
29-2099.99	Health Technologists and Technicians, All Other	20	8	2.50
29-9011.00	Occupational Health and Safety Specialists	21	16	1.31
29-9012.00	Occupational Health and Safety Technicians	7	1	7.00
29-9091.00	Athletic Trainers	14	1	14.00
29-9099.99	Healthcare Practitioners and Technical Workers, All Other	8	14	0.57
Total for Professional and Related Occupations		5,021	3,262	1.54
31-1011.00	Home Health Aides	490	93	5.27
31-1012.00	Nursing Aides, Orderlies, and Attendants	1,437	408	3.52
31-1013.00	Psychiatric Aides	119	74	1.61
31-2011.00	Occupational Therapist Assistants	4	2	2.00
31-2012.00	Occupational Therapist Aides	11	0	0.00
31-2021.00	Physical Therapist Assistants	14	13	1.08
31-2022.00	Physical Therapist Aides	38	3	12.67
31-9011.00	Massage Therapists	27	3	9.00
31-9091.00	Dental Assistants	92	11	8.36
31-9092.00	Medical Assistants	244	31	7.87
31-9093.00	Medical Equipment Preparers	13	3	4.33
31-9094.00	Medical Transcriptionists	50	3	16.67
31-9095.00	Pharmacy Aides	30	0	0.00
31-9096.00	Veterinary Assistants and Laboratory Animal Caretakers	115	3	38.33
31-9099.99	Healthcare Support Workers, All Other	230	134	1.72
33-1011.00	First-Line Supervisors/Managers of Correctional Officers	4	0	0.00
33-1012.00	First-Line Supervisors/Managers of Police and Detectives	6	0	0.00

Job Openings and Clients by Occupation (October 1, 2005 - December 31, 2005) **STATE OF IOWA**

O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
33-1021.00	First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	3	0	0.00
33-1021.01	Municipal Fire Fighting and Prevention Supervisors	2	0	0.00
33-1099.99	First-Line Supervisors/Managers, Protective Service Workers, All Other	31	24	1.29
33-2011.00	Fire Fighters	28	2	14.00
33-2011.01	Municipal Fire Fighters	51	0	0.00
33-2011.02	Forest Fire Fighters	4	0	0.00
33-2021.01	Fire Inspectors	2	1	2.00
33-2021.02	Fire Investigators	2	0	0.00
33-3011.00	Bailiffs	12	0	0.00
33-3012.00	Correctional Officers and Jailers	236	20	11.80
33-3021.00	Detectives and Criminal Investigators	8	0	0.00
33-3021.01	Police Detectives	8	0	0.00
33-3021.02	Police Identification and Records Officers	8	0	0.00
33-3021.03	Criminal Investigators and Special Agents	19	0	0.00
33-3021.04	Child Support, Missing Persons, and Unemployment Insurance Fraud Investigators	19	0	0.00
33-3021.05	Immigration and Customs Inspectors	7	0	0.00
33-3031.00	Fish and Game Wardens	35	0	0.00
33-3041.00	Parking Enforcement Workers	16	0	0.00
33-3051.00	Police and Sheriff's Patrol Officers	45	3	15.00
33-3051.01	Police Patrol Officers	164	14	11.71
33-3051.02	Highway Patrol Pilots	2	0	0.00
33-3051.03	Sheriffs and Deputy Sheriffs	25	5	5.00
33-3052.00	Transit and Railroad Police	11	0	0.00
33-9011.00	Animal Control Workers	58	0	0.00
33-9021.00	Private Detectives and Investigators	40	17	2.35
33-9031.00	Gaming Surveillance Officers and Gaming Investigators	26	14	1.86
33-9032.00	Security Guards	1,270	281	4.52
33-9091.00	Crossing Guards	202	63	3.21
33-9092.00	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	17	2	8.50
33-9099.99	Protective Service Workers, All Other	22	5	4.40
35-1011.00	Chefs and Head Cooks	115	13	8.85
35-1012.00	First-Line Supervisors/Managers of Food Preparation and Serving Workers	194	43	4.51
35-2011.00	Cooks, Fast Food	470	32	14.69
35-2012.00	Cooks, Institution and Cafeteria	432	104	4.15
35-2013.00	Cooks, Private Household	14	1	14.00
35-2014.00	Cooks, Restaurant	1,032	163	6.33
35-2015.00	Cooks, Short Order	206	66	3.12
35-2019.99	Cooks, All Other	193	8	24.13
35-2021.00	Food Preparation Workers	730	98	7.45

Job Openings and Clients by Occupation (October 1, 2005 - December 31, 2005)
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O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
35-3011.00	Bartenders	780	85	9.18
35-3021.00	Combined Food Preparation and Serving Workers, Including Fast Food	1,103	210	5.25
35-3022.00	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	154	135	1.14
35-3031.00	Waiters and Waitresses	1,588	279	5.69
35-3041.00	Food Servers, Nonrestaurant	235	50	4.70
35-9011.00	Dining Room and Cafeteria Attendants and Bartender Helpers	146	108	1.35
35-9021.00	Dishwashers	968	95	10.19
35-9031.00	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	374	62	6.03
35-9099.99	Food Preparation and Serving Related Workers, All Other	120	169	0.71
37-1011.00	First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	36	3	12.00
37-1011.01	Housekeeping Supervisors	437	55	7.95
37-1011.02	Janitorial Supervisors	80	22	3.64
37-1012.00	First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	12	10	1.20
37-1012.01	Lawn Service Managers	18	1	18.00
37-1012.02	First-Line Supervisors and Manager/Supervisors - Landscaping Workers	20	4	5.00
37-2011.00	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	2,325	482	4.82
37-2012.00	Maids and Housekeeping Cleaners	1,549	319	4.86
37-2019.99	Building Cleaning Workers, All Other	194	12	16.17
37-2021.00	Pest Control Workers	51	8	6.38
37-3011.00	Landscaping and Groundskeeping Workers	1,003	328	3.06
37-3012.00	Pesticide Handlers, Sprayers, and Applicators, Vegetation	17	28	0.61
37-3013.00	Tree Trimmers and Pruners	113	19	5.95
37-3019.99	Grounds Maintenance Workers, All Other	156	27	5.78
39-1011.00	Gaming Supervisors	0	1	0.00
39-1012.00	Slot Key Persons	9	0	0.00
39-1021.00	First-Line Supervisors/Managers of Personal Service Workers	16	5	3.20
39-2011.00	Animal Trainers	17	0	0.00
39-2021.00	Nonfarm Animal Caretakers	248	13	19.08
39-3011.00	Gaming Dealers	50	8	6.25
39-3012.00	Gaming and Sports Book Writers and Runners	1	0	0.00
39-3019.99	Gaming Service Workers, All Other	6	1	6.00
39-3021.00	Motion Picture Projectionists	9	0	0.00
39-3031.00	Ushers, Lobby Attendants, and Ticket Takers	48	29	1.66
39-3091.00	Amusement and Recreation Attendants	92	14	6.57
39-3092.00	Costume Attendants	3	0	0.00
39-3093.00	Locker Room, Coatroom, and Dressing Room Attendants	27	5	5.40
39-3099.99	Entertainment Attendants and Related Workers, All Other	6	1	6.00
39-4021.00	Funeral Attendants	7	0	0.00
39-5011.00	Barbers	12	0	0.00

Job Openings and Clients by Occupation (October 1, 2005 - December 31, 2005)
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O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
39-5012.00	Hairdressers, Hairstylists, and Cosmetologists	131	45	2.91
39-5091.00	Makeup Artists, Theatrical and Performance	4	0	0.00
39-5092.00	Manicurists and Pedicurists	11	0	0.00
39-5093.00	Shampooers	12	0	0.00
39-5094.00	Skin Care Specialists	5	1	5.00
39-6011.00	Baggage Porters and Bellhops	17	1	17.00
39-6012.00	Concierges	11	0	0.00
39-6021.00	Tour Guides and Escorts	13	0	0.00
39-6022.00	Travel Guides	5	0	0.00
39-6031.00	Flight Attendants	18	0	0.00
39-6032.00	Transportation Attendants, Except Flight Attendants and Baggage Porters	9	0	0.00
39-9011.00	Child Care Workers	1,194	148	8.07
39-9021.00	Personal and Home Care Aides	282	74	3.81
39-9031.00	Fitness Trainers and Aerobics Instructors	42	11	3.82
39-9032.00	Recreation Workers	67	21	3.19
39-9041.00	Residential Advisors	18	22	0.82
39-9099.99	Personal Care and Service Workers, All Other	43	16	2.69
Total for Service Occupations		13,044	4,687	2.78
41-1011.00	First-Line Supervisors/Managers of Retail Sales Workers	668	127	5.26
41-1012.00	First-Line Supervisors/Managers of Non-Retail Sales Workers	84	12	7.00
41-2011.00	Cashiers	3,810	451	8.45
41-2012.00	Gaming Change Persons and Booth Cashiers	45	9	5.00
41-2021.00	Counter and Rental Clerks	126	20	6.30
41-2022.00	Parts Salespersons	183	21	8.71
41-2031.00	Retail Salespersons	2,101	721	2.91
41-3011.00	Advertising Sales Agents	143	37	3.86
41-3021.00	Insurance Sales Agents	133	279	0.48
41-3031.00	Securities, Commodities, and Financial Services Sales Agents	6	3	2.00
41-3031.01	Sales Agents, Securities and Commodities	18	9	2.00
41-3031.02	Sales Agents, Financial Services	31	21	1.48
41-3041.00	Travel Agents	37	0	0.00
41-3099.99	Sales Representatives, Services, All Other	249	173	1.44
41-4011.00	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	26	2	13.00
41-4011.01	Sales Representatives, Agricultural	26	14	1.86
41-4011.02	Sales Representatives, Chemical and Pharmaceutical	23	2	11.50
41-4011.03	Sales Representatives, Electrical/Electronic	66	23	2.87

Job Openings and Clients by Occupation (October 1, 2005 - December 31, 2005)
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O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
41-4011.04	Sales Representatives, Mechanical Equipment and Supplies	49	8	6.13
41-4011.05	Sales Representatives, Medical	26	6	4.33
41-4011.06	Sales Representatives, Instruments	4	0	0.00
41-4012.00	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	361	53	6.81
41-9011.00	Demonstrators and Product Promoters	57	131	0.44
41-9012.00	Models	24	0	0.00
41-9021.00	Real Estate Brokers	2	0	0.00
41-9022.00	Real Estate Sales Agents	48	3	16.00
41-9031.00	Sales Engineers	9	1	9.00
41-9041.00	Telemarketers	1,199	1,039	1.15
41-9091.00	Door-To-Door Sales Workers, News and Street Vendors, and Related Workers	35	29	1.21
41-9099.99	Sales and Related Workers, All Other	836	124	6.74
Total for Sales and Related Occupations		7,840	3,318	2.36
43-1011.00	First-Line Supervisors/Managers of Office and Administrative Support Workers	84	14	6.00
43-1011.01	First-Line Supervisors, Customer Service	101	15	6.73
43-1011.02	First-Line Supervisors, Administrative Support	132	15	8.80
43-2011.00	Switchboard Operators, Including Answering Service	173	12	14.42
43-2021.00	Telephone Operators	34	0	0.00
43-2021.01	Directory Assistance Operators	9	0	0.00
43-2021.02	Central Office Operators	28	1	28.00
43-2099.99	Communications Equipment Operators, All Other	26	4	6.50
43-3011.00	Bill and Account Collectors	227	98	2.32
43-3021.00	Billing and Posting Clerks and Machine Operators	59	2	29.50
43-3021.01	Statement Clerks	11	1	11.00
43-3021.02	Billing, Cost, and Rate Clerks	107	32	3.34
43-3021.03	Billing, Posting, and Calculating Machine Operators	64	3	21.33
43-3031.00	Bookkeeping, Accounting, and Auditing Clerks	958	165	5.81
43-3041.00	Gaming Cage Workers	21	2	10.50
43-3051.00	Payroll and Timekeeping Clerks	227	18	12.61
43-3061.00	Procurement Clerks	18	3	6.00
43-3071.00	Tellers	504	97	5.20
43-4011.00	Brokerage Clerks	10	0	0.00
43-4021.00	Correspondence Clerks	32	12	2.67
43-4031.00	Court, Municipal, and License Clerks	26	1	26.00
43-4031.01	Court Clerks	34	1	34.00
43-4031.02	Municipal Clerks	3	0	0.00

Job Openings and Clients by Occupation (October 1, 2005 - December 31, 2005) **STATE OF IOWA**

O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
43-4031.03	License Clerks	10	0	0.00
43-4041.00	Credit Authorizers, Checkers, and Clerks	10	3	3.33
43-4041.01	Credit Authorizers	6	0	0.00
43-4041.02	Credit Checkers	19	0	0.00
43-4051.00	Customer Service Representatives	864	573	1.51
43-4051.01	Adjustment Clerks	137	42	3.26
43-4051.02	Customer Service Representatives, Utilities	245	14	17.50
43-4061.00	Eligibility Interviewers, Government Programs	20	3	6.67
43-4061.01	Claims Takers, Unemployment Benefits	16	0	0.00
43-4061.02	Welfare Eligibility Workers and Interviewers	34	6	5.67
43-4071.00	File Clerks	348	21	16.57
43-4081.00	Hotel, Motel, and Resort Desk Clerks	693	94	7.37
43-4111.00	Interviewers, Except Eligibility and Loan	91	39	2.33
43-4121.00	Library Assistants, Clerical	139	9	15.44
43-4131.00	Loan Interviewers and Clerks	55	43	1.28
43-4141.00	New Accounts Clerks	260	19	13.68
43-4151.00	Order Clerks	315	936	0.34
43-4161.00	Human Resources Assistants, Except Payroll and Timekeeping	165	22	7.50
43-4171.00	Receptionists and Information Clerks	2,119	306	6.92
43-4181.00	Reservation and Transportation Ticket Agents and Travel Clerks	12	1	12.00
43-4181.01	Travel Clerks	28	1	28.00
43-4181.02	Reservation and Transportation Ticket Agents	18	1	18.00
43-4199.99	Information and Record Clerks, All Other	57	7	8.14
43-5011.00	Cargo and Freight Agents	17	3	5.67
43-5021.00	Couriers and Messengers	647	48	13.48
43-5031.00	Police, Fire, and Ambulance Dispatchers	82	13	6.31
43-5032.00	Dispatchers, Except Police, Fire, and Ambulance	116	49	2.37
43-5041.00	Meter Readers, Utilities	122	12	10.17
43-5051.00	Postal Service Clerks	123	0	0.00
43-5052.00	Postal Service Mail Carriers	46	12	3.83
43-5053.00	Postal Service Mail Sorters, Processors, and Processing Machine Operators	55	5	11.00
43-5061.00	Production, Planning, and Expediting Clerks	135	31	4.35
43-5071.00	Shipping, Receiving, and Traffic Clerks	876	76	11.53
43-5081.00	Stock Clerks and Order Fillers	239	50	4.78
43-5081.01	Stock Clerks, Sales Floor	771	115	6.70
43-5081.02	Marking Clerks	7	1	7.00
43-5081.03	Stock Clerks- Stockroom, Warehouse, or Storage Yard	1,315	204	6.45
43-5081.04	Order Fillers, Wholesale and Retail Sales	89	5	17.80
43-5111.00	Weighers, Measurers, Checkers, and Samplers, Recordkeeping	32	27	1.19

Job Openings and Clients by Occupation (October 1, 2005 - December 31, 2005) **STATE OF IOWA**

O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
43-6011.00	Executive Secretaries and Administrative Assistants	913	186	4.91
43-6012.00	Legal Secretaries	172	14	12.29
43-6013.00	Medical Secretaries	192	10	19.20
43-6014.00	Secretaries, Except Legal, Medical, and Executive	966	58	16.66
43-9011.00	Computer Operators	562	9	62.44
43-9021.00	Data Entry Keyers	1,272	90	14.13
43-9022.00	Word Processors and Typists	569	21	27.10
43-9031.00	Desktop Publishers	27	3	9.00
43-9041.00	Insurance Claims and Policy Processing Clerks	44	1	44.00
43-9041.01	Insurance Claims Clerks	73	18	4.06
43-9041.02	Insurance Policy Processing Clerks	42	23	1.83
43-9051.00	Mail Clerks and Mail Machine Operators, Except Postal Service	36	8	4.50
43-9051.01	Mail Machine Operators, Preparation and Handling	29	4	7.25
43-9051.02	Mail Clerks, Except Mail Machine Operators and Postal Service	133	5	26.60
43-9061.00	Office Clerks, General	2,802	413	6.78
43-9071.00	Office Machine Operators, Except Computer	11	1	11.00
43-9071.01	Duplicating Machine Operators	8	1	8.00
43-9081.00	Proofreaders and Copy Markers	45	2	22.50
43-9111.00	Statistical Assistants	6	2	3.00
43-9199.99	Office and Administrative Support Workers, All Other	452	589	0.77
Total for Office and Administrative Support Occupations		11,555	4,745	2.44
45-1011.00	First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	2	0	0.00
45-1011.01	First-Line Supervisors and Manager/Supervisors - Agricultural Crop Workers	6	5	1.20
45-1011.02	First-Line Supervisors and Manager/Supervisors - Animal Husbandry Workers	4	0	0.00
45-1011.03	First-Line Supervisors and Manager/Supervisors - Animal Care Workers, Except Livestock	8	1	8.00
45-1011.04	First-Line Supervisors and Manager/Supervisors - Horticultural Workers	2	0	0.00
45-1011.05	First-Line Supervisors and Manager/Supervisors - Logging Workers	2	0	0.00
45-1011.06	First-Line Supervisors and Manager/Supervisors - Fishery Workers	1	0	0.00
45-2011.00	Agricultural Inspectors	15	5	3.00
45-2021.00	Animal Breeders	37	18	2.06
45-2031.00	Farm Labor Contractors	19	32	0.59
45-2041.00	Graders and Sorters, Agricultural Products	23	9	2.56
45-2091.00	Agricultural Equipment Operators	173	24	7.21
45-2092.00	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	99	158	0.63
45-2092.01	Nursery Workers	93	10	9.30
45-2092.02	General Farmworkers	291	73	3.99

Job Openings and Clients by Occupation (October 1, 2005 - December 31, 2005) **STATE OF IOWA**

O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
45-2093.00	Farmworkers, Farm and Ranch Animals	333	74	4.50
45-2099.99	Agricultural Workers, All Other	23	4	5.75
45-3011.00	Fishers and Related Fishing Workers	38	0	0.00
45-3021.00	Hunters and Trappers	19	0	0.00
45-4011.00	Forest and Conservation Workers	40	5	8.00
45-4021.00	Fallers	9	0	0.00
45-4022.00	Logging Equipment Operators	2	0	0.00
45-4022.01	Logging Tractor Operators	5	1	5.00
45-4023.00	Log Graders and Scalers	1	0	0.00
45-4029.99	Logging Workers, All Other	9	2	4.50
Total for Farming, Fishing, and Forestry Occupations		1,041	421	2.47
47-1011.00	First-Line Supervisors/Managers of Construction Trades and Extraction Workers	11	4	2.75
47-1011.01	First-Line Supervisors and Manager/Supervisors- Construction Trades Workers	67	41	1.63
47-1011.02	First-Line Supervisors and Manager/Supervisors- Extractive Workers	3	2	1.50
47-2011.00	Boilermakers	13	1	13.00
47-2021.00	Brickmasons and Blockmasons	107	16	6.69
47-2022.00	Stonemasons	9	0	0.00
47-2031.00	Carpenters	301	60	5.02
47-2031.01	Construction Carpenters	734	135	5.44
47-2031.02	Rough Carpenters	224	5	44.80
47-2031.03	Carpenter Assemblers and Repairers	231	14	16.50
47-2031.05	Boat Builders and Shipwrights	3	0	0.00
47-2041.00	Carpet Installers	132	7	18.86
47-2042.00	Floor Layers, Except Carpet, Wood, and Hard Tiles	59	2	29.50
47-2043.00	Floor Sanders and Finishers	15	107	0.14
47-2044.00	Tile and Marble Setters	24	1	24.00
47-2051.00	Cement Masons and Concrete Finishers	379	142	2.67
47-2053.00	Terrazzo Workers and Finishers	2	4	0.50
47-2061.00	Construction Laborers	1,231	542	2.27
47-2071.00	Paving, Surfacing, and Tamping Equipment Operators	44	1	44.00
47-2072.00	Pile-Driver Operators	1	0	0.00
47-2073.00	Operating Engineers and Other Construction Equipment Operators	75	18	4.17
47-2073.01	Grader, Bulldozer, and Scraper Operators	152	30	5.07
47-2073.02	Operating Engineers	286	62	4.61
47-2081.00	Drywall and Ceiling Tile Installers	55	0	0.00
47-2081.01	Ceiling Tile Installers	8	2	4.00

Job Openings and Clients by Occupation (October 1, 2005 - December 31, 2005)
STATE OF IOWA

O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
47-2081.02	Drywall Installers	283	22	12.86
47-2082.00	Tapers	7	1	7.00
47-2111.00	Electricians	338	164	2.06
47-2121.00	Glaziers	10	6	1.67
47-2131.00	Insulation Workers, Floor, Ceiling, and Wall	21	15	1.40
47-2132.00	Insulation Workers, Mechanical	5	0	0.00
47-2141.00	Painters, Construction and Maintenance	579	47	12.32
47-2142.00	Paperhangers	4	0	0.00
47-2151.00	Pipelayers	20	2	10.00
47-2152.00	Plumbers, Pipefitters, and Steamfitters	20	27	0.74
47-2152.01	Pipe Fitters	73	46	1.59
47-2152.02	Plumbers	185	79	2.34
47-2152.03	Pipelaying Fitters	4	1	4.00
47-2161.00	Plasterers and Stucco Masons	8	1	8.00
47-2171.00	Reinforcing Iron and Rebar Workers	6	1	6.00
47-2181.00	Roofers	600	55	10.91
47-2211.00	Sheet Metal Workers	127	21	6.05
47-2221.00	Structural Iron and Steel Workers	62	57	1.09
47-3011.00	Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	29	21	1.38
47-3012.00	Helpers--Carpenters	529	72	7.35
47-3013.00	Helpers--Electricians	193	22	8.77
47-3014.00	Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons	37	7	5.29
47-3015.00	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	87	12	7.25
47-3016.00	Helpers--Roofers	44	16	2.75
47-3019.99	Helpers, Construction Trades, All Other	203	24	8.46
47-4011.00	Construction and Building Inspectors	27	4	6.75
47-4021.00	Elevator Installers and Repairers	1	0	0.00
47-4031.00	Fence Erectors	22	2	11.00
47-4041.00	Hazardous Materials Removal Workers	11	1	11.00
47-4041.01	Irradiated-Fuel Handlers	9	0	0.00
47-4051.00	Highway Maintenance Workers	92	28	3.29
47-4061.00	Rail-Track Laying and Maintenance Equipment Operators	29	5	5.80
47-4071.00	Septic Tank Servicers and Sewer Pipe Cleaners	2	2	1.00
47-4099.99	Construction and Related Workers, All Other	221	128	1.73
47-5011.00	Derrick Operators, Oil and Gas	2	0	0.00
47-5013.00	Service Unit Operators, Oil, Gas, and Mining	1	0	0.00
47-5021.00	Earth Drillers, Except Oil and Gas	2	0	0.00
47-5021.01	Construction Drillers	5	5	1.00
47-5021.02	Well and Core Drill Operators	3	2	1.50

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O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
47-5031.00	Explosives Workers, Ordnance Handling Experts, and Blasters	4	0	0.00
47-5041.00	Continuous Mining Machine Operators	5	0	0.00
47-5042.00	Mine Cutting and Channeling Machine Operators	3	0	0.00
47-5049.99	Mining Machine Operators, All Other	5	0	0.00
47-5051.00	Rock Splitters, Quarry	3	0	0.00
47-5071.00	Roustabouts, Oil and Gas	2	0	0.00
47-5081.00	Helpers--Extraction Workers	8	0	0.00
47-5099.99	Extraction Workers, All Other	9	1	9.00
Total for Construction and Extraction Occupations		5,194	2,093	2.48
49-1011.00	First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	144	32	4.50
49-2011.00	Computer, Automated Teller, and Office Machine Repairers	17	6	2.83
49-2011.01	Automatic Teller Machine Servicers	3	2	1.50
49-2011.02	Data Processing Equipment Repairers	5	2	2.50
49-2011.03	Office Machine and Cash Register Servicers	25	5	5.00
49-2021.00	Radio Mechanics	16	0	0.00
49-2022.00	Telecommunications Equipment Installers and Repairers, Except Line Installers	22	3	7.33
49-2022.01	Central Office and PBX Installers and Repairers	8	1	8.00
49-2022.03	Communication Equipment Mechanics, Installers, and Repairers	45	14	3.21
49-2022.04	Telecommunications Facility Examiners	1	0	0.00
49-2022.05	Station Installers and Repairers, Telephone	2	3	0.67
49-2091.00	Avionics Technicians	3	0	0.00
49-2092.00	Electric Motor, Power Tool, and Related Repairers	7	0	0.00
49-2092.01	Electric Home Appliance and Power Tool Repairers	32	6	5.33
49-2092.02	Electric Motor and Switch Assemblers and Repairers	19	1	19.00
49-2092.03	Battery Repairers	2	2	1.00
49-2092.04	Transformer Repairers	1	0	0.00
49-2092.05	Electrical Parts Reconditioners	1	0	0.00
49-2092.06	Hand and Portable Power Tool Repairers	6	0	0.00
49-2093.00	Electrical and Electronics Installers and Repairers, Transportation Equipment	15	6	2.50
49-2094.00	Electrical and Electronics Repairers, Commercial and Industrial Equipment	66	11	6.00
49-2095.00	Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	12	1	12.00
49-2096.00	Electronic Equipment Installers and Repairers, Motor Vehicles	15	4	3.75
49-2097.00	Electronic Home Entertainment Equipment Installers and Repairers	27	3	9.00
49-2098.00	Security and Fire Alarm Systems Installers	11	5	2.20
49-3011.00	Aircraft Mechanics and Service Technicians	22	1	22.00
49-3011.01	Airframe-and-Power-Plant Mechanics	6	0	0.00

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O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
49-3011.02	Aircraft Engine Specialists	4	0	0.00
49-3011.03	Aircraft Body and Bonded Structure Repairers	6	0	0.00
49-3021.00	Automotive Body and Related Repairers	310	21	14.76
49-3022.00	Automotive Glass Installers and Repairers	15	1	15.00
49-3023.00	Automotive Service Technicians and Mechanics	205	75	2.73
49-3023.01	Automotive Master Mechanics	397	50	7.94
49-3023.02	Automotive Specialty Technicians	45	11	4.09
49-3031.00	Bus and Truck Mechanics and Diesel Engine Specialists	144	122	1.18
49-3041.00	Farm Equipment Mechanics	65	10	6.50
49-3042.00	Mobile Heavy Equipment Mechanics, Except Engines	55	15	3.67
49-3043.00	Rail Car Repairers	17	6	2.83
49-3051.00	Motorboat Mechanics	6	1	6.00
49-3052.00	Motorcycle Mechanics	20	1	20.00
49-3053.00	Outdoor Power Equipment and Other Small Engine Mechanics	68	7	9.71
49-3091.00	Bicycle Repairers	14	1	14.00
49-3092.00	Recreational Vehicle Service Technicians	4	0	0.00
49-3093.00	Tire Repairers and Changers	163	27	6.04
49-9011.00	Mechanical Door Repairers	9	10	0.90
49-9012.00	Control and Valve Installers and Repairers, Except Mechanical Door	5	2	2.50
49-9012.01	Electric Meter Installers and Repairers	6	2	3.00
49-9012.02	Valve and Regulator Repairers	5	0	0.00
49-9012.03	Meter Mechanics	2	1	2.00
49-9021.00	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	31	11	2.82
49-9021.01	Heating and Air Conditioning Mechanics	85	65	1.31
49-9021.02	Refrigeration Mechanics	12	8	1.50
49-9031.00	Home Appliance Repairers	10	8	1.25
49-9031.01	Home Appliance Installers	9	2	4.50
49-9031.02	Gas Appliance Repairers	10	3	3.33
49-9041.00	Industrial Machinery Mechanics	412	150	2.75
49-9042.00	Maintenance and Repair Workers, General	788	176	4.48
49-9043.00	Maintenance Workers, Machinery	129	45	2.87
49-9044.00	Millwrights	79	30	2.63
49-9045.00	Refractory Materials Repairers, Except Brickmasons	2	0	0.00
49-9051.00	Electrical Power-Line Installers and Repairers	41	6	6.83
49-9052.00	Telecommunications Line Installers and Repairers	90	110	0.82
49-9061.00	Camera and Photographic Equipment Repairers	3	0	0.00
49-9062.00	Medical Equipment Repairers	3	0	0.00
49-9063.00	Musical Instrument Repairers and Tuners	2	0	0.00
49-9063.02	Stringed Instrument Repairers and Tuners	1	0	0.00

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O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
49-9063.04	Percussion Instrument Repairers and Tuners	2	0	0.00
49-9064.00	Watch Repairers	1	1	1.00
49-9069.99	Precision Instrument and Equipment Repairers, All Other	2	0	0.00
49-9091.00	Coin, Vending, and Amusement Machine Servicers and Repairers	13	6	2.17
49-9092.00	Commercial Divers	8	0	0.00
49-9094.00	Locksmiths and Safe Repairers	8	0	0.00
49-9095.00	Manufactured Building and Mobile Home Installers	6	2	3.00
49-9096.00	Riggers	5	2	2.50
49-9097.00	Signal and Track Switch Repairers	4	0	0.00
49-9098.00	Helpers--Installation, Maintenance, and Repair Workers	350	36	9.72
49-9099.99	Installation, Maintenance, and Repair Workers, All Other	150	28	5.36
Total for Installation, Maintenance, and Repair Occupations		3,185	1,160	2.75
51-1011.00	First-Line Supervisors/Managers of Production and Operating Workers	433	102	4.25
51-2011.01	Aircraft Structure Assemblers, Precision	2	0	0.00
51-2011.02	Aircraft Systems Assemblers, Precision	13	0	0.00
51-2011.03	Aircraft Rigging Assemblers	1	0	0.00
51-2021.00	Coil Winders, Tapers, and Finishers	5	0	0.00
51-2022.00	Electrical and Electronic Equipment Assemblers	179	59	3.03
51-2023.00	Electromechanical Equipment Assemblers	16	0	0.00
51-2031.00	Engine and Other Machine Assemblers	198	49	4.04
51-2041.00	Structural Metal Fabricators and Fitters	5	0	0.00
51-2041.01	Metal Fabricators, Structural Metal Products	75	39	1.92
51-2041.02	Fitters, Structural Metal- Precision	2	2	1.00
51-2091.00	Fiberglass Laminators and Fabricators	15	16	0.94
51-2092.00	Team Assemblers	439	367	1.20
51-2093.00	Timing Device Assemblers, Adjusters, and Calibrators	7	0	0.00
51-2099.99	Assemblers and Fabricators, All Other	772	166	4.65
51-3011.00	Bakers	67	11	6.09
51-3011.01	Bakers, Bread and Pastry	165	37	4.46
51-3011.02	Bakers, Manufacturing	106	5	21.20
51-3021.00	Butchers and Meat Cutters	216	24	9.00
51-3022.00	Meat, Poultry, and Fish Cutters and Trimmers	157	38	4.13
51-3023.00	Slaughterers and Meat Packers	655	94	6.97
51-3091.00	Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders	17	3	5.67
51-3092.00	Food Batchmakers	23	2	11.50
51-3093.00	Food Cooking Machine Operators and Tenders	37	3	12.33

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O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
51-4011.00	Computer-Controlled Machine Tool Operators, Metal and Plastic	30	2	15.00
51-4011.01	Numerical Control Machine Tool Operators and Tenders, Metal and Plastic	137	46	2.98
51-4012.00	Numerical Tool and Process Control Programmers	12	5	2.40
51-4021.00	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	19	12	1.58
51-4022.00	Forging Machine Setters, Operators, and Tenders, Metal and Plastic	13	8	1.63
51-4023.00	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	7	1	7.00
51-4031.00	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	81	4	20.25
51-4031.01	Sawing Machine Tool Setters and Set-Up Operators, Metal and Plastic	36	5	7.20
51-4031.02	Punching Machine Setters and Set-Up Operators, Metal and Plastic	55	4	13.75
51-4031.03	Press and Press Brake Machine Setters and Set-Up Operators, Metal and Plastic	137	12	11.42
51-4031.04	Shear and Slitter Machine Setters and Set-Up Operators, Metal and Plastic	32	3	10.67
51-4032.00	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	59	34	1.74
51-4033.00	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	14	0	0.00
51-4033.01	Grinding, Honing, Lapping, and Deburring Machine Set-Up Operators	56	12	4.67
51-4033.02	Buffing and Polishing Set-Up Operators	18	4	4.50
51-4034.00	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	55	5	11.00
51-4035.00	Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	21	7	3.00
51-4041.00	Machinists	403	109	3.70
51-4051.00	Metal-Refining Furnace Operators and Tenders	7	0	0.00
51-4052.00	Pourers and Casters, Metal	14	3	4.67
51-4061.00	Model Makers, Metal and Plastic	3	24	0.13
51-4062.00	Patternmakers, Metal and Plastic	4	0	0.00
51-4071.00	Foundry Mold and Coremakers	80	17	4.71
51-4072.00	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	11	8	1.38
51-4072.01	Plastic Molding and Casting Machine Setters and Set-Up Operators	86	17	5.06
51-4072.02	Plastic Molding and Casting Machine Operators and Tenders	41	16	2.56
51-4072.03	Metal Molding, Coremaking, and Casting Machine Setters and Set-Up Operators	12	0	0.00
51-4072.04	Metal Molding, Coremaking, and Casting Machine Operators and Tenders	14	4	3.50
51-4072.05	Casting Machine Set-Up Operators	10	0	0.00
51-4081.00	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	8	0	0.00
51-4081.01	Combination Machine Tool Setters and Set-Up Operators, Metal and Plastic	595	99	6.01
51-4081.02	Combination Machine Tool Operators and Tenders, Metal and Plastic	644	97	6.64
51-4111.00	Tool and Die Makers	65	27	2.41
51-4121.00	Welders, Cutters, Solderers, and Brazers	87	29	3.00
51-4121.01	Welders, Production	573	305	1.88
51-4121.02	Welders and Cutters	566	235	2.41
51-4121.03	Welder-Fitters	170	149	1.14
51-4121.04	Solderers	34	1	34.00
51-4121.05	Brazers	7	0	0.00

Job Openings and Clients by Occupation (October 1, 2005 - December 31, 2005) **STATE OF IOWA**

O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
51-4122.00	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	27	1	27.00
51-4122.01	Welding Machine Setters and Set-Up Operators	45	0	0.00
51-4122.02	Welding Machine Operators and Tenders	33	45	0.73
51-4122.04	Soldering and Brazing Machine Operators and Tenders	3	0	0.00
51-4191.00	Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	2	0	0.00
51-4191.01	Heating Equipment Setters and Set-Up Operators, Metal and Plastic	1	0	0.00
51-4191.02	Heat Treating, Annealing, and Tempering Machine Operators and Tenders, Metal and Plastic	4	4	1.00
51-4192.00	Lay-Out Workers, Metal and Plastic	14	0	0.00
51-4193.00	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	1	0	0.00
51-4193.01	Electrolytic Plating and Coating Machine Setters and Set-Up Operators, Metal and Plastic	4	0	0.00
51-4193.02	Electrolytic Plating and Coating Machine Operators and Tenders, Metal and Plastic	2	1	2.00
51-4193.04	Nonelectrolytic Plating and Coating Machine Operators and Tenders, Metal and Plastic	5	0	0.00
51-4194.00	Tool Grinders, Filers, and Sharpeners	23	8	2.88
51-4199.99	Metal Workers and Plastic Workers, All Other	115	30	3.83
51-5011.00	Bindery Workers	44	19	2.32
51-5011.01	Bindery Machine Setters and Set-Up Operators	3	4	0.75
51-5011.02	Bindery Machine Operators and Tenders	78	4	19.50
51-5012.00	Bookbinders	9	0	0.00
51-5021.00	Job Printers	11	0	0.00
51-5022.00	Prepress Technicians and Workers	5	0	0.00
51-5022.01	Hand Compositors and Typesetters	4	0	0.00
51-5022.02	Paste-Up Workers	4	0	0.00
51-5022.04	Camera Operators	10	0	0.00
51-5022.05	Scanner Operators	14	2	7.00
51-5022.11	Plate Finishers	2	0	0.00
51-5022.12	Typesetting and Composing Machine Operators and Tenders	2	0	0.00
51-5022.13	Photoengraving and Lithographing Machine Operators and Tenders	1	0	0.00
51-5023.00	Printing Machine Operators	30	8	3.75
51-5023.01	Precision Printing Workers	36	1	36.00
51-5023.02	Offset Lithographic Press Setters and Set-Up Operators	21	1	21.00
51-5023.03	Letterpress Setters and Set-Up Operators	12	4	3.00
51-5023.04	Design Printing Machine Setters and Set-Up Operators	6	0	0.00
51-5023.05	Marking and Identification Printing Machine Setters and Set-Up Operators	2	0	0.00
51-5023.06	Screen Printing Machine Setters and Set-Up Operators	12	1	12.00
51-5023.07	Embossing Machine Set-Up Operators	0	1	0.00
51-5023.08	Engraver Set-Up Operators	3	0	0.00
51-5023.09	Printing Press Machine Operators and Tenders	76	22	3.45
51-6011.00	Laundry and Dry-Cleaning Workers	67	8	8.38
51-6011.01	Spotters, Dry Cleaning	1	0	0.00

Job Openings and Clients by Occupation (October 1, 2005 - December 31, 2005)
STATE OF IOWA

O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
51-6011.03	Laundry and Drycleaning Machine Operators and Tenders, Except Pressing	209	9	23.22
51-6021.00	Pressers, Textile, Garment, and Related Materials	2	0	0.00
51-6021.01	Pressers, Delicate Fabrics	1	2	0.50
51-6021.02	Pressing Machine Operators and Tenders- Textile, Garment, and Related Materials	39	7	5.57
51-6021.03	Pressers, Hand	4	0	0.00
51-6031.00	Sewing Machine Operators	28	0	0.00
51-6031.01	Sewing Machine Operators, Garment	30	1	30.00
51-6031.02	Sewing Machine Operators, Non-Garment	53	17	3.12
51-6041.00	Shoe and Leather Workers and Repairers	2	0	0.00
51-6051.00	Sewers, Hand	9	0	0.00
51-6052.00	Tailors, Dressmakers, and Custom Sewers	6	3	2.00
51-6052.01	Shop and Alteration Tailors	3	0	0.00
51-6062.00	Textile Cutting Machine Setters, Operators, and Tenders	6	5	1.20
51-6064.00	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	1	0	0.00
51-6091.00	Extruding and Forming Machine Setters, Operators, and Tenders, Synthetic and Glass Fibers	2	0	0.00
51-6091.01	Extruding and Forming Machine Operators and Tenders, Synthetic or Glass Fibers	5	2	2.50
51-6092.00	Fabric and Apparel Patternmakers	2	1	2.00
51-6093.00	Upholsterers	11	3	3.67
51-6099.99	Textile, Apparel, and Furnishings Workers, All Other	5	0	0.00
51-7011.00	Cabinetmakers and Bench Carpenters	124	8	15.50
51-7021.00	Furniture Finishers	7	12	0.58
51-7032.00	Patternmakers, Wood	1	0	0.00
51-7041.00	Sawing Machine Setters, Operators, and Tenders, Wood	9	0	0.00
51-7041.01	Sawing Machine Setters and Set-Up Operators	2	0	0.00
51-7041.02	Sawing Machine Operators and Tenders	54	7	7.71
51-7042.00	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	2	0	0.00
51-7042.01	Woodworking Machine Setters and Set-Up Operators, Except Sawing	13	0	0.00
51-7042.02	Woodworking Machine Operators and Tenders, Except Sawing	41	3	13.67
51-7099.99	Woodworkers, All Other	29	0	0.00
51-8011.00	Nuclear Power Reactor Operators	2	0	0.00
51-8012.00	Power Distributors and Dispatchers	3	0	0.00
51-8013.00	Power Plant Operators	7	0	0.00
51-8013.01	Power Generating Plant Operators, Except Auxiliary Equipment Operators	5	0	0.00
51-8013.02	Auxiliary Equipment Operators, Power	2	2	1.00
51-8021.00	Stationary Engineers and Boiler Operators	0	4	0.00
51-8021.01	Boiler Operators and Tenders, Low Pressure	14	1	14.00
51-8021.02	Stationary Engineers	13	2	6.50
51-8031.00	Water and Liquid Waste Treatment Plant and System Operators	30	11	2.73
51-8091.00	Chemical Plant and System Operators	11	0	0.00

Job Openings and Clients by Occupation (October 1, 2005 - December 31, 2005) **STATE OF IOWA**

O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
51-8092.00	Gas Plant Operators	1	0	0.00
51-8092.01	Gas Processing Plant Operators	1	0	0.00
51-8092.02	Gas Distribution Plant Operators	2	0	0.00
51-8093.00	Petroleum Pump System Operators, Refinery Operators, and Gaugers	2	0	0.00
51-8093.01	Petroleum Pump System Operators	2	0	0.00
51-8093.02	Petroleum Refinery and Control Panel Operators	2	0	0.00
51-8099.99	Plant and System Operators, All Other	10	0	0.00
51-9011.00	Chemical Equipment Operators and Tenders	13	0	0.00
51-9011.01	Chemical Equipment Controllers and Operators	73	13	5.62
51-9011.02	Chemical Equipment Tenders	92	0	0.00
51-9012.00	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	132	66	2.00
51-9021.00	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	64	16	4.00
51-9022.00	Grinding and Polishing Workers, Hand	105	144	0.73
51-9023.00	Mixing and Blending Machine Setters, Operators, and Tenders	170	65	2.62
51-9031.00	Cutters and Trimmers, Hand	34	2	17.00
51-9032.00	Cutting and Slicing Machine Setters, Operators, and Tenders	5	0	0.00
51-9032.01	Fiber Product Cutting Machine Setters and Set-Up Operators	12	0	0.00
51-9032.02	Stone Sawyers	2	0	0.00
51-9032.03	Glass Cutting Machine Setters and Set-Up Operators	23	7	3.29
51-9032.04	Cutting and Slicing Machine Operators and Tenders	19	11	1.73
51-9041.00	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	1	14	0.07
51-9041.01	Extruding, Forming, Pressing, and Compacting Machine Setters and Set-Up Operators	6	0	0.00
51-9041.02	Extruding, Forming, Pressing, and Compacting Machine Operators and Tenders	51	20	2.55
51-9051.00	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	17	10	1.70
51-9061.00	Inspectors, Testers, Sorters, Samplers, and Weighers	49	2	24.50
51-9061.01	Materials Inspectors	54	22	2.45
51-9061.02	Mechanical Inspectors	26	4	6.50
51-9061.03	Precision Devices Inspectors and Testers	7	32	0.22
51-9061.04	Electrical and Electronic Inspectors and Testers	18	0	0.00
51-9061.05	Production Inspectors, Testers, Graders, Sorters, Samplers, Weighers	413	62	6.66
51-9071.00	Jewelers and Precious Stone and Metal Workers	1	0	0.00
51-9071.01	Jewelers	7	0	0.00
51-9071.04	Bench Workers, Jewelry	3	0	0.00
51-9071.06	Gem and Diamond Workers	2	0	0.00
51-9081.00	Dental Laboratory Technicians	7	3	2.33
51-9082.00	Medical Appliance Technicians	2	0	0.00
51-9083.00	Ophthalmic Laboratory Technicians	3	10	0.30
51-9083.01	Precision Lens Grinders and Polishers	7	15	0.47
51-9083.02	Optical Instrument Assemblers	1	0	0.00

Job Openings and Clients by Occupation (October 1, 2005 - December 31, 2005)
STATE OF IOWA

O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
51-9111.00	Packaging and Filling Machine Operators and Tenders	281	48	5.85
51-9121.00	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	15	0	0.00
51-9121.01	Coating, Painting, and Spraying Machine Setters and Set-Up Operators	16	3	5.33
51-9121.02	Coating, Painting, and Spraying Machine Operators and Tenders	36	11	3.27
51-9122.00	Painters, Transportation Equipment	23	12	1.92
51-9123.00	Painting, Coating, and Decorating Workers	166	19	8.74
51-9131.00	Photographic Process Workers	3	0	0.00
51-9131.01	Photographic Retouchers and Restorers	4	0	0.00
51-9131.02	Photographic Reproduction Technicians	1	1	1.00
51-9131.03	Photographic Hand Developers	2	3	0.67
51-9131.04	Film Laboratory Technicians	5	0	0.00
51-9132.00	Photographic Processing Machine Operators	15	0	0.00
51-9141.00	Semiconductor Processors	16	0	0.00
51-9191.00	Cementing and Gluing Machine Operators and Tenders	9	2	4.50
51-9192.00	Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders	16	3	5.33
51-9193.00	Cooling and Freezing Equipment Operators and Tenders	2	1	2.00
51-9194.00	Etchers and Engravers	2	0	0.00
51-9194.01	Precision Etchers and Engravers, Hand or Machine	1	0	0.00
51-9194.02	Engravers/Carvers	1	0	0.00
51-9195.00	Molders, Shapers, and Casters, Except Metal and Plastic	6	3	2.00
51-9195.01	Precision Mold and Pattern Casters, except Nonferrous Metals	1	0	0.00
51-9195.02	Precision Pattern and Die Casters, Nonferrous Metals	1	0	0.00
51-9195.04	Glass Blowers, Molders, Benders, and Finishers	4	0	0.00
51-9195.05	Potters	1	0	0.00
51-9195.06	Mold Makers, Hand	1	1	1.00
51-9195.07	Molding and Casting Workers	22	6	3.67
51-9196.00	Paper Goods Machine Setters, Operators, and Tenders	151	8	18.88
51-9197.00	Tire Builders	20	2	10.00
51-9198.00	Helpers--Production Workers	477	182	2.62
51-9198.01	Production Laborers	4,703	1,096	4.29
51-9198.02	Production Helpers	597	68	8.78
51-9199.99	Production Workers, All Other	3,760	2,498	1.51
Total for Production Occupations		13,250	7,070	1.87
53-1011.00	Aircraft Cargo Handling Supervisors	9	0	0.00
53-1021.00	First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	71	4	17.75
53-1031.00	First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Oper	53	7	7.57

Job Openings and Clients by Occupation (October 1, 2005 - December 31, 2005)
STATE OF IOWA

O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
53-2011.00	Airline Pilots, Copilots, and Flight Engineers	1	1	1.00
53-2012.00	Commercial Pilots	4	0	0.00
53-2021.00	Air Traffic Controllers	5	0	0.00
53-2022.00	Airfield Operations Specialists	5	0	0.00
53-3011.00	Ambulance Drivers and Attendants, Except Emergency Medical Technicians	13	0	0.00
53-3021.00	Bus Drivers, Transit and Intercity	67	38	1.76
53-3022.00	Bus Drivers, School	79	29	2.72
53-3031.00	Driver/Sales Workers	464	124	3.74
53-3032.00	Truck Drivers, Heavy and Tractor-Trailer	183	120	1.53
53-3032.01	Truck Drivers, Heavy	715	305	2.34
53-3032.02	Tractor-Trailer Truck Drivers	488	482	1.01
53-3033.00	Truck Drivers, Light or Delivery Services	1,006	172	5.85
53-3041.00	Taxi Drivers and Chauffeurs	80	52	1.54
53-3099.99	Motor Vehicle Operators, All Other	28	0	0.00
53-4011.00	Locomotive Engineers	9	2	4.50
53-4012.00	Locomotive Firers	1	0	0.00
53-4013.00	Rail Yard Engineers, Dinkey Operators, and Hostlers	3	0	0.00
53-4021.00	Railroad Brake, Signal, and Switch Operators	11	0	0.00
53-4021.01	Train Crew Members	20	0	0.00
53-4021.02	Railroad Yard Workers	75	1	75.00
53-4031.00	Railroad Conductors and Yardmasters	11	5	2.20
53-4099.99	Rail Transportation Workers, All Other	14	0	0.00
53-5011.00	Sailors and Marine Oilers	2	0	0.00
53-5011.01	Able Seamen	31	0	0.00
53-5011.02	Ordinary Seamen and Marine Oilers	17	5	3.40
53-5021.00	Captains, Mates, and Pilots of Water Vessels	2	0	0.00
53-5021.01	Ship and Boat Captains	2	0	0.00
53-5021.02	Mates- Ship, Boat, and Barge	5	0	0.00
53-5021.03	Pilots, Ship	1	0	0.00
53-5031.00	Ship Engineers	2	0	0.00
53-6011.00	Bridge and Lock Tenders	4	0	0.00
53-6021.00	Parking Lot Attendants	16	8	2.00
53-6031.00	Service Station Attendants	166	17	9.76
53-6041.00	Traffic Technicians	4	0	0.00
53-6051.00	Transportation Inspectors	10	3	3.33
53-6051.01	Aviation Inspectors	4	0	0.00
53-6051.02	Public Transportation Inspectors	1	0	0.00
53-6051.04	Railroad Inspectors	6	1	6.00
53-6051.05	Motor Vehicle Inspectors	6	0	0.00

Job Openings and Clients by Occupation (October 1, 2005 - December 31, 2005)
STATE OF IOWA

O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
53-6051.06	Freight Inspectors	6	0	0.00
53-6099.99	Transportation Workers, All Other	26	3	8.67
53-7011.00	Conveyor Operators and Tenders	33	11	3.00
53-7021.00	Crane and Tower Operators	68	19	3.58
53-7031.00	Dredge Operators	3	0	0.00
53-7032.00	Excavating and Loading Machine and Dragline Operators	3	0	0.00
53-7032.01	Excavating and Loading Machine Operators	30	3	10.00
53-7032.02	Dragline Operators	4	0	0.00
53-7033.00	Loading Machine Operators, Underground Mining	5	2	2.50
53-7041.00	Hoist and Winch Operators	18	1	18.00
53-7051.00	Industrial Truck and Tractor Operators	2,773	156	17.78
53-7061.00	Cleaners of Vehicles and Equipment	358	64	5.59
53-7062.00	Laborers and Freight, Stock, and Material Movers, Hand	281	113	2.49
53-7062.01	Stevedores, Except Equipment Operators	14	9	1.56
53-7062.02	Grips and Set-Up Workers, Motion Picture Sets, Studios, and Stages	6	3	2.00
53-7062.03	Freight, Stock, and Material Movers, Hand	2,001	307	6.52
53-7063.00	Machine Feeders and Offbearers	646	64	10.09
53-7064.00	Packers and Packagers, Hand	1,290	236	5.47
53-7071.01	Gas Pumping Station Operators	6	0	0.00
53-7072.00	Pump Operators, Except Wellhead Pumpers	7	2	3.50
53-7081.00	Refuse and Recyclable Material Collectors	80	16	5.00
53-7111.00	Shuttle Car Operators	14	0	0.00
53-7121.00	Tank Car, Truck, and Ship Loaders	42	4	10.50
53-7199.99	Material Moving Workers, All Other	81	8	10.13
Total for Transportation and Material Moving Occupations		8,215	2,397	3.43
55-1012.00	Aircraft Launch and Recovery Officers	1	0	0.00
55-1013.00	Armored Assault Vehicle Officers	1	0	0.00
55-1015.00	Command and Control Center Officers	1	0	0.00
55-1016.00	Infantry Officers	2	2	1.00
55-2011.00	First-Line Supervisors/Managers of Air Crew Members	1	0	0.00
55-2012.00	First-Line Supervisors/Managers of Weapons Specialists/Crew Members	2	0	0.00
55-2013.00	First-Line Supervisors/Managers of All Other Tactical Operations Specialists	8	0	0.00
55-3011.00	Air Crew Members	7	0	0.00
55-3012.00	Aircraft Launch and Recovery Specialists	6	0	0.00
55-3013.00	Armored Assault Vehicle Crew Members	3	0	0.00
55-3014.00	Artillery and Missile Crew Members	4	0	0.00

Job Openings and Clients by Occupation (October 1, 2005 - December 31, 2005) STATE OF IOWA

O*Net Code	Title	Available Clients	Available Openings	Client/ Opening Ratio
55-3015.00	Command and Control Center Specialists	8	1	8.00
55-3016.00	Infantry	10	0	0.00
55-3017.00	Radar and Sonar Technicians	3	0	0.00
55-3018.00	Special Forces	4	0	0.00
55-3019.99	Military Enlisted Tactical Operations and Air/Weapons Specialists and Crew Members, All Other	12	12	1.00
Total for Military Specific Occupations		58	15	3.87
Grand Total		33,286	30,861	1.08

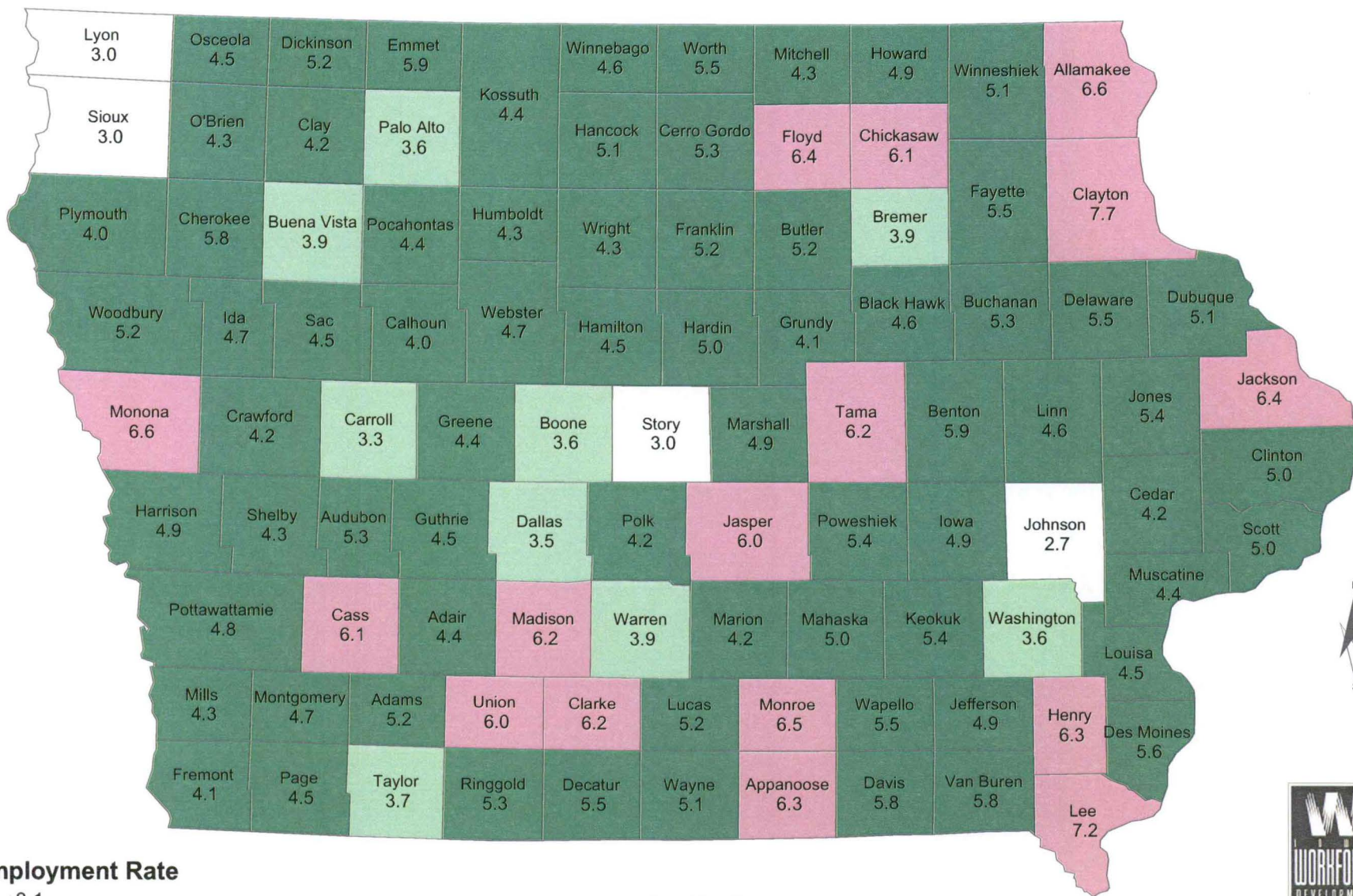
Source: Labor Market and Economic Research Bureau, Iowa Workforce Development

Notes

- Clients and Openings are selected using the Audit_Modify_DT field. This represents the last date there was any activity with the record. This date had to be during the reference period for a record to be selected.
- Clients and openings are counted by IWD Region and O*Net Code.
- O*Net titles are taken from the ALMIS *Onetcode* table.
- Clients are counted once for each occupation listed in the IWORKS UW_Client_Onets table. For this reason, adding the individual 'Available Clients' lines will normally result in a total greater than the number of clients who have registered. However, a client is counted only once per occupational group (for the group total) and once per IWD Region (for the regional total). For example, a client classified as an Advertising and Promotions Manager (11-2011.00) and a Public Relations Manager (11-2031.00) would be counted in both occupations. However, she would only be counted once on the 'Total for Business, Management, Financial Occupations' line and once on the 'Grand Total' line.
- Openings are derived from the IWORKS UW_Job_Orders table. A job order can have more than one opening.

UNEMPLOYMENT RATES PER IOWA COUNTIES

DECEMBER 2005



Unemployment Rate

- 2.7 - 3.1
- 3.2 - 3.9
- 4.0 - 5.9
- 6.0 - 7.7

0 10 20 40 60 80 Miles

Source: Labor Market & Research Bureau, Iowa Workforce Development



POLICY AND
INFORMATION
DIVISION

Laborshed Studies

Laborshed studies provide community economic developers and existing or prospective employers a flexible tool to understand the local labor market and make informed expansion and site selection decisions.

A Laborshed is defined as the area or region from which an employment center draws its commuting workers. Laborshed studies show the distribution of the workers irrespective of natural or political boundaries. Laborsheds also address underemployment, the availability and willingness of current and prospective employees to change employment within the workforce, current and desired occupations, wages, hours worked and distance willing to commute to work.

<http://www.iowaworkforce.org/lmi/labsur/index.html>

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Laborshed Studies

Why a Laborshed?

Over the past few years, Laborshed studies have proven to be a unique and effective tool for Iowa communities working to expand their existing businesses, attract prospective employers into the state, and maintain/recruit a high-quality workforce.

The availability of labor is among the most critical location factors for a business. Communities that have the ability to document and illustrate that area residents are willing to accept new or different employment opportunities, as well as identifying their current and desired wage levels, work experience, and level of education have a distinct competitive advantage over those that rely on anecdotal information, unemployment rates or outdated data/information.

Unfortunately, just having a Laborshed study does little to help you retain or attract businesses. How you choose to use the information and incorporate it into your programming will be the most significant factor that determines if the Laborshed study was a good investment for your community. The real success of the Laborshed study is not in the methodology or maps created but in the efforts of communities and developers to truly serve their existing businesses and prospects.

Iowa Workforce Development (IWD) developed this best practices guide to offer suggestions and insight from experienced economic developers across Iowa on how Laborshed studies have and can be used to educate others about the results of the study, understand the limitations of the study, and answer tailored questions about a community's labor force.

Remember, there can be multiple audiences for Laborshed information including community development groups, employers, site selectors, utility companies, educational institutions, state and local government agencies, policy makers, media, and employees. While the Laborshed study cannot answer every question, it can be customized to enhance labor availability information, whether the approach is an aggressive marketing campaign or a existing industry program.

Speaking from Experience:

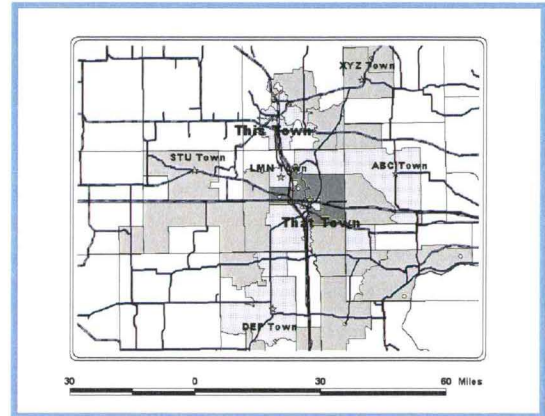
"I had a company once ask, 'How do you know that you can provide me with the workforce with the skills necessary for my business?' I handed him a copy of the study and he later commented that he understood why I could be so sure about my response."

"We find that the information that identifies the wage rate the local market will bear is extremely important when comparing the wage rates those willing to change jobs are willing to accept."

Laborshed History and Definition

In early 1998, the Institute for Decision Making (IDM) at the University of Northern Iowa completed the first pilot Laborshed study in Iowa. The Laborshed approach and methodology was developed to meet the specific needs of economic development groups trying to understand and detail the unique characteristics of their area labor force. The Laborshed process soon gained national attention for its innovative approach and studies began to be conducted across the state. In July 2001, Iowa Workforce Development assumed all responsibility for conducting Laborshed studies in Iowa, and since has worked with IDM to continually improve the Laborshed methodology used. IWD strives to provide Iowa communities with innovative and informative labor data.

A Laborshed is defined as the area or region from which an employment center draws its commuting workers. The maps provided with each study illustrate the distribution of the workers throughout the area, irrespective of natural or political boundaries. A Laborshed is very similar to how a magnet attracts metal shavings on a piece of paper. Every community has a Laborshed area that serves as a “magnet.” The make up of a community’s local employer base (including type of employment and wage rates) determines how strong a “magnet” the community will be and where it has the greatest potential to attract labor.



As a Development Tool:

“It gave me a clear picture of how important our community is to providing a job base to area communities, communities that funnel employees into our community.”

“It gives us a better understanding of what employees want or expect and what they are willing to do to get or keep jobs.”

“Laborsheds should not be looked at as the one true answer, but in conversations with consultants it already is setting us (Iowa) apart from other regions and states.”

The node (employment center) community has the largest geographic draw of labor in the Laborshed area (the region from which an employment center draws its commuting workers). Smaller, nearby communities may have their own Laborsheds but fall within the umbrella of the node community. In most cases, Laborshed information collected on the node community helps to explain the general characteristics of the surrounding communities. For example, a Laborshed study conducted for Storm Lake would assist Alta, Early, and Sac City to understand their labor markets.

It is important to analyze the characteristics of the community’s employers in order to understand its

Laborshed and how the amount of available labor may change over time. Two

communities that appear to have similar Laborsheds may be very different economically. A Laborshed may be dominated by only one or two employers that account for a very significant percentage of the labor force, while another community may be more diversified and have a number of small to medium-sized employers. Understanding how businesses impact the Laborshed will provide insight to changes that may occur within the Laborshed area due to hiring, layoffs, expansions, and relocations.

A focus group consisting of community economic developers, utility companies, business leaders, and state agencies determined that the best practice “rule of thumb” is that Laborshed data remains accurate for 18 months to two years, recognizing that some communities experience special events (new business locating into the area, plant closings/layoffs, etc.) that may reduce a study’s “shelf life”.

Promoting Community Involvement

Communities request Laborshed studies for a variety of reasons. *High-end users:* Those who actively use the data to attract, recruit and retain industry, create media opportunities to promote the available labor within their area, as a source for grant writing opportunities, highway expansion, and other educational opportunities. This group looks for a multitude of ways to disseminate the Laborshed information to most effectively promote economic growth to the area. *Prospect demand users:* those who request Laborshed information as a result of a request from a prospect. This group also includes businesses looking for available labor information. Information is prepared more for on-demand requests than for wide-spread community marketing campaigns. Then there's the *Internal users:* these groups want the information, not to share with outside entities but to see what/where the community is in regards to available labor. This group may consist of businesses within the Laborshed area, businesses looking at moving to the Laborshed area, or the community itself looking to further define its labor force.

Many employers serve as members of economic development organizations, chambers of commerce and industrial boards.

Their involvement in the initial discussions and presentations that occur prior to the survey are imperative.



Educating employers, the media, and the community prior to the survey will help answer questions, identify potential funding sources, and create community support that will assist them in better understanding the interests and desires of their own employees. It is also important to inform, educate and involve local and county officials about the process as many will financially support your organization and the study, and will undoubtedly

receive labor and Laborshed related questions down the road.

Working with your local and regional media helps to educate business owners, inform residents (potential respondents), create publicity of your efforts, and recognize and thank financial contributors. Developers use many combinations of print, radio, television, and on-line media. It may be necessary to meet with local media organizations to educate them about the Laborshed process and provide documentation that can be incorporated into articles and news clips. IWD's local offices and Community Workforce & Research Development Unit staff may always be consulted to help with labor data related inquiries

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Many developers use the “unveiling” of the Laborshed study as an event to bring together business leaders, government officials, service providers, media, and the community to showcase the results from the Laborshed and to discuss the local/regional economy. Others take the next step in promoting the study by scheduling a series of presentations given by IWD research staff to local industry. Outside of the promotional benefits, these events help developers become familiar with presenting the new information, fielding labor related questions and getting feedback on the results, all of which will be important when communicating with existing industries and prospects.

Strategies for Promotion:

“Information on the study was in the newspaper due to our request to the city for funding.”

“Newspaper and newsletter articles.”

“Personal contact by our office to local businesses prior to them receiving the request for employee zip code information.”

“A direct mail campaign to the public to let them know the survey would be done in their area.”

“Radio advertising, guest spots on the radio and newspaper articles.”

“Several press releases and three radio interviews, as well as emails and faxes to all Chamber members. We also notified major employers during our annual retention/expansion period.”

“Newspaper and radio stories just to alert people who might be called.”

“Many communities have feature stories in the local media, as well speaking engagements with local employers and community organizations.”

“Newsletters, personal letters and meetings to ‘talk it up!’”

“Personally met with HR staff and plant managers.”

“We did a press conference when the study was complete. A great deal of interest about the study was generated and many questions were fielded about its applications and results.”

All approaches can be very effective. For this Laborshed studies handbook the above strategies will provide the community “a tool for economic growth”.

Funding Your Laborshed

Communities vary considerably in how they obtain funding for the Laborshed study. Basic planning can assist most communities and development organizations in coordinating funding.

Spend time building a case as to why your community should have a Laborshed with the development board, government officials, local businesses, schools, community college, local IWD representatives, and utility service providers. Doing your homework, clearly outlining why the study is needed, and documenting that need, will be worth your time and effort. Visit with other developers that have recently been through the process to gain their insight and suggestions.

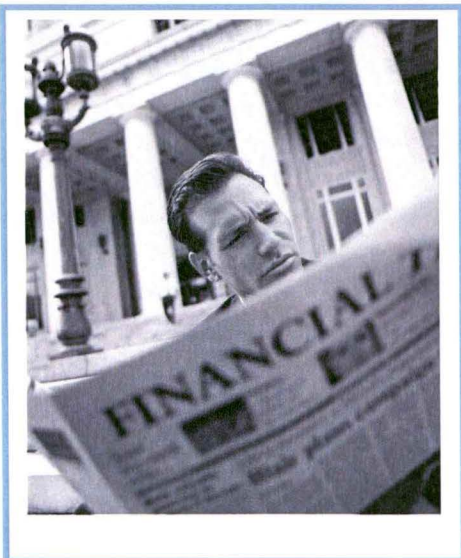
Development organizations, cities, and counties have all pooled their resources to finance studies. Iowa's electric and gas utility service providers have also been very active in helping communities fund Laborshed studies where and when they are beneficial. Partnering with contiguous communities to conduct simultaneous Laborsheds as part of regional efforts, helps to reduce costs associated with individual Laborshed studies.

Notes on Funding:

"Cost is a factor and your partners need to realize its importance."

"It is a must do and it is a must do on a regular basis. Be sure and budget for updates. Don't be afraid to ask (IWD) for assistance when working with specific prospects or existing employers."

"Make sure local employers trust the organization enough to cooperate; establish credibility prior to the study."



It may be beneficial to keep your organization's research budget in mind when developing your annual budget. Beyond the initial cost of the Laborshed study, the organization may incur fees for additional analysis and tailored reports to respond to unforeseen opportunities.

The fund-raising process alone may be an opportunity to draw attention to the Laborshed process and to publicly thank partners and service providers. Additionally, you should be mindful of recognizing contributors at the unveiling of the Laborshed study and subsequent public/private meetings.

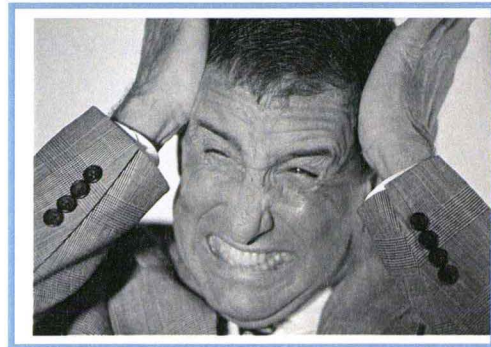
Finally, the time to begin thinking about the funding of your next Laborshed is when you are planning your current study. As stated previously, the "shelf life" of a study is

estimated to be 18 months to two years. How well a developer uses the Laborshed and educates supporters helps determine how difficult fund-raising will be for the next Laborshed. Contributors are more likely to support a project that they perceive as a valuable tool that has been utilized.

Understanding the Laborshed Study

The study is based upon a random telephone survey of individuals, ages 18-64, living within the Laborshed area. The 18-64 age range is used because it reflects the segment of the population that is most likely to be employed or re-enter the workforce. The survey is a sampling of households, not a complete census of all households. The sample is a statistically valid representation of the population 18-64 (+/- 5% confidence interval). The number of calls made into a particular ZIP code is based on the population 18-64 within that ZIP code and the total of each zone.

The call center that administers the survey obtains a geographically diverse number of respondents from within the Laborshed. The individual survey responses, such as wage, willingness to change employment, desired work hours, and education, are combined to report the characteristics of the entire Laborshed.



The survey data is divided into three survey zones, with each zone containing ZIP codes of residents working in the node community (Zone 1 represents the node community, Zone 2 generally contains ZIP codes that are next, or close, to the node community, and Zone 3 generally represents ZIP codes that make up the outer boundaries of the Laborshed).

Think About Data Application:

“Be involved in the process, question the results and analysis so you understand.”

“...(Use) as a tool for existing industry to identify pockets of additional labor.”

“Repackage the information to fit your marketing materials.”

“Understand the data...take advantage of the different formats available.”

A common question about the Laborshed is, “How do you know how many people will be willing to work in a node community?”

The Laborshed methodology estimates the number of people within the Laborshed that have the potential to work in the node community. This Total Estimated Potential Labor Force is derived from a statistical model created at the University of Northern Iowa.

The model is a logistic regression model based on commuting, employment, wage and demographic data collected from over 15,000 Laborshed respondents from across Iowa. The model projects how many

individuals would be willing to accept employment and travel a distance that would get them to the node community given the location of communities within the Laborshed. The model also considers the respondents' employment status, e.g. employed, unemployed, homemaker or retired.

The survey data also provides information that highlights the strengths of your labor force (i.e., education, work experience, training, work hours desired, workplace preferences/flexibility, and willingness to commute to work). Respondents that are not employed share additional information on their previous work experience and why they are not working.

Learn from the Experience of Others:

"A small business was looking at an expansion so they asked for estimates on the number of individuals interested in manufacturing positions. The information was used by the business to secure bank financing."

"We have already provided a number of existing and perspective clients with data from the survey. Using the survey as a marketing tool indicates to companies that we have a sound and professional approach to meeting their needs."

"A local manufacturer relied heavily on a recently completed Laborshed study in its decision to expand rather than reduce its workforce. The Laborshed indicated an adequate workforce would be available for unusual shifts at the plant."

"Using this study is the only way a community or region can learn so much about their laborforce. Having this study puts Iowa over the top in being able to attract new companies as well as encourage local companies to stay and expand in the state."

"A current company we are working with is completely overwhelmed with applications just like what the survey (report) indicated about the labor force in our area."

"Prospects don't want a survey, they want to talk with area employers and get real company and position specific wage information. Use the Laborshed to get your foot in the door."

"(The Laborshed's) GIS maps, charts and specific wage information are put together in a common sense approach."

"Used the GIS capabilities to map out (employers') recent hirings/applicants; it provided information on what employees and potential employees want and expect."

"The Laborshed analysis is one of the most important economic development tools we have to show prospects that we have the available and affordable workforce that is not typically provided elsewhere and gives us a competitive advantage."

Using Your Laborshed Data

The completion of the calling, the preparation of the report, and the unveiling of the data represent the beginning of the process. The value of the information is reflected on how it is used. Laborshed studies include a wide variety of employment-related responses that may assist you and your community in understanding some of the characteristics of your local labor force and respond to specific inquiries.

Always Monitor & Compare Wage Data:

"I believe 'new' company wages are consistent with the Laborshed data."

"Nothing replaces the actual experiences of employers in finding qualified workers. We have had mixed reaction from HR execs about how reflective the report is of the labor force. We attempt to be specific in conversations with companies and involve IWD in assisting companies to tailor their approach to pockets of labor as determined by the analysis."

"Some fluctuation (from the Laborshed data) has occurred due to recent layoffs."

"No comments (regarding wage data accuracy) so far."

IWD assigns the appropriate Standardized Occupational Code (SOC) for each occupation the respondents identify as their current/previous position, or the type of job that they would be interested in accepting given the right conditions. This creates a data set that may be filtered to look at characteristics of respondents employed in specific or similar jobs and industries.

This information can also benefit existing employers and prospects, as it can give additional insight into the wages and desires of potential employees. This data provides detailed information regarding the pockets of unused skill sets within an area and how to tap into this pool of potential labor.

If you anticipate working with a particular prospect, provide IWD's research staff with as much information as possible about the position(s) for which business

and prospects are interested. For example, simply providing broadly defined estimates based on the industry assumptions will not produce detailed results the prospect may need to make an expansion or relocation decision.

A better request would include details on all types of positions within the company (i.e., assembly, maintenance, clerical, engineering, transportation, custodial etc.) IWD research staff can produce a more complete understanding of the labor market for that particular request.

A clear understanding of a community's Laborshed study can help policymakers frame economic development related policy. Community college and workforce development officials may use this data to tailor courses to fit the needs of workers and to encourage upward mobility within the workforce, or as the basis for coordinating local career fairs and career counseling.

Underemployment estimates relating to mismatches of skills, low hours and low incomes may assist communities in initiatives to reduce poverty and to develop higher skilled jobs. Underemployment estimates draw attention to some of the primary motivators as to why people are willing to change employment, their career fields and their place of residence.

The Laborshed allows examination of potential workers in the area by occupation, education, and wages. It also allows data to be extracted by where respondents live in relationship to the node community. The survey identifies out-commuters as those individuals who are currently living in the employment center but who are working elsewhere. All of the characteristics previously identified can be determined for those who are leaving the node community for employment opportunities. Out commuters can be another source of potential labor if an employer understands the characteristics of those leaving the community.

Working Notes

More Uses:

“We use it (Laborshed study) for businesses who want to expand to let them know what the labor pool would be for the occupations in which they are interested.”

“Included general Laborshed information in the initial response packet to address the availability and the geographical range that the local Laborshed covers.”

“Demographic data for grants and for Federal/State loans.”

“To show that shift work numbers were available.”

“To show where people are commuting from and to represent the target market for a wellness center as part of a Vision Iowa application.”

“We have prepared custom Laborshed reports (in-house) for specific projects and abbreviated versions to be used on call trips.”

“Placed data in pdf reports that have been posted on our website.”

“The medical center asked for data on the availability of individuals who had a nursing background or were interested in nursing.”

“Many times I have requested specific wage information (from IWD) for prospects.”

“To inform policymakers of where the community’s workforce resides and the frequency of commute.”

“Areas of interest include planning for housing and evaluation of the quality of life issues which could prevent people from locating within the county when they are employed.”

Developing a Laborshed Strategy

How Laborshed studies are used varies from community to community and developer to developer. Some have let the study collect dust while others have actively incorporated it into their business plan or used it to help shape new initiatives.

The Laborshed study should be used in conjunction with the information and feedback received from existing industries and new prospects. Partnering with IWD research staff will provide a better understanding of what is going on in your Laborshed area, as labor trends may be more complex than they first appear.

For example, though a mass layoff which displaces many workers in your Laborshed area may seem like an increase in the total number of individuals looking for employment, the economic downturn that led to the layoff may have made currently employed residents more conservative and less likely to accept a new employment opportunity.

Developers can create competitive advantages for their organization, community or region. The following section provides suggestions for developing your own “tool for economic growth”.

Taking a Tailored Approach

One of the most important things to recognize is that the Laborshed report and executive summary are general documents designed to touch on only the high points or common element of any Laborshed. They are far from stand-alone documents and will not be able to convince site locators or business officials on their own because they are not created to address the specific and unique needs of their project.

Working with Existing Industry:

“Our local development groups did a ton of communicating with local employers about the Laborshed survey prior to it happening. We even have private employers who helped pay for the study as well.”

“It assists with businesses getting grants, (planning) expansions and understanding business commuting patterns.”

“(Existing industries) were able to reevaluate their advertising and hiring practices.”

“We had a special Round Table dinner to which businesses and community leaders came in to learn about the Laborshed analysis. We also conduct one-on-one visits with our existing businesses and industries during which we share the information.”

“I think some developers have a limited understanding of the scope of what they have with this tool (Laborshed) and really don’t know the full potential of how they can use it.”

“I found recruiters wanting the information so they could work with companies to explain why they were having worker turnover and to develop possible solutions to their problems.”

Many developers post the executive summaries on their organization's/community's website to entice site locators to contact them for additional information. All Iowa Laborshed executive summaries are posted on IWD's website, www.iowaworkforce.org/lmi/labsur/index.html.

Simply sending a prospect one of the general Laborshed reports or executive summaries produced by IWD without explanation or the offer of additional analysis may cause more questions than it answers, especially if the recipient is unfamiliar with the Laborshed concept. While now commonplace in Iowa, the Laborshed methodology is less common outside the state. You may want to work with IWD's research staff to develop one or two hypothetical project scenarios, such as advanced manufacturing or health care, that you can refer to when explaining what the Laborshed is and how it can be a strategic advantage to businesses.

Developers can use this tool to create opportunities to educate existing business on the available labor characteristics. Some may consider incorporating Laborshed data into existing industry survey summaries. By providing Laborshed data on specific types of industries surveyed, the developer creates a value added element to the report instead of simply repackaging the employers' comments.

The purpose of a *regional analysis* is to provide insight into the overall industry makeup and occupational clusters (advanced manufacturing, biotechnology/life sciences, information solutions) within the region and how the availability and characteristics of workers within the region can affect industry growth. The information contained in this type of report is based on all respondents from multiple Laborsheds. A more detailed look at the industries within the region is analyzed in order to provide business and local development officials with necessary labor force characteristics.

Advice from Colleagues:

"Have a good to excellent understanding of how you want to use the surveys...don't conduct a Laborshed survey just to do one. It's too expensive for that."

"Make sure local employers trust the organization enough to cooperate, establish credibility prior to the study."

"Use it! Customize it!"

"The more that local economic developers can do to understand the industry such as business cost trends, business climate trends and site location factors and prove why their community is unique to that industry, the more successful they will be. Customized Laborshed data will help."

"Continually monitor how labor data is used by others in the community and media. Be prepared to educate, clarify or correct."

"Don't pretend to be an expert. Call on your resources to answer specific needs."

"Learn how others are using the results of the Laborshed in their programming, and what customized questions others have included to spark local ideas."

Fundamental Concepts

There are several fundamental concepts worth expanding upon as they are areas most likely to generate questions.

Total Estimated Potential Labor Force:

This figure identifies the estimated number of individuals (18-64 years of age) living within the Laborshed and who have the potential of working in the node community. A statistical model calculates the availability of workers, taking into consideration employment demographic variables such as employment status, age, educational attainment, and miles driven to work. The Total Estimated Potential Labor Force includes workers from all industries irrespective of natural or political boundaries, such as county and/or state lines.



Type of Survey Instrument: IWD works closely with a private vendor to complete a random telephone survey of residents 18-64 years of age living in the Laborshed area. The telephone interview is approximately 10-12 minutes in length requiring the interviewee to respond to a variety of workforce demographic issues such as: availability and willingness to change or re-enter employment; current and desired occupations; education and training needs; wages and benefits; and the distance respondents are willing to commute to work.

Survey Zones: The Laborshed area is divided into three survey zones for the purpose of collecting and organizing responses. IWD determines the zones through a process of categorizing the ZIP codes in the Laborshed based on distance, accessibility, and concentration of people living in their respective ZIP code and working within the node community. Zone 1 (everyone living in the node zip code(s)), Zone 2 (ZIP codes adjacent or near Zone 1 that have a moderate number of residents working the node community) and Zone 3 (ZIP codes in outlying areas with a low concentration of residents working in the node community). This distribution of surveys is an attempt to avoid a clustering of respondents in Zone 1 or in the surrounding areas. Utilizing this survey distribution method also provides the basis for comparisons among the zones and offers a more valid means of applying the survey results within each individual zone.

Employment Categories: The survey asks the respondent to report if they are employed, unemployed, retired or a homemaker. The respondent then answers a series of questions based on the employment category they selected. In some sections of the report the unemployed, retired and homemakers are collectively referred to as “not employed.”

[illegible]

wages equal to or less than the national poverty level (low income), and/or those who are working in positions that do not meet their skill or education levels or worked for higher wages at a previous employment (mismatch of skills). Individuals may be underemployed for more than one reason; however, they are only counted once in order to determine total underemployment.

Workplace Adaptability: The survey asks respondents to describe their current and desired workplace environment including: routine and task preference, cross training (trained to perform more than one position), job teams (group of individuals accomplishing a common goal), job sharing (involved two or more individuals who split one full-time position), and flexibility (flex and personal time off). The respondents are also asked questions regarding their current and desired work schedule including: seasonal, temporary, full-time, part-time, and a combination of 2nd, 3rd, or split shifts.

What the Laborshed is Not:

As stated previously, the Laborshed survey is not a census of those age 18-64, living in the Laborshed area. Instead it is a random sample of the population between the ages of 18-64. Those responding to the survey come from different zip codes. IWD takes care to ensure sure that respondents in all ZIP codes within the Laborshed have a chance to participate in the survey. The respondents in the communities of your Laborshed share very similar characteristics and preferences.

The Laborshed study does not provide a list of names of potential applicants. It is a confidential survey; no name or identification is entered with the individual responses.

The Laborshed report cannot forecast how the Laborshed area and local economy will change due to large economic events (i.e., mass hiring or layoffs). The Laborshed methodology does not currently measure how surrounding communities' Laborsheds "pull" on residents living in your Laborshed. Though these Laborsheds can easily be identified, their final impact is less clear.

Unexpected Information:

"I am always learning of more capabilities. I am amazed at what a great tool this is and why developers even question wanting to do it (a Laborshed)."

"I am usually surprised by data on Laborshed surveys that I find valuable at some later point in time."

"We use this information almost on a daily basis in our organization."

"It was about what we expected, but it helped to confirm those expectations."

"While not unexpected, the information on commuting patterns has been very beneficial."

"It reveals the underutilized and dormant workforce, and also shows the price point (desired wages) and commuting distance."

"Provides a better understanding of the wage levels needed to attract workers."

Therefore, it is important to keep in mind that the potential workers in the Laborshed area (especially those living in Zones 2 and 3) are also residents of several different Laborshed areas that “pull” residents in all directions.

For example, it is well known that healthcare providers in Minnesota attract Iowa workers who live in Iowa’s border communities but commute out of the state on a daily basis. This is especially true in the more densely populated/concentrated areas of the state and extends beyond Iowa’s borders. It is important to keep in mind the mobility of the labor force.

Laborshed Products and Services

Initial Consultation/Presentation

IWD research staff will meet with the community to explain in detail the importance of a Laborshed Study and the steps that need to be taken to start the Laborshed process.

Laborshed Map

Using Geographic Information Systems (GIS) software, a map is constructed using home ZIP codes of employees working in the “node” community. IWD, in cooperation with the development group, acquires the ZIP codes from the local employers. The map illustrates the concentration of workers commuting into the “node” community to work. It is also used when determining where the survey will be administered.



Laborshed Report

A bound report detailing availability and characteristics of workers within an employment center’s commuting area. It is based on geographic principles and telephone surveys conducted to a random sample of the population within the Laborshed area. The data generated aids local development officials in their facilitation of existing industry expansion and recruitment of prospective industry into the area. The data can also provide information to assist with grants, highway expansion, and employee recruitment, to name a few.

Laborshed Executive Summary/Fact Sheet

A brief summary of the Laborshed data in an 11 x 17 or 8 ½ x 11 layout which can be used as a marketing piece for prospective and existing business recruitment and expansion.

Regional Industry Executive Summary

A brief summary of the regional data in an 11 x 17 or 8 ½ x 11 layout, that can be used as a marketing piece for prospective and existing business recruitment and expansion.

(Exhibit B)

Regional Occupational Cluster Fact Sheet

A brief summary of the occupational cluster data in an 8 ½ x 11 layout, that can be used as a marketing piece for prospective and existing business recruitment and expansion.

(Exhibit C)

Individual Business - Specific to Industry Fact Sheet w/Map

A summary related to a particular employer using Laborshed data geared toward a specific industry. Includes a map that utilizes the ZIP codes of employees working for that particular employer (ZIPs must be furnished to complete the mapping). Designed in an 8 ½ x 11 layout. **(Exhibit D)**

Community Commuting Pattern Map

Using Geographic Information Systems (GIS) software, a map is constructed using home ZIP codes of employees working in the “node” community. IWD, in cooperation with the development group, acquires the ZIP codes from the local employer. This map illustrates the concentration of workers commuting into the “node” community to work. This type of map would be used for communities within the Laborshed area but not referenced as the “node” community.



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