



**GSG**

# Labor Demand Certification

Great Falls, Montana  
Development Authority



Employment

Skills

Practices

Compensation

# Great Falls, Montana Development Authority Labor Demand Certification

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## Growth, Diversification, and High Wage Jobs



June 2015



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# Executive Summary

## Introduction

The Great Falls, Montana Development Authority commissioned a Labor Demand Certification to obtain a measure of the labor market in Great Falls and Cascade County. The purpose of assessing the workforce is to provide employers with labor information necessary to make better-informed decisions for private investment that minimizes risks for hiring, retaining, and developing the workforce. Further, to support quality economic growth, this data provides local officials information to promote a better understanding on the competitive realities in today's labor market, to develop the strategies for improving the skills, quality and availability of the workforce, and to enable the Great Falls area and its employers to better compete at all market levels.

## Survey and Assessment Methodology

A total of 100 electronic questionnaires were e-mailed to business firms in the area. The response rate was 60.0 percent with 60 firms responding. Confidentiality is strictly enforced. Any question or answer with less than three responses was eliminated to minimize the chance of matching the response to a company. Due to a smaller sample size, a lower than normal statistical confidence level may be reflected in the data occupation results.

Results of the Workforce Assessment are expressed in a manner considered to be of greatest value to the interested stakeholders. Because larger employers influence the average more than smaller employers, some results are weighted. The term *percentage of total employment* identifies a weighted percentage. Other amounts are expressed as absolute totals either in terms of total employment or total number of respondents. The term *percentage of total respondents* means the figures are not weighted relative to each company's total employment level.

Respondents were asked to estimate or approximate the answer for many of the items, such as: *Commuting Distance*, *Turnover*, *Age of Employee*, and *Employer Contribution* toward benefits. It is important to recognize that these numbers are or may be estimates and should be viewed accordingly.

The results reflect the views and perspectives of employers in the greater Great Falls labor market and represent the demand side of the workforce. The findings are being reported in three broad areas: Employment Indicators and Practices Findings; Skill and Occupation Findings; and Benefits and Earnings Findings.

## Employment Indicators and Practices Findings

### *The Employment Indicators show:*

- A positive outlook for employment during the next year with 46.7 percent of employers expecting an increase in employment and 50.0 percent remaining steady
- A stable and mature workforce with 91.7 percent of employees with the same firm for four years or more.
- A large available workforce of 78.7 percent within 10 miles of their place of work.
- A reported turnover rate of 12.0 percent or less for 68.4 percent of employers

- Most employers (55.0 percent) have five qualified applicants or less for review to fill positions – only 23.3 percent work with 11 or more.
- Seventy-seven percent of employers view the reason for job offer non-acceptance as compensation issues. Important Quality of Life Areas such as Medical Services, Passenger Air Service, Educational system, and Community Acceptance are considered as non-issues.

### *The Employer Practices show:*

- Drug testing rated highest among employers at 61.7 percent for Pre-Employment Testing
- Most employers (71.7 percent) seldom or never use temporary workers
- Forty-three percent of employers use only internal training staff with another 48.3 percent using both training staff and external training providers
- Forty-five percent of employers conduct 21 or more hours of formal training for employees.
- Fifty-three percent of employers use neither public nor private employment agencies for their recruitment efforts.
- Online and social media are the favorite recruitment methods with 81.6 and 59.6 percent employer preference
- The five day work week is the norm for 58.3 percent of the employers

### **Skill and Occupation Findings**

- The Work Styles Importance rating shows Dependability as the most important and Independence the least of ten skill characteristics
- The Knowledge Importance rating show English Language as the most important and Psychology the least of ten skill characteristics
- The Occupation Difficulty rating shows Machinists at 3.50 in a 5.00 index, followed by Computer Programmer at 3.50 and General and Operations Manager at 3.49

### **Benefits and Compensation Finding:**

- Health Insurance is offered with premium contributions by 93 percent of the firms for employees and 73 percent for dependents
- Retirement plans are offered by 98 percent of the firms with 73 percent offering 401K and 20.0 percent offering both a pension and 401K plan
- Eighty-three percent of the firms offer six or more days of paid holidays
- A large majority of the firms offer paid leave for vacation, sick leave, Jury Duty, and Funeral
- Performance bonus pay is offered as a fringe benefit by 76.7 percent of the firms with Wellness programs offered by 40.0 percent
- Pay Differentials are offered for shift work by 23.3 percent of the firms
- Monthly earnings for the various occupations appear relatively competitive to the State of Montana and the USA except in the Production and Maintenance area where nine of the fourteen occupations range from 11.5 percent to 80.7 percent higher than the USA averages.

# Employment Profile

## Introduction

The Labor Demand Certification is the result of a survey of companies conducted by the Great Falls, Montana Development Authority. The survey is a collaborative effort between local/regional development officials and GSG to measure Labor Market Demand as generally related to Work Style, Knowledge, Occupation skills, and Compensation Costs. The degree of importance of work style or soft skills and the difficulty in finding new hires is one side of the demand equation. Another side is generally considered the knowledge or hard skills associated with certain careers and occupations. The occupation rating and the difficulty in finding new hires for those occupations is the third element in assessing the availability and skills in the local market. By comparing occupation earnings to the employer difficulty in hiring and filling vacant positions at the local level, one can, in most instances, measure the stress and the degree of the skill gap.

Another goal is to improve the communication process of skills needs for employers with educators and training providers in preparing students for careers that close the gap between the demand for skills by employers and the supply of talent at the local and regional level. The work style characteristics and knowledge areas are skills sources from O\*NET, the nation's primary source of occupation information. O\*NET acts as a medium for exchanging information. Workers and students benefit by exploring career options and learning which skills employers seek for specific types of work. Employers identify necessary skills to increase the efficiency of recruitment and training. Educational planners need O\*NET to design instructional programs but teach the skills demanded in the workplace.

## Responses

A total of 60 business firms completed the online Labor Demand Certification survey. This represents 60 percent of the 100 firms who were sent the survey.

## Employer Type and Size

The Employer firms represent operations with annual revenues or budgets from under \$1 million to over \$100 million. Three firms are under \$1 million and eight with \$51 million or more in revenue. Forty-nine firms have revenues from \$1 million to \$50 million. In the Goods Producing firms, there are no firms under \$1 million and three of the eight have \$51 million or more.

Twenty-one of the respondents (35.0%) are from the Goods Producing sector and are primarily represented by manufacturing. The Service Providing sector is represented by thirty-four firms (56.7%) and Government by five firms (8.3%). Four of the eight firms with \$51 million or more in revenue are in the Service Providing Industries.

### Annual Revenue/Budget

Category	Count	Percent
Under \$1M	3	5.0%
\$1M - \$10M	19	31.7%
\$11M - \$25M	19	31.7%
\$26M - \$50M	11	18.3%
\$51M - \$100M	3	5.0%
Over \$100M	5	8.3%

### Industry Groups

Category	Count	Percent
Goods Producing	21	35.0%
Services Providing	34	56.7%
Government/ Education	5	8.3%

Almost half of the firms employment size fall under 50 employees. Those with 50 or more employees represent 53.3 percent. The five Government entities have a total employment of 2,637 employees with an average of 527 employees.

### Employment Size

Category	Count	Percent
Under 50	28	46.7%
50 - 100	11	18.3%
101 - 250	12	20.0%
251 - 500	4	6.7%
Over 500	5	8.3%

### Employment Status

The 60 firms responding to the survey employ 11,433 persons with an average of 191 employees per firm. Of the 11,433 total, there are: 5,201 full-time hourly employees, 3,083 part-time hourly employees, and 3,149 salaried employees.

### Employment Status

Category	Count	Percent
Full Time Hourly	5,201	45.5%
Part Time Hourly	3,083	27.0%
Salaried	3,149	27.5%
Total Employment	11,433	100.0%

### Worker Demographics

The age range of 30–54 represents 54.5 percent of all employees. This compares to 19.3 percent in the 55 years or older and 26.2 percent in 29 years or younger groups.

### Employment Age

Category	Count	Percent
22 or younger		5.2%
23 - 29		21.0%
30 - 54		54.5%
55 - 64		16.9%
65 or older		2.4%

The range of Education Attainment of the employed labor force is 33.6 percent for those with bachelor degrees or higher and 15.7 percent for those with some college or associate degree or higher.

Government has the highest level of educated workforce with 55.6 percent obtaining a bachelor degree or higher. The Goods Producing sector has the lowest with 25.2 percent with a Bachelor's degree or higher, leaving the Service sector in the middle with 47.8 percent.

### Education Attainment

Category	Percent
Less than high school	3.3%
High school or equivalent	47.5%
Some college or Associate Degree	15.7%
Bachelor's Degree	26.0%
Advanced Degree	7.6%

# Employment Indicators

## Employment Expectation

The employment expectations is positive with 46.2 percent of the employers expecting to increase their total employment during the next year. Only two employers are expecting to decrease their employment, and both are in Government.

### Employment Expectation

Category	Count	Percent
Increase	28	46.7%
Remain steady	30	50.0%
Decrease	2	3.3%

## Length of Employment

The length of employment range of 4 to 10 years covers 51.7 percent of employers. The range 3 years or less encompasses 8.3 percent while 11 years or more covers 40.0 percent.

### Length of Employment

Category	Count	Percent
3 years or less	5	8.3%
4 - 10 years	31	51.7%
11 - 15 years	18	30.0%
16 years or more	6	10.0%

## Years at Current Location

The majority of employers responding (55%) have been at their location for over 30 years. All Government entities report the same location for over 30 years. Only fourteen (41.2%) of the Service Providing Industries were at the same location for over 30 years.

### Years at Current Location

Category	Count	Percent
10 years or less	11	18.3%
11 - 30 years	16	26.7%
Over 30 years	33	55.0%

## Commuting Distance

A large percentage of employers (78.7%) show their employees commute less than 10 miles to work. Of the remaining, 21.5 percent commute 31 or more miles to work.

### Commuting Distance

Count	Percent
Less than 10 miles	78.7%
10 - 30 miles	17.0%
31 - 50 miles	2.0%
51+ miles	2.3%

## Turnover Rate

The under 6% Turnover Range has the most employer response with twenty-two (36.7%). The over 13% range was represented by twenty-nine firms (31.7%). With regards to the Over 13% range, Goods Producing has 28.6 percent and Service Providing has 27.6 percent.

### Turnover Rate

Category	Count	Percent
Under 6%	22	36.7%
6 to 12%	19	31.7%
13 to 20%	10	16.7%
Over 20%	9	15.0%

## Qualified Applicants to Fill Position

This section relates to employer’s experience as it applies to the availability of job applicants. The greater number of qualified applications for review to fill positions, the greater the perceived difficulty in filling those open positions. Employers perceptions about hiring people is not only about the number of people looking for work, but also the number of applicants meeting the soft and hard skills for those open positions

## Qualified Applicants to Review

Category	Count	Percent
1 - 5 applications	33	55.0%
6 - 10 applications	13	21.7%
11 - 15 applications	6	10.0%
16 or more applications	8	13.3%

Overall, approximately 45 percent of the firms indicated they would need to review six or more qualified applicants to fill an available position. Thirty-eight percent of the Goods Producing sector requires six or more qualified applicants to fill an available position, compared to forty-one percent for the Service Providing sector.

## Job Offer Non-Acceptance by Outside Workers

Many applicants will often fall outside the normal local commute. The biggest reason provided by employers as to why these prospects decline a position is Compensation (Wages and/or Benefits), as reported by 76.9 percent of firms. This is followed by Employment Opportunities for Spouse or family at 40.4 percent. However, four Quality of Life areas were hardly mentioned, all falling below 5.0 percent. These include: Education, Medical Services, Passenger Air Service, and Community Acceptance.

## Job Non-Acceptance

Category	Count	Percent
Compensation (Wages and/or Benefits)	40	76.9%
Employment Opportunities for Spouse/Family	21	40.4%
Cultural and Recreational	16	30.8%
Available Housing and Costs	13	25.0%
Restaurants and Shopping	12	23.1%
Community Acceptance	2	3.9%
Educational system	1	1.9%
Passenger Air Service	1	1.9%
Medical Services	0	0.0%

All Government sector employers responded with Compensation as their biggest reason for non-acceptance of positions. The other categories, such as Restaurants and Shopping, Available Housing and Costs, and Cultural and Recreational, all received ratings of 23 to 31 percent as reasons for non-acceptance.

# Employer Practices

## Pre-Employment Testing

The most common pre-employment testing utilized by 61.7 percent of employers is Drug Testing. Skills testing is the second most common with Personality coming in third. Twenty-eight percent of employers do not require testing. The Goods Producing industry requires Drug Testing 90.5 percent of the time.

## Pre-Employment Testing

Category	Count	Percent
Drugs	37	61.7%
Skills	24	40.0%
Do not require testing	17	28.3%
Personality	14	23.3%
Mental Abilities	10	16.7%
Integrity	8	13.3%

## Temporary or Contingent Workers

Only 20.0 percent of firms use temporary or contingent workers Frequently or Constantly. Thirty-six percent of the firms never use them.

## Temporary or Contingent Workers

Category	Count	Percent
Constantly	3	5.0%
Frequently	9	15.0%
Occasionally	5	8.3%
Seldom	21	35.0%
Never	22	36.7%

## Formal Training

Ninety-six percent of the firms responding to the survey have a formal training program. Thirty-four percent of the firms provide training with both internal and external providers.

## Formal Training

Category	Count	Percent
Training staff, supervisors, etc.	26	43.3%
Training consultants, college, etc.	3	5.0%
Both	29	48.3%
No training provided	2	3.3%

## Hours of Formal Training

Of the sixty firms providing formal training 45.0 percent provide 21 or more hours of training. Eighteen firms (30.0%) provide 31 or more hours of training.

## Hours of Formal Training

Category	Count	Percent
1 - 10 hours	13	21.7%
11 - 20 hours	20	33.3%
21 - 30 hours	9	15.0%
31 or more hours	18	30.0%

## Employment Agencies

Twenty-five percent of the employers use both public and private employment agencies to hire employees. Eight percent only use private, while 13.3 percent of firms only use public and 53.3 percent do not use any employment agencies.

### Employment Agencies

Category	Count	Percent
Do not use	32	53.3%
Public	8	13.3%
Private	5	8.3%
Both	15	25.0%

## Types of Recruitment

The type of recruitment most frequently used by employers is Online Employment Services with 84.6 percent indicating the use of those services. Next in line was Social Media with usage at 59.6 percent. Both of these have grown with advances in the Internet. Head Hunters and College Career Days were utilized by 36.5 percent of the firms.

### Types of Recruitment

Category	Count	Percent
Online Employment Services	44	84.6%
Social Media Advertising	31	59.6%
Professional Trade Organizations	23	44.2%
Job/Career Fairs	21	40.4%
Head Hunter	19	36.5%
College Career Days	19	36.5%

## Shift Operations

Forty-three percent of the employers operate more than one shift representing 67 percent of all the employees. The range of average hours worked per shift is 5–8 hours with 51.7 percent employer participation. The number of work days per week is 5. For the second shift, the average hourly shift differential is 1.03 cents per hour. For the third shift the average hourly shift differential is 1.06 cents per hour.

### Multiple Shifts

Category	Count	Percent
Yes	26	43.3%
No	34	56.7%

### Average Hours Per Shift

Category	Count	Percent
1 - 4 hours	1	1.7%
5 - 8 hours	31	51.7%
9 - 12 hours	27	45.0%
13 or more hours	1	1.7%

### Days a Week of Company Operation

Category	Count	Percent
4 days or less	1	1.7%
5 days	35	58.3%
6 days	10	16.7%
7 days	14	23.3%

# Skills and Occupation Quality and Availability

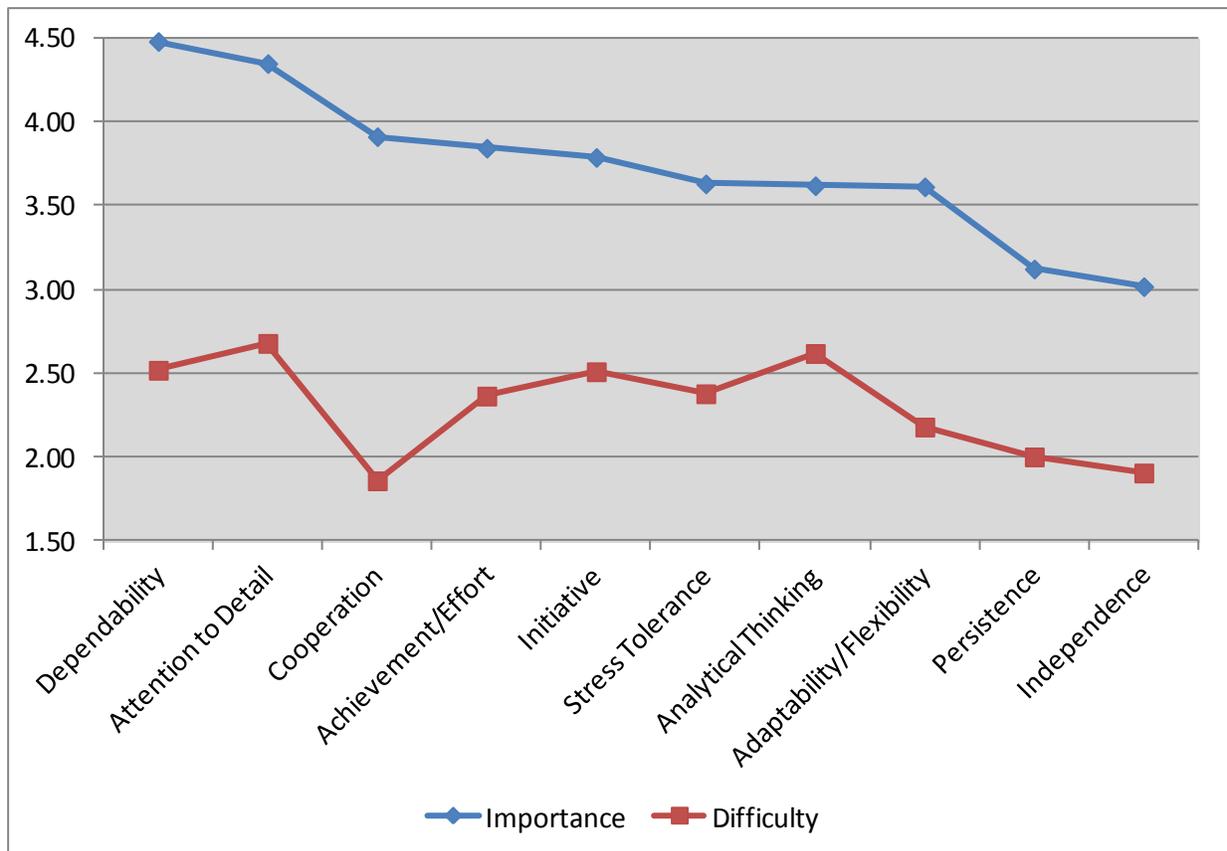
## Work Style Skills Importance and Hiring Difficulty

Ten work style skill characteristics were rated by responding employers on two sets of criteria, one based on importance and the other based on the difficulty of finding new hires with these work style skill characteristics.

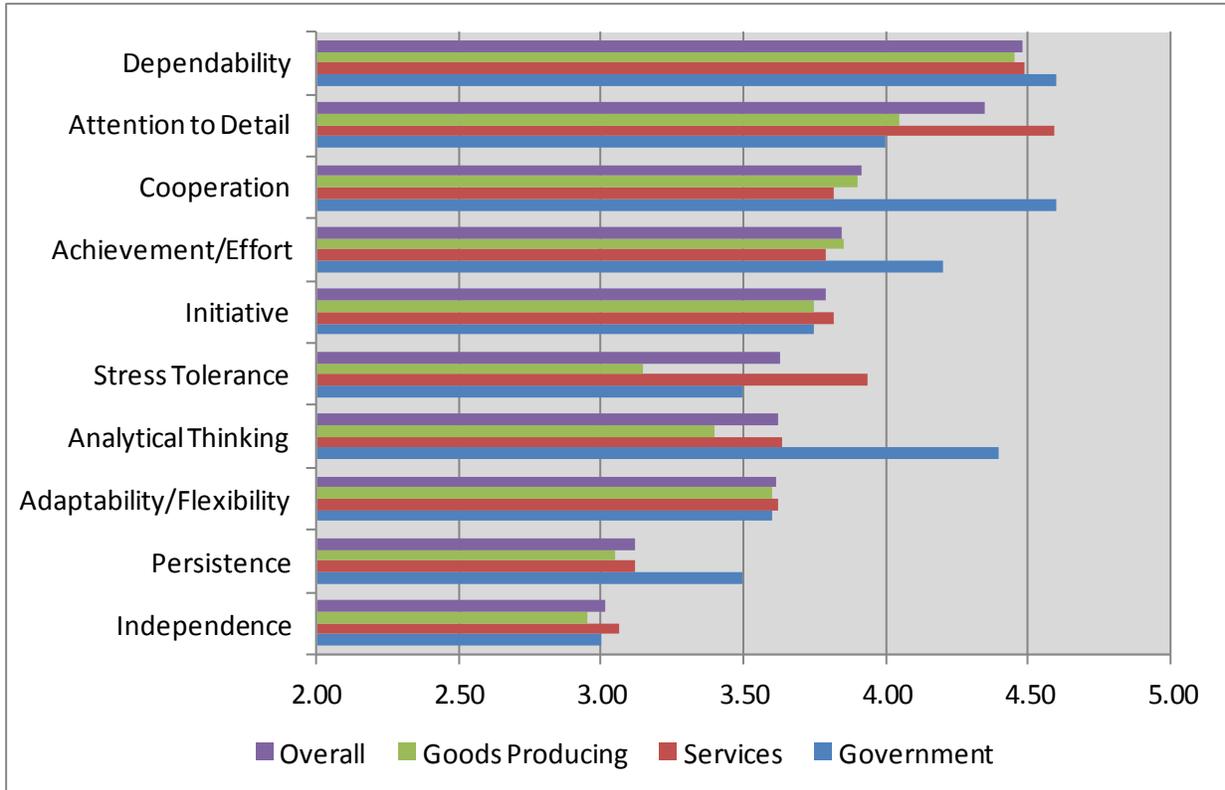
For work styles the skill characteristics were rated by employers on a scale of five—extremely important, to one - not important. A rating of three is considered important. Dependability is rated highest at 4.48. Independence ranked lowest at 3.02. All work style characteristics rated above the statistical average of 3.00. In the Labor Demand Certification employers generally evaluate the importance of skill characteristics of the local labor force as above average. The overall importance index for Work Style Skills is 3.74.

For the difficulty rating, the skill characteristics were rated by employers on a scale of five—expanded search to one—easy. A rating of three is considered difficult or normal because of the subjective nature. Attention to Detail was rated most difficult at 2.68. Cooperation along with Persistence and Independence were rated at 2.00 and below. In the difficulty ratings the overall rating is generally below the statistical average of 3.00. The overall difficulty index is 2.31.

**Work Styles Importance/Difficulty**



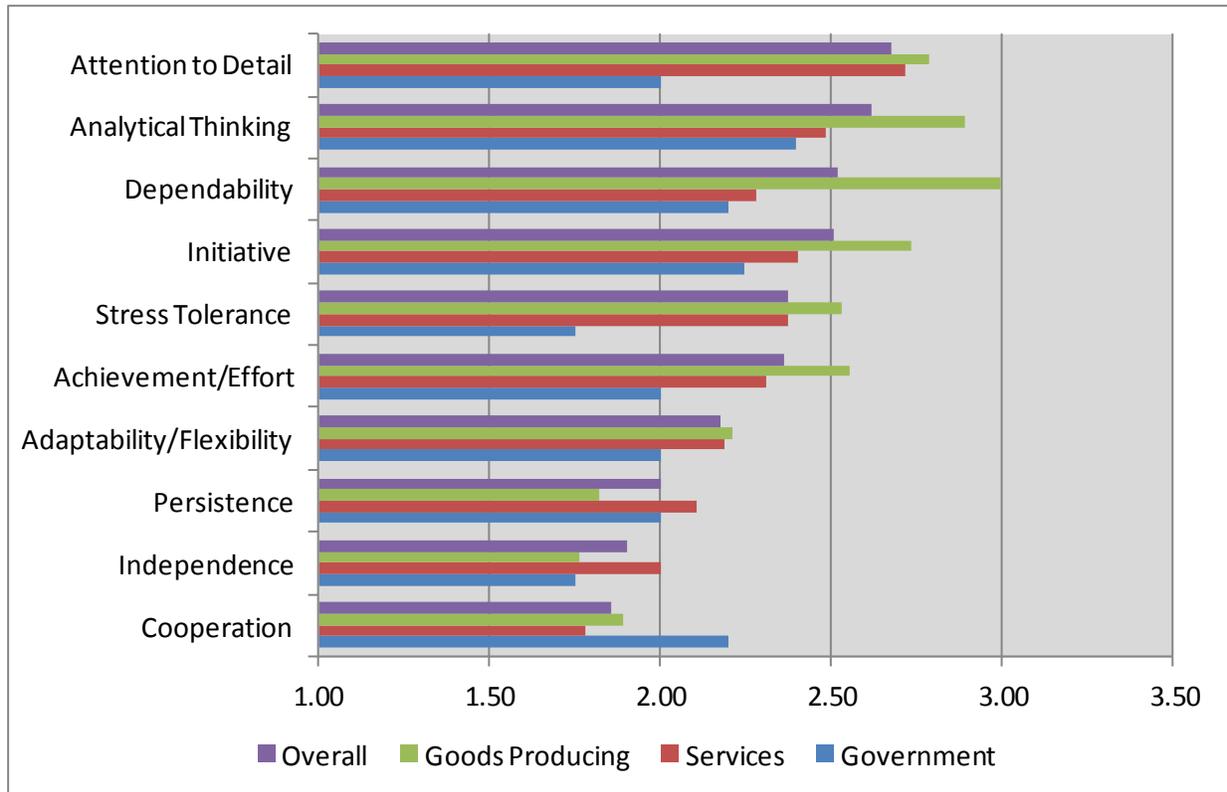
### Work Styles Industry Importance



### Work Styles Importance Overall Ranking

	Extremely Important	Very Important	Important	Somewhat Important	Not Important	Index
Dependability	34	18	6	0	0	4.48
Attention to Detail	31	16	9	1	0	4.35
Cooperation	14	29	12	2	1	3.91
Achievement/Effort	15	23	16	4	0	3.84
Initiative	11	26	17	3	0	3.79
Stress Tolerance	12	20	18	6	1	3.63
Analytical Thinking	15	17	17	7	2	3.62
Adaptability/Flexibility	9	24	18	5	1	3.61
Persistence	6	14	23	9	5	3.12
Independence	5	11	24	14	3	3.02
Overall	152	198	160	51	13	3.74

### Work Styles Industry Hiring Difficulty



### Work Styles Hiring Difficulty Overall Ranking

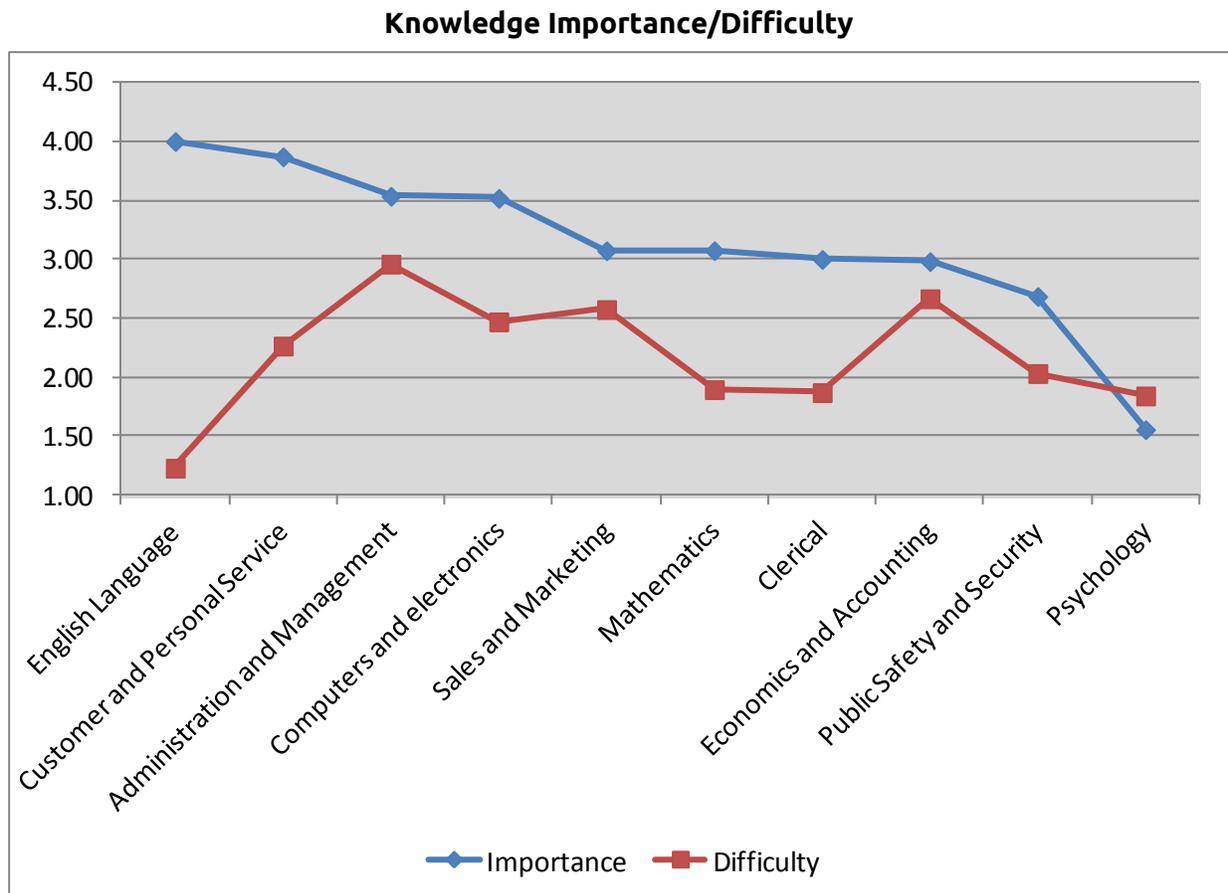
	Requires ex- panded state and national search	Very Difficult	Difficult	Slightly Difficult	Easy	Index
Attention to Detail	0	6	27	22	1	2.68
Analytical Thinking	1	7	20	24	3	2.62
Dependability	0	10	13	29	4	2.52
Initiative	0	7	17	28	3	2.51
Stress Tolerance	0	5	16	26	6	2.38
Achievement/Effort	0	3	21	24	7	2.36
Adaptability/Flexibility	0	1	15	33	7	2.18
Persistence	0	1	8	30	10	2.00
Independence	0	1	5	34	12	1.90
Cooperation	0	2	6	30	18	1.86
Overall	1	43	148	280	71	2.31

## Knowledge Skills Importance and Hiring Difficulty

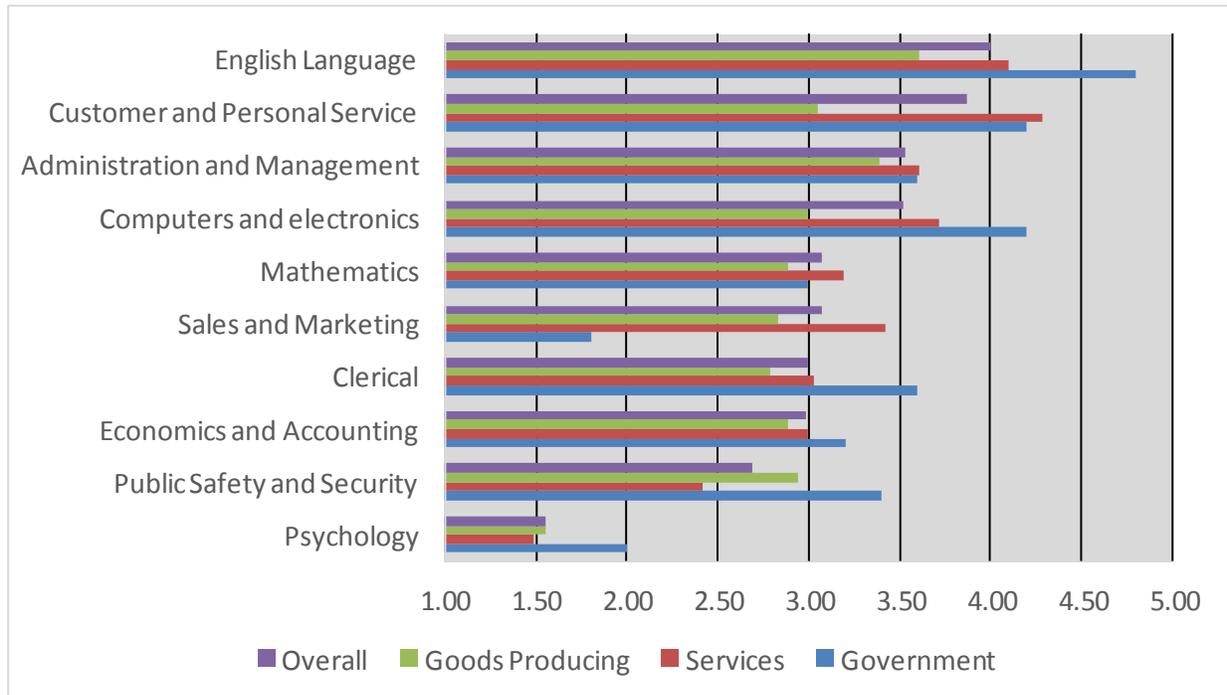
Ten knowledge area characteristics were rated by responding employers on two sets of criteria, one based on importance of the skill and the other based on the difficulty of finding new hires with these knowledge characteristics. Knowledge areas are generally considered specific, teachable abilities that are based on fact. The particular occupation and work culture can play a large role on the importance of knowledge characteristics in the work place.

For the importance rating the skill characteristics were rated by employers on a scale of five—extremely important, to one - not important. A rating of three is considered important or normal. English Language is rated highest at 4.00. Psychology ranked lowest at 1.56. Four skill characteristics rated at 3.00 or below, the statistical average. In the Labor Demand Certification employers generally evaluate the importance of knowledge characteristics of the labor market as above average. The overall knowledge index is 3.13.

For the difficulty in hiring rating, the skill characteristics were rated by employers on a scale of five—expanded search to one—easy. A rating of three is considered difficult or normal because of the subjective nature. Administration and Management was rated most difficult at 2.96. English Language along with four others was rated the easiest to find at 2.00 or below. In the difficulty ratings the overall rating is generally below the statistical average of 3.00. The overall difficulty index is 2.20.



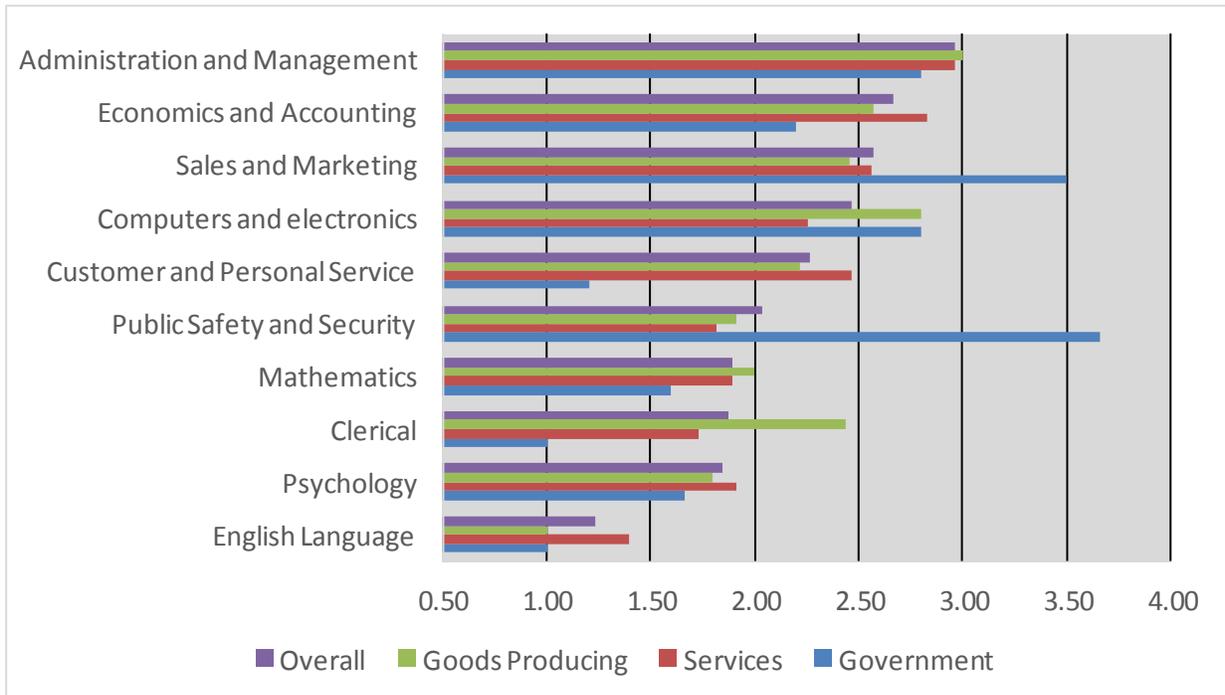
### Knowledge Skill Industry Importance



### Importance of Knowledge Skills Overall Ranking

	Extremely Important	Very Important	Important	Somewhat Important	Not Important	Index
English Language	28	10	9	2	5	4.00
Customer and Personal Service	24	12	10	3	5	3.87
Administration and Management	16	14	14	8	4	3.54
Computers and electronics	10	24	12	5	5	3.52
Sales and Marketing	11	10	17	4	12	3.07
Mathematics	4	15	21	9	5	3.07
Clerical	2	17	20	15	3	3.00
Economics and Accounting	10	11	14	6	13	2.98
Public Safety and Security	12	5	10	8	19	2.69
Psychology	0	1	9	9	35	1.56
Overall	117	119	136	69	106	3.13

### Knowledge Skill Industry Hiring Difficulty



### Knowledge Skills Hiring Difficulty Overall Ranking

	Requires ex- panded state and national search	Very Difficult	Difficult	Slightly Difficult	Easy	Index
Administration and Manage- ment	4	12	16	14	4	2.96
Economics and Accounting	0	8	15	16	3	2.67
Sales and Marketing	2	5	12	16	5	2.58
Computers and electronics	1	9	13	18	10	2.47
Customer and Personal Service	0	2	20	16	11	2.27
Public Safety and Security	2	0	5	14	10	2.03
Mathematics	0	0	12	19	17	1.90
Clerical	0	1	13	18	22	1.87
Psychology	0	0	4	8	7	1.84
English Language	0	1	3	2	42	1.23
Overall	9	38	113	141	131	2.20

## Occupation Earnings and Hiring Difficulty

The purpose of presenting Occupation Indexes with a uniform or consistent rating and weighting methodology is to show the relationship of earnings to difficulty in hiring. The intent is that the higher the earnings index is to the difficulty in hiring, the easier it should be to find employees in the specific occupation. The lower the ratio or relationship of earnings to difficulty in hiring, the more difficult it is to find applicants for those occupations. A good indicator of a more difficult hiring situation is when the ratio of the earnings index to the difficulty index is below 1.00.

A small sample size or number of firms responding to the occupation could provide a low confidence level for the specific index.

All earnings are grouped and weighted by number of employees. Employer types by industry and employment level (number of employees) impact the values reported by the respondents. A different mix of reporting respondents could well change the results.

In the job classifications section of the survey, three pieces of data are collected: Number of Employees, Monthly Earnings group, and the Difficulty in Hiring group. The earnings and difficulty columns are indexes for comparison purposes. The lowest earnings option is \$2,290 or less per month with a one-weighting and over \$7,450 per month with a five-weighting as the highest earnings option. The difficulty in hiring is one-easy to find and 5-expanded search with the most difficulty to find (see Appendix A—Skills and Occupation Ratings and Index Weighting).

Out of the 11,433 employees reported by the 60 responding firms, 3,311 were listed pertaining to the forty-six occupations. The remaining employees were in occupations other than those selected for this research.

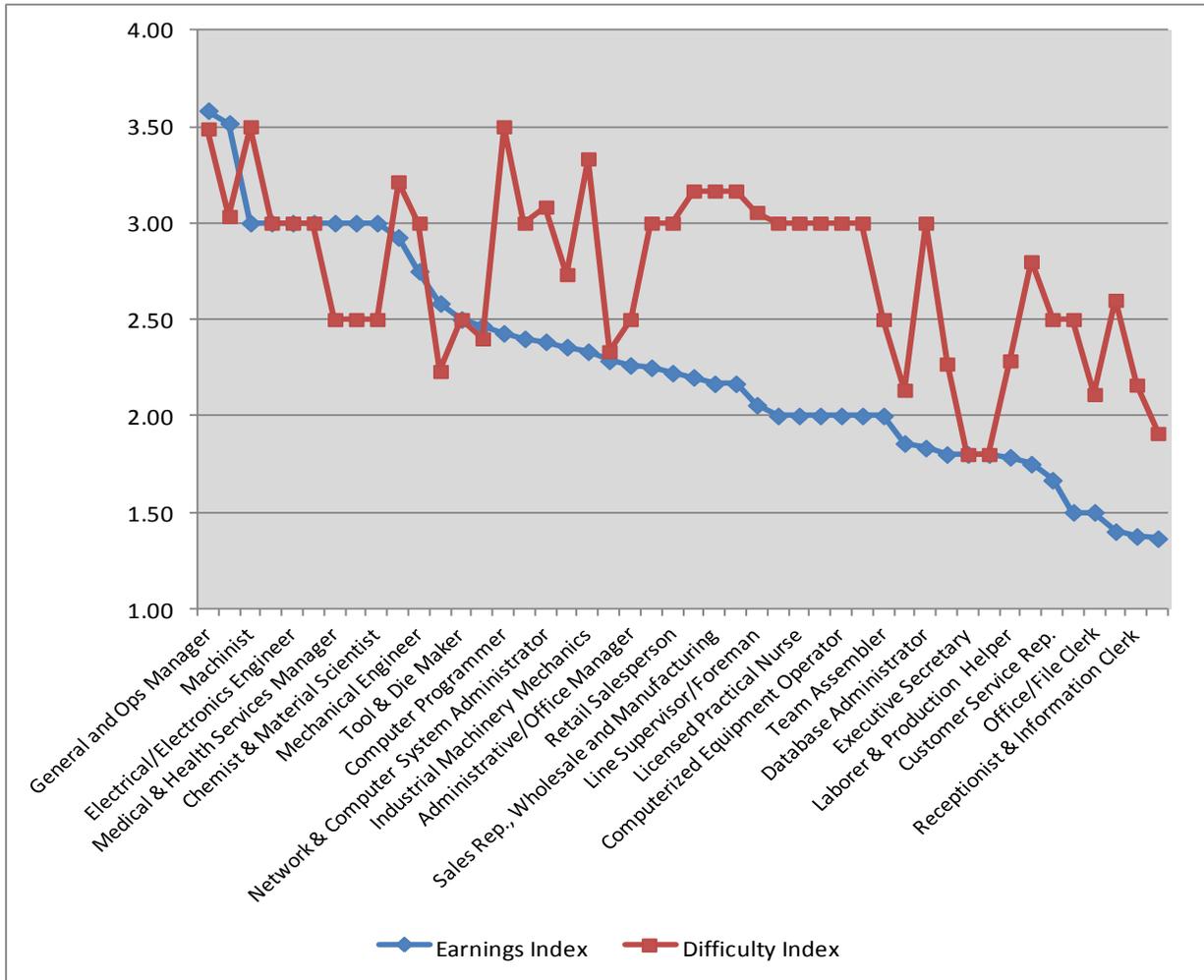
**Occupation Indexes**

Occupation	# Emp.	Earnings Index	Difficulty Index	Ratio
<b>Managers</b>	<b>608</b>	<b>3.08</b>	<b>3.02</b>	<b>1.02</b>
General and Ops Manager	262	3.58	3.49	1.03
Marketing & Sales Manager	66	2.93	3.21	0.91
Administrative/Office Manager	142	2.26	2.50	0.90
Financial/Controller Manager	39	3.52	3.03	1.16
Human Resource Manager	24	3.00	3.00	1.00
Transportation, Storage, & Dist. Manager	75	2.58	2.23	1.16
<b>Professional/Technical</b>	<b>768</b>	<b>3.00</b>	<b>2.50</b>	<b>1.20</b>
Medical & Health Services Manager	384	2.28	2.64	0.86
Buyers and Purchasing Agents	30	2.47	2.40	1.03
Accountants and Auditors	72	2.36	2.73	0.86
Computer Programmer	19	2.43	3.50	0.69
Database Administrator	6	1.83	3.00	0.61
Network & Computer System Administrator	16	2.38	3.08	0.77
Electrical/Electronics Engineer	4	3.00	3.00	1.00
Industrial Engineer	4	3.00	2.50	1.20
Mechanical Engineer	11	2.75	3.00	0.92
Engineering Technician, except Drafter	12	2.29	2.33	0.98
Chemist & Material Scientist	10	3.00	2.50	1.20
Computer Support Specialist	8	1.75	2.80	0.63
Electrician	15	2.25	3.00	0.75
Executive Secretary	6	1.80	1.80	1.00
Registered Nurse	102	2.00	3.00	0.67
Licensed Practical Nurse	47	2.00	3.00	0.67
Clinical Lab Technologist	22	1.50	2.50	0.60

## Occupation Indexes, Continued

Occupation	# Emp.	Earnings Index	Difficulty Index	Ratio
<b>Clerical</b>	<b>270</b>	<b>1.61</b>	<b>2.13</b>	<b>0.75</b>
Cashier	57	1.36	1.91	0.71
Bookkeeping, Accounting, and Auditing Clerk	72	1.80	2.27	0.79
Receptionist & Information Clerk	83	1.38	2.16	0.64
Secretary & Administrative Assistant	30	1.86	2.13	0.87
Data Entry Operator	7	1.80	1.80	1.00
Office/File Clerk	21	1.50	2.11	0.71
<b>Sales</b>	<b>218</b>	<b>2.05</b>	<b>2.90</b>	<b>0.70</b>
Retail Salesperson	79	2.22	3.00	0.74
Sales Rep., Wholesale and Manufacturing	46	2.17	3.17	0.68
Customer Service Rep.	93	1.67	2.50	0.67
<b>Production/Maintenance</b>	<b>1,447</b>	<b>2.09</b>	<b>2.88</b>	<b>0.73</b>
Line Supervisor/Foreman	84	2.06	3.06	0.67
Electronic Assembler	154	2.00	3.00	0.67
Metal Fabricator and Fitter	141	2.17	3.17	0.68
Team Assembler	15	2.00	2.50	0.80
Production Assembly, Other Worker	138	1.40	2.60	0.54
Computerized Equipment Operator	11	2.00	3.00	0.67
Machine Tool Operator	12	2.00	3.00	0.67
Machinist	5	3.00	3.50	0.86
Tool & Die Maker	4	2.50	2.50	1.00
Welding & Brazing Worker	126	3.00	3.00	1.00
Inspector, Tester, & Sorter	32	2.20	3.17	0.69
Laborer & Production Helper	643	1.79	2.29	0.78
Automotive Mechanics	69	2.40	3.00	0.80
Industrial Machinery Mechanics	13	2.33	3.33	0.70
<b>All Occupations</b>	<b>3,311</b>	<b>3.30</b>	<b>2.73</b>	<b>1.02</b>

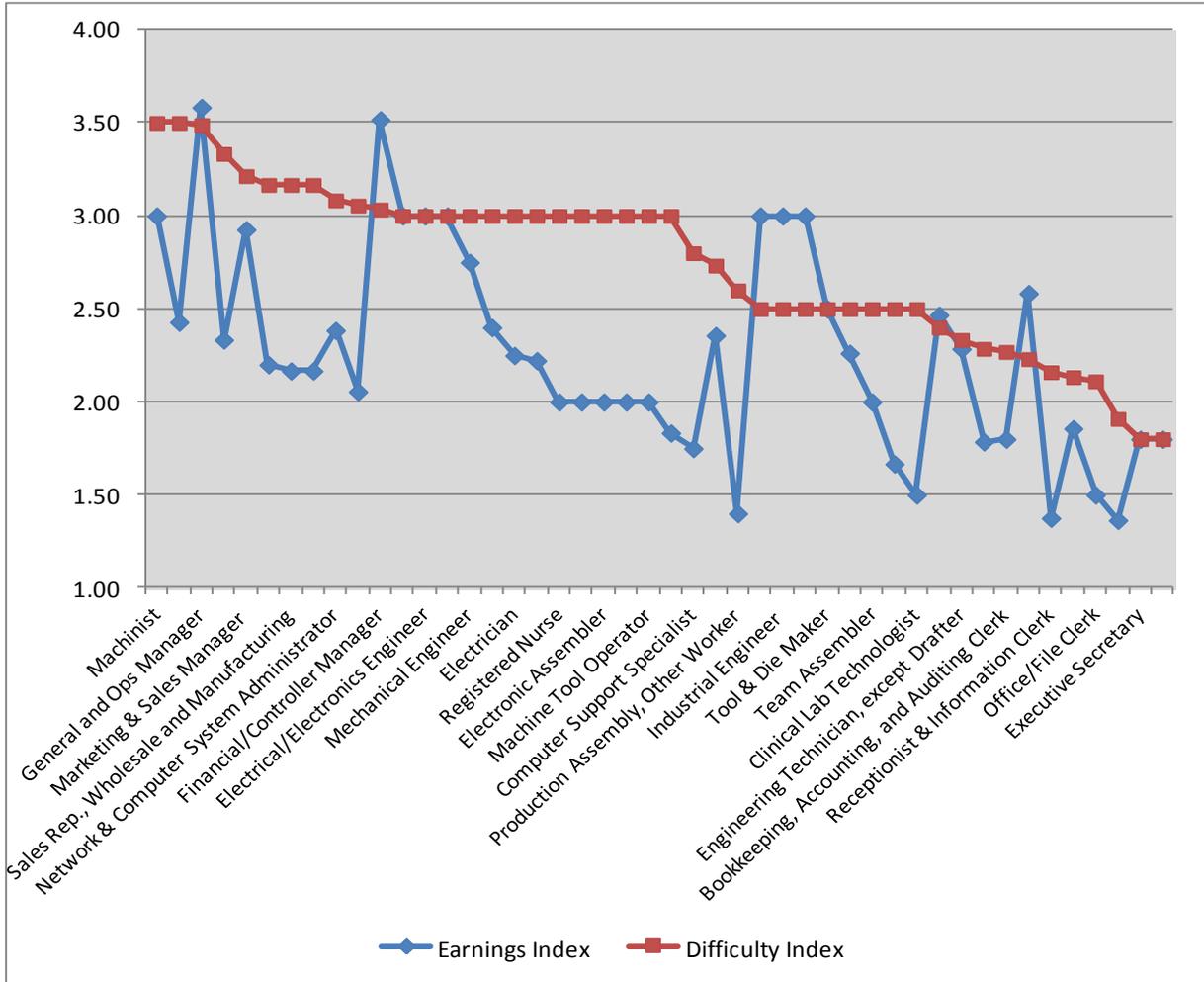
### Occupation Earnings and Difficulty Indexes—Earnings Descending



The above chart shows the Occupation Earnings Index, in blue, descending left to right with the highest monthly earnings on the left and the lowest monthly earnings on the right. The Difficulty in Hiring Index, in red, is related to the same occupation. The Difficulty in Hiring index requires respondents to reflect on the difficulty of finding and hiring applicants with the skills and qualifications needed to fill a position (see Appendix A—Occupation Index Weights). The intent is to measure to what degree applicants are available who are willing and able to accept the earnings and have the necessary skills and experience to fill the specific position available in the local labor market. In the final analysis it is the **supply** or availability of applicants and the **demand** by employers of the quality and cost of those applicants.

A big factor in a lower confidence level is the smaller number of employers addressing a specific occupation. The lower the number of employers responding the lower the confidence level between the relationship of earnings and hiring difficulty. In some cases the number of employers responding to a particular occupation is as low as three out of the sixty respondents to the survey. Other factors also play a role such as how different industries and employers view their necessary requirements for different occupations, such as knowledge and style factors as addressed in other parts of the report. Because of the small sample of respondents, this section of the report should be viewed more as an indicator and not a firm status of the occupation in the local labor market.

## Occupation Earnings and Hiring Difficulty Indexes—Difficulty Descending



The above chart shows the Difficulty in Hiring Index, in red, descending left to right with the highest difficulty in hiring on the left and the lowest on the right. The Occupation Earnings Index, in blue, is related to the same occupation. The Difficulty in Hiring index requires respondents to reflect on the difficulty of finding and hiring applicants with the skills and qualifications needed to fill a position (see Appendix A—Occupation Index Weights). The intent is to measure to what degree applicants are available who are willing and able to accept the earnings and have the necessary skills and experience to fill the specific position available in the local labor market. In the final analysis it is the **supply** or availability of applicants and the **demand** by employers of the quality and cost of those applicants.

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## Benefits and Compensation

### Insurance Benefits

A variety of benefit programs are made available to employees. Ninety-two percent of the firms responding contribute or provide health insurance for their employees with thirty-eight, or 63 percent, of the firms contributing 75 percent or more coverage. Over 51 percent of the employers contribute 50 percent or more to dental insurance programs and 58 percent contribute to vision care programs.

Dependent coverage for health insurance is offered with contributions by 93 percent of the firms responding to the survey. Forty-six percent of the firms contribute to dependent vision insurance coverage. Group Insurance for dependents is available at about 20 to 31 percent of the employers, but requires employee premium contribution to participants in the various programs.

#### Employee Insurance Benefits

	100%		75 - 99%		50 - 74%		1 - 49%		No Employer Contribution		Program Not Provided	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Group Life Insurance	35	58.3%	2	3.3%	5	8.3%	4	6.7%	4	6.7%	10	16.7%
Health Insurance	16	26.7%	22	36.7%	13	21.7%	4	6.7%	1	1.7%	4	6.7%
Dental Insurance	11	18.3%	14	23.3%	6	10.0%	6	10.0%	11	18.3%	12	20.0%
Vision Care	10	16.7%	12	20.0%	7	11.7%	6	10.0%	10	16.7%	15	25.0%

#### Dependent Benefits

	100%		75 - 99%		50 - 74%		1 - 49%		No Employer Contribution		Program Not Provided	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Group Life Insurance	8	13.8%	3	5.2%	2	3.4%	6	10.3%	19	31.0%	22	36.2%
Health Insurance	8	13.6%	17	28.8%	11	18.6%	7	11.9%	12	20.3%	4	6.8%
Dental Insurance	6	10.2%	11	18.6%	6	10.2%	6	10.2%	18	30.5%	12	20.3%
Vision Care	8	13.8%	7	12.1%	6	10.3%	6	10.3%	18	29.3%	14	24.1%

### Retirement Plans

Twenty percent of the employers offer both a pension plan (defined benefits) and a 401(k) plan or similar public sector (defined contribution plans) and 73.3 percent offer only a 401(k) plan.

Eighty percent of Government ;retirement plans offer both pension and 401(K) plans while the Service Providing Industries offer only 401 (K) plans.

#### Retirement Plans

	Count	Count	Percent
No Plan		1	1.7%
IRA (401K, 403B, 457, etc.)		44	73.3%
Pension		3	5.0%
Both		12	20.0%

## Paid Holidays

The primary number of paid holidays range from no paid holidays to 12 or more days. Seventy-eight percent of the employers provide 6 to 11 days of paid holidays. Only 5.0 percent provide 12 or more days.

### Paid Holidays

Count	Count	Percent
No Paid Holidays	3	5.0%
5 days or less	7	11.7%
6 - 8 days	27	45.0%
9 - 11 days	20	33.3%
12 or more days	3	5.0%

## Paid Leave

Only 6.7 percent of employers provide no paid leave with 93.3 percent providing vacation. The second and third highest paid leave areas are sick and Funeral with 73 percent and 72 percent respectively.

### Paid Leave

Category	Count	Percent
No Paid Leave	4	6.7%
Sick	44	73.3%
Jury Duty	42	70.0%
Military	26	43.3%
Funeral	43	71.7%
Vacation	56	93.3%

## Fringe Benefits

Seventy-seven percent of responding firms provide performance bonus pays, forty percent have wellness programs, and 25 percent furnish uniforms. All responding Government entities offer Wellness Programs.

### Fringe Benefits

Category	Count	Percent
No fringe Benefits	8	13.3%
Performance bonus/pay	46	76.7%
Wellness Program	24	40.0%
On-Site child care	3	5.0%
Uniforms furnished	18	30.0%

## Shift Operations Pay Differentials

Eight employers offer Pay Differentials for the Second Shift at \$1.03 per hour and six employers offer the third shift a \$1.06 per hour pay differential.

### Pay Differentials

Category	Differential	Count	Percent
Second Shift Comp.	\$1.03	8	13.3%
Third Shift Comp.	\$1.06	6	10.0%

## Monthly Earnings Local, State, and National

While workforce cost is an important element when evaluating an existing labor market, it is not the only factor. Workforce quality, skills, and availability covered in other sections of this study are also key factors. A highly competitive labor cost structure is critical in both the domestic and global marketplaces. The labor factor is easier to evaluate when all components (quality, availability, and cost) are part of the assessment process.

All wages and salaries are weighted by number of employees. In some cases there are wide differences in the minimum range to the maximum range. Employer types by industry and employment level (number of employees) impact the values reported by the respondents. A different mix of reporting respondents could well change the results.

In the Monthly Earnings Section of the survey each occupation has three sections: number of employees, a monthly earnings bracket (See Appendix A), and difficulty in hiring. The survey average earnings are a weighted average of number of employees and selected earnings brackets.

### Monthly Earnings

Occupation	*Survey Average	State of Montana**	National USA**
<b>Managers</b>			
General and Ops Manager	\$6,095	\$7,185	\$9,767
Marketing & Sales Manager	\$5,187	\$8,254	\$10,825
Administrative/Office Manager	\$3,809	\$5,930	\$7,687
Financial/Controller Manager	\$6,127	\$8,462	\$10,852
Human Resource Manager	\$5,282	\$7,332	\$9,513
Transportation, Storage, & Dist. Manager	\$4,703	\$6,854	\$7,765
Medical & Health Services Manager	\$5,625	\$6,762	\$8,639
<b>Professional/Technical</b>			
Buyers and Purchasing Agents	\$4,454	\$5,477	\$5,238
Accountants and Auditors	\$3,979	\$5,091	\$6,139
Computer Programmer	\$4,508	\$5,335	\$6,890
Database Administrator	\$3,004	\$4,723	\$6,857
Network & Computer System Administrator	\$3,976	\$5,013	\$6,647
Electrical/Electronics Engineer	\$5,258	\$6,315	\$8,143
Industrial Engineer	\$4,991	\$6,857	\$7,093
Mechanical Engineer	\$4,922	\$6,592	\$7,261
Engineering Technician, except Drafter	\$3,735	\$4,241	\$4,786
Chemist & Material Scientist	\$5,991	\$5,801	\$6,689
Computer Support Specialist	\$3,377	\$3,401	\$4,579
Electrician	\$4,166	\$5,058	\$4,543
Executive Secretary	\$3,264	\$3,586	\$4,465
Registered Nurse	\$4,357	\$5,151	\$5,815
Licensed Practical Nurse	\$3,362	\$3,231	\$3,617
Clinical Lab Technologist	\$2,292	\$4,848	\$5,044

**\*In some occupations, the response sample may be too low to reflect a 90-95 percent confidence level but in all cases meets the minimum to retain confidentiality of the respondents.**

**\*\*Bureau of Labor Statistics (BLS) 5/2014 Data, researched June 2015 (Right 2 columns)**

As part of the evaluation process it is important to compare the area's average salaries and wages with state and national averages. The information in the salary and wage section covers forty-six job classifications in the following key categories: Management, Professional/Technical, Clerical, Sales, and Production Maintenance. The job classifications listed in these categories are a selected sample found most representative of a typical Labor Market workforce.

### Monthly Earnings, Continued

Occupation	*Survey Average	State of Montana**	National USA**
<b>Clerical</b>			
Cashier	\$2,250	\$1,742	\$1,721
Bookkeeping, Accounting, and Auditing Clerk	\$2,867	\$2,754	\$3,172
Receptionist & Information Clerk	\$2,207	\$2,194	\$2,319
Secretary & Administrative Assistant	\$2,899	\$2,494	\$2,876
Data Entry Operator	\$2,604	\$2,198	\$2,510
Office/File Clerk	\$2,292	\$2,385	\$2,569
<b>Sales</b>			
Retail Salesperson	\$2,285	\$2,295	\$2,146
Sales Rep., Wholesale and Manufacturing	\$4,259	\$4,822	\$5,483
Customer Service Rep.	\$2,832	\$2,477	\$2,824
<b>Production/Maintenance</b>			
Line Supervisor/Foreman	\$4,843	\$4,760	\$4,921
Electronic Assembler	\$3,179	\$2,681	\$2,860
Metal Fabricator and Fitter	\$3,732	\$3,146	\$3,181
Team Assembler	\$3,362	\$2,584	\$2,562
Production Assembly, Other Worker	\$2,187	\$2,510	\$2,614
Computerized Equipment Operator	\$3,362	\$3,264	\$4,183
Machine Tool Operator	\$3,912	\$2,759	\$2,834
Machinist	\$4,991	\$2,976	\$3,461
Tool & Die Maker	\$4,252	\$4,284	\$4,174
Welding & Brazing Worker	\$5,491	\$2,808	\$3,039
Inspector, Tester, & Sorter	\$3,675	\$3,290	\$3,200
Laborer & Production Helper	\$2,586	\$2,082	\$2,134
Automotive Mechanics	\$4,334	\$3,162	\$3,331
Industrial Machinery Mechanics	\$3,872	\$4,527	\$4,203
<b>All Occupations</b>	<b>\$3,696</b>	<b>\$3,313</b>	<b>\$3,936</b>

\*In some occupations, the response sample may be too low to reflect a 90-95 percent confidence level but in all cases meets the minimum to retain confidentiality of the respondents.

\*\*Bureau of Labor Statistics (BLS) 5/2014 Data, researched June 2015 (Right 2 columns)

The Great Falls Survey Earnings in some occupations appear to have significant variance to the May 2014 Bureau of Labor Statistics National averages. This may in part be due to sample size and smaller respondent participation on the individual occupations. In some cases the confidence level may be below 90 percent.

Generally, the Great Falls Survey Earnings for Managers and Professional/Technical occupation compare favorably to the State and National averages. The Clerical and Sales occupation earnings are relatively comparable to the national averages. The Production/Maintenance occupation earnings are significantly higher in nine of the fourteen occupations, with Electronic Assembler 11.5 percent higher than the National average and Welding & Brazing Worker 80.7 percent higher.

The overall survey average for Great Falls is \$3,696 and compares to the State of Montana at \$3,313 and the USA at \$3,936. The survey sample reflects only 46 occupations while the Bureau of Labor Statistics at the USA level reflects over 800 occupations

## Appendices

# Appendix A—Skills and Occupation Ratings and Index Weighting

## Occupation Survey Ratings

Monthly Earnings
\$1,250 or less per month
\$1,251 - \$2,290 per month
\$2,291 - \$3,333 per month
\$3,334 - \$4,490 per month
\$4,491 - \$5,490 per month
\$5,491 - \$6,490 per month
\$6,491 - \$7,450 per month
Over \$7,450 per month
Not Applicable

Difficulty In Hiring
Requires expanded state and national search
Very Difficult
Difficult
Slightly Difficult
Easy
Not Applicable

## Occupation Index Weights

Monthly Earnings	Weight
\$0—\$2,290 per month	1
\$2,291 - \$4,490 per month	2
\$4,491 - \$6,490 per month	3
\$6,491 - \$7,450 per month	4
Over \$7,450 per month	5

Difficulty in Hiring	Weight
Requires expanded state and national search	5
Very Difficult	4
Difficult	3
Slightly Difficult	2
Easy	1

## O\*Net Work Style Ratings

Importance
Extremely Important
Very Important
Important
Somewhat Important
Not Important

Difficulty in Hiring
Requires expanded state and national search
Very Difficult
Difficult
Slightly Difficult
Easy
Not Applicable

## O\*Net Work Style Index Weights

Importance	Weight
Extremely Important	5
Very Important	4
Important	3
Somewhat Important	2
Not Important	1

Difficulty in Hiring	Weight
Requires expanded state and national search	5
Very Difficult	4
Difficult	3
Slightly Difficult	2
Easy	1

## O\*Net Knowledge Ratings

Importance
Extremely Important
Very Important
Important
Somewhat Important
Not Important

Difficulty in Hiring
Requires expanded state and national search
Very Difficult
Difficult
Slightly Difficult
Easy
Not Applicable

## O\*Net Knowledge Index Weights

Importance	Weight
Extremely Important	5
Very Important	4
Important	3
Somewhat Important	2
Not Important	1

Difficulty in Hiring	Weight
Requires expanded state and national search	5
Very Difficult	4
Difficult	3
Slightly Difficult	2
Easy	1

## About O\*Net

The O\*NET program is the nation's primary source of occupational information. Central to the project is the O\*NET database, containing information on hundreds of standardized and occupation-specific descriptors. The database, which is available to the public at no cost, is continually updated by surveying a broad range of workers from each occupation. Information from this database forms the heart of O\*NET OnLine, an interactive application for exploring and searching occupations. The database also provides the basis for our Career Exploration Tools, a set of valuable assessment instruments for workers and students looking to find or change careers.

## Appendix B—Occupation Descriptions

Occupation	Job Description	SOC
<b>Management</b>		
General & Operations Manager	Plan, direct, or coordinate the operations of public or private sector organizations. Duties and responsibilities include formulating policies, managing daily operations, and planning the use of materials and human resources, but are too diverse and general in nature to be classified in any one functional area of management or administration, such as personnel, purchasing, or administrative services.	11-1021
Human Resource Manager	Plan, direct, or coordinate human resources activities and staff of an organization.	11-3121
Financial Controller Manager	Plan, direct, or coordinate accounting, investing, banking, insurance, securities, and other financial activities of a branch, office, or department of an establishment.	11-3031
Marketing and Sales Manager	Plan, direct, or coordinate marketing policies and programs, such as determining the demand for products and services offered by a firm and its competitors, and identify potential customers. Develop pricing strategies with the goal of maximizing the firm's profits or share of the market while ensuring the firm's customers are satisfied. Oversee product development or monitor trends that indicate the need for new products and services.	11-2021
Administrative/Office Manager	Plan, direct, or coordinate one or more administrative services of an organization, such as records and information management, mail distribution, facilities planning and maintenance, custodial operations, and other office support services.	11-3011
Transportation, Storage & Dist. Manager	Plan, direct, or coordinate transportation, storage, or distribution activities in accordance with organizational policies and applicable government laws or regulations. Includes logistics managers.	11-3071
Medical & Health Services Manager	Plan, direct, or coordinate medical and health services in hospitals, clinics, managed care organizations, public health agencies, or similar organizations.	11-9111
<b>Professional/Technical</b>		
Buyers and Purchasing Agent	Purchase machinery, equipment, tools, parts, supplies, or services necessary for the operation of an establishment. Purchase raw or semi-finished materials for manufacturing.	13-1023
Accountant and Auditor	Examine, analyze, and interpret accounting records to prepare financial statements, give advice, or audit and evaluate statements prepared by others. Install or advise on systems of recording costs or other financial and budgetary data.	13-2011
Network and Computer System	Install, configure, and support an organization's local area network (LAN), wide area network (WAN), and Internet systems or a segment of a network system. Monitor network to ensure network availability to all system users and may perform necessary maintenance to support network availability. May monitor and test Web site performance to ensure Web sites operate correctly and without interruption. May assist in network modeling, analysis, planning, and coordination between network and data communications hardware and software. May supervise computer user support specialists and computer network support specialists. May administer network security measures.	15-1142
Industrial Engineer	Design, develop, test, and evaluate integrated systems for managing industrial production processes, including human work factors, quality control, inventory control, logistics and material flow, cost analysis, and production coordination.	17-2112
Mechanical Engineer	Perform engineering duties in planning and designing tools, engines, machines, and other mechanically functioning equipment. Oversee installation, operation, maintenance, and repair of equipment such as centralized heat, gas, water, and steam systems.	17-2141
Engineering Technician	Applying engineering theory and principles to problems of industrial, electronic, or mechanical layout or manufacturing production, usually under the direction of engineering staff. May perform time and motion studies on worker operations in a variety of industries for purposes such as establishing standard production rates or improving efficiency.	17-3029
Computer Programmer	Create, modify, and test the code, forms, and script that allow computer applications to run. Work from specifications drawn up by software developers or other individuals. May assist software developers by analyzing user needs and designing software solutions. May develop and write computer programs to store, locate, and retrieve specific documents, data, and information.	15-1131

Occupation	Job Classification	SOC
<b>Professional/Technical</b>		
Database Administrator	Administer, test, and implement computer databases, applying knowledge of database management systems. Coordinate changes to computer databases. May plan, coordinate, and implement security measures to safeguard computer databases	15-1141
Electrical/Electronics Engineer	Research, design, develop, test, or supervise the manufacturing and installation of electrical equipment, components, or systems for commercial, industrial, military, or scientific use.	17-2070
Chemist & Material Scientist	Conduct qualitative and quantitative chemical analyses or experiments in laboratories for quality or process control or to develop new products or knowledge. Research and study the structures and chemical properties of various natural and synthetic or composite materials, including metals, alloys, rubber, ceramics, semiconductors, polymers, and glass. Determine ways to strengthen or combine materials or develop new materials with new or specific properties for use in a variety of products and applications. Includes glass scientists, ceramic scientists, metallurgical scientists, and polymer scientists.	19-2030
Computer Support Specialist	Analyze, test, troubleshoot, and evaluate existing network systems, such as local area network (LAN), wide area network (WAN), and Internet systems or a segment of a network system. Perform network maintenance to ensure networks operate correctly with minimal interruption.	15-1152
Electrician	Install, maintain, and repair electrical wiring, equipment, and fixtures. Ensure that work is in accordance with relevant codes. May install or service street lights, intercom systems, or electrical control systems.	47-2111
Executive Secretary	Provide high-level administrative support by conducting research, preparing statistical reports, handling information requests, and performing clerical functions such as preparing correspondence, receiving visitors, arranging conference calls, and scheduling meetings. May also train and supervise lower-level clerical staff.	43-6011
Registered Nurse	Assess patient health problems and needs, develop and implement nursing care plans, and maintain medical records. Administer nursing care to ill, injured, convalescent, or disabled patients. May advise patients on health maintenance and disease prevention or provide case management. Licensing or registration required.	29-1141
Licensed Practical Nurse	Care for ill, injured, or convalescing patients or persons with disabilities in hospitals, nursing homes, clinics, private homes, group homes, and similar institutions. May work under the supervision of a registered nurse. Licensing required.	29-2061
Clinical Lab Technologist	Perform complex medical laboratory tests for diagnosis, treatment, and prevention of disease. May train or supervise staff.	29-2011
<b>Clerical and Sales</b>		
Cashier	Receive and disburse money in establishments other than financial institutions. May use electronic scanners, cash registers, or related equipment. May process credit or debit card transactions and validate checks.	41-2011
Bookkeeping, Accounting Clerk	Compute, classify, and record numerical data to keep financial records complete. Perform any combination of routine calculating, posting, and verifying duties to obtain primary financial data for use in maintaining accounting records. May also check the accuracy of figures, calculations, and postings pertaining to business transactions recorded by other workers.	43-3031
Sales Rep—Wholesale and Manufacturing	Sell goods for wholesalers or manufacturers to businesses or groups of individuals. Work requires substantial knowledge of items sold.	41-4012
Retail Salesperson	Sell merchandise, such as furniture, motor vehicles, appliances, or apparel to consumers.	41-2031
Receptionist & Information Clerk	Answer inquiries and provide information to the general public, customers, visitors, and other interested parties regarding activities conducted at establishment and location of departments, offices, and employees within the organization.	43-4171
Secretary & Administrative Assistant	Provide high-level administrative support by conducting research, preparing statistical reports, handling information requests, and performing clerical functions such as preparing correspondence, receiving visitors, arranging conference calls, and scheduling meetings. May also train and supervise lower-level clerical staff.	43-6011

Occupation	Job Classification	SOC
<b>Clerical and Sales</b>		
Data Entry Operator	Operate data entry device, such as keyboard or photo composing perforator. Duties may include verifying data and preparing materials for printing	43-9021
Office/File clerk	Perform duties too varied and diverse to be classified in any specific office clerical occupation, requiring knowledge of office systems and procedures. Clerical duties may be assigned in accordance with the office procedures of individual establishments and may include a combination of answering telephones, bookkeeping, typing or word processing, stenography, office machine operation, and filing.	43-9061
Customer Service Rep.	Interact with customers to provide information in response to inquiries about products and services and to handle and resolve complaints.	43-4051
<b>Production/Maintenance</b>		
Line Supervisor	Directly supervise and coordinate the activities of production and operating workers, such as inspectors, precision workers, machine setters and operators, assemblers, fabricators, and plant and system operators	51-1011
Electronic Assembler	Assemble or modify electrical or electronic equipment, such as computers, test equipment telemetering systems, electric motors, and batteries.	51-2022
Machine Tool Operator	Set up, operate, or tend machines to saw, cut, shear, slit, punch, crimp, notch, bend, or straighten metal or plastic material.	51-4031
Machinist	Set up and operate a variety of machine tools to produce precision parts and instruments. Includes precision instrument makers who fabricate, modify, or repair mechanical instruments. May also fabricate and modify parts to make or repair machine tools or maintain industrial machines, applying knowledge of mechanics, mathematics, metal properties, layout, and machining procedures.	51-4041
Tool and Die Maker	Analyze specifications, lay out metal stock, set up and operate machine tools, and fit and assemble parts to make and repair dies, cutting tools, jigs, fixtures, gauges, and machinists' hand tools.	51-4111
Welding and Brazing Worker	Use hand-welding, flame-cutting, hand soldering, or brazing equipment to weld or join metal components or to fill holes, indentations, or seams of fabricated metal products.	51-4121
Laborer and Production Helper	Manually move freight, stock, or other materials or perform other general labor. Includes all manual laborers not elsewhere classified.	53-7062
Industrial Machinery Mechanic	Repair, install, adjust, or maintain industrial production and processing machinery or refinery and pipeline distribution systems.	49-9041
Metal Fabricator & Fitter	Fabricate, position, align, and fit parts of structural metal products.	51-2041
Team Assembler	Work as part of a team having responsibility for assembling an entire product or component of a product. Team assemblers can perform all tasks conducted by the team in the assembly process and rotate through all or most of them rather than being assigned to a specific task on a permanent basis. May participate in making management decisions affecting the work. Includes team leaders who work as part of the team.	51-2092
Production Assembly, Other Worker		51-9199
Computerized Equipment Operator	Operate computer-controlled machines or robots to perform one or more machine functions on metal or plastic work pieces.	51-4011
Inspector, Tester, & Sorter	Inspect, test, sort, sample, or weigh nonagricultural raw materials or processed, machined, fabricated, or assembled parts or products for defects, wear, and deviations from specifications. May use precision measuring instruments and complex test equipment.	51-9061
Automotive Mechanics	Diagnose, adjust, repair, or overhaul automotive vehicles.	49-3023

## Appendix C—Skill Descriptions

Work Style Skill	Description
Achievement/Effort	Job requires establishing and maintaining personally challenging achievement goals and exerting effort toward mastering tasks.
Adaptability/Flexibility	Job requires being open to change (positive or negative) and to considerable variety in the workplace.
Analytical Thinking	Job requires analyzing information and using logic to address work-related issues and problems.
Attention to Detail	Job requires being careful about detail and thorough in completing work tasks.
Cooperation	Job requires being pleasant with others on the job and displaying a good-natured, cooperative attitude.
Dependability	Job requires being reliable, responsible, and dependable, and fulfilling obligations.
Independence	Job requires developing one's own ways of doing things, guiding oneself with little or no supervision, and depending on oneself to get things done.
Initiative	Job requires a willingness to take on responsibilities and challenges.
Persistence	Job requires persistence in the face of obstacles.
Stress Tolerance	Job requires accepting criticism and dealing calmly and effectively with high stress situations.

Knowledge Skill	Description
Administration and Management	Knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.
Clerical	Knowledge of administrative and clerical procedures and systems such as word processing, managing files and records, stenography and transcription, designing forms, and other office procedures and terminology.
Computers and Electronics	Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.
Customer and Personal Service	Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
Economics and Accounting	Knowledge of economic and accounting principles and practices, the financial markets, banking and the analysis and reporting of financial data.
English Language	Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
Mathematics	Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.
Psychology	Knowledge of human behavior and performance; individual differences in ability, personality, and interests; learning and motivation; psychological research methods; and the assessment and treatment of behavioral and affective disorders.
Public Safety and Security	Knowledge of relevant equipment, policies, procedures, and strategies to promote effective local, state, or national security operations for the protection of people, data, property, and institutions.
Sales and Marketing	Knowledge of principles and methods for showing, promoting, and selling products or services. This includes marketing strategy and tactics, product demonstration, sales techniques, and sales control systems.

## Appendix D—Glossary of Terms

**Defined Benefit Plan:** A defined benefit plan refers to a traditional or fixed pension. It is a plan under which an employee receives a set monthly amount upon retirement, guaranteed for their life or the joint lives of the member and their spouse. This benefit may also include a cost of living increase each year during retirement. The monthly benefit amount is based upon the participant's wages and length of service.

**Defined Contribution Plan:** A defined contribution plan refers to a retirement savings program under which an employer promises certain contributions to a participant's account during employment, but with no guaranteed retirement benefit. The ultimate benefit is based exclusively upon the contributions and investment earnings of the plan. The benefit ceases when the account balance is depleted regardless of the retiree's age or circumstances. Examples include 457, 401(k), and 403(b) plans.

**Non-weighted Averages:** Non-weighted averages refer to percentage of total survey respondents. This means large employers with hundreds of employees would be weighted the same as small employers with only a few employees.

**Weighted Averages:** Weighted averages refer to percentage of total employment. Weighted average corrects the distortion which would occur in a simple average if one or more companies have many more employees at a given wage than another group of employers at a different wage. If group A has ten employees in a position at an average wage of \$15 per hour and another company has one employee in the same position at \$25 per hour, the simple average wage would be \$20 per hour, but the weighted average wage would be \$15.91 per hour.

**Indexing:** An index is a relatively simple way to make comparisons for characteristics with a common starting point and weights for each of the classifications. An index provides a single number or measure for all characteristics as rated by respondents in the project study. This indexing methodology can also be used to measure how the respondents from the Goods Producing sector compare with the respondents from the Service Providing sector or the Government/Education sector and with all of the respondents from all industries in the project group.