

Larimer/Weld

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Job Vacancy Survey

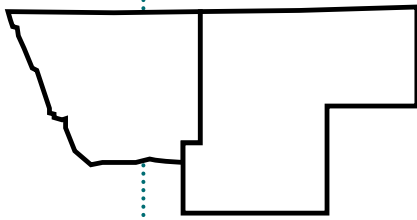
Larimer and Weld Counties

January 2002



Workforce Research & Analysis
Labor Market Information
Colorado Department of Labor and Employment





Larimer/Weld Job Vacancy Survey

State of Colorado

Bill Owens, *Governor*

Colorado Department of Labor & Employment

Vickie Armstrong, *Executive Director*

Jeffrey M. Wells, *Deputy Executive Director*

Funding Provided in Part by
The Colorado Workforce Development Council

January 2002



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Labor Market Information

Two Park Central, Suite 300

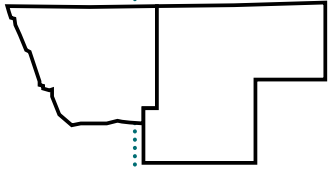
1515 Arapahoe Street

Denver CO 80202-2117

(303) 318-8890

Email: lmi@state.co.us

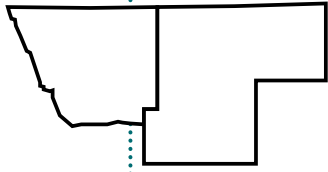
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The office of Workforce Research and Analysis would like to extend sincerest gratitude to all the Larimer/Weld area employers who participated in this study. The analysis provided in this document would not be possible without their help.

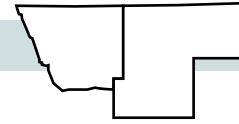


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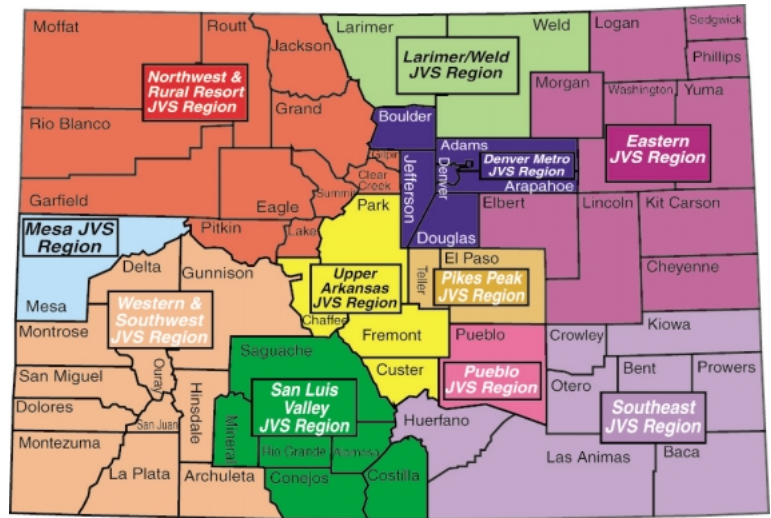
Introduction

The unemployment rate, along with the level and growth rate of employment, has been used as an indicator of labor market conditions for decades. While this indicator provides information about changes in the demand for labor, it reveals nothing about the skills most sought after by employers. As such, individuals preparing themselves for the job market have done so with limited knowledge of what proficiencies are necessary to successfully compete in the contemporary labor market.

The Larimer/Weld Job Vacancy Survey was initiated not only to measure demand for workers at a specific point in time, but also provide detailed information on the quality of employees demanded.

The Job Vacancy Survey (JVS) was adopted by Colorado’s Department of Labor and Employment (CDLE) through the Denver Metro pilot studies of September 1999 and April 2000, which were initiated by Arapahoe/Douglas Works! The popularity of the reports based on the survey data led the CDLE to expand its coverage to include the entire state of Colorado. Since the last Denver Metro pilot JVS, the survey instrument was revised to eliminate

Figure 1: Colorado Job Vacancy Survey Regions



ambiguity and enhanced to gather more specifics on the job vacancy within the survey constraints.

The survey is funded by a grant from the U.S. Department of Labor’s Employment and Training Administration. The JVS is produced by Labor Market Information’s office of Workforce Research and Analysis.

This publication is a product of the Colorado Department of Labor and Employment’s Labor Market Information Section, Bill LaGrange-Director. This report was prepared by LMI’s office of Workforce Research and Analysis. Members of this unit are:

- Senior Economist:** Alexandra E. Hall
- Economists:** Yasir Ahmed
Paul Paez
Michael Patton
Wande Reweta, Ph.D.
Leora Starr
- Statistical Analyst:** Joseph Winter
- Administrative Assistant:** Dionne M. Frey
- Graphic Artist:** Martha Cooper

- For this report:**
- Analyst:** Wande Reweta, Ph.D.
- Project Management/Editor:** Alexandra E. Hall
- Design/Production:** Martha Cooper

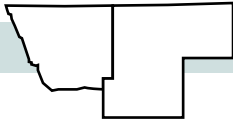
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This report is published semi-annually. Comments, suggestions, and questions regarding content and format are welcome and may be addressed to:

Workforce Research & Analysis
Labor Market Information
Colorado Department of Labor & Employment
Two Park Central, Suite 300
1515 Arapahoe Street Denver CO 80202-2117

Email: lmi@state.co.us (303) 318-8890

www.coworkforce.com/lmi/wra/home.htm



How to Use This Report

With the analysis of labor market conditions, many questions regarding labor demand and supply, as well as labor skills requirements, often arise.

- ◆ Is there a labor shortage in the region?
- ◆ If so, what types of labor are in short supply?
- ◆ Is there a shortage of skills?
- ◆ What skills are necessary to fill current vacancies?

The answers to these and similar questions are important in the decision-making processes of employers, employees, job seekers, trainers and planning officials. While Labor Market Information (LMI) has provided information on the local labor force supply, the Job Vacancy Survey will further complement this data by providing information about the demand for labor and offer a more complete picture of local labor markets.

Employers

The Job Vacancy Survey measures the area's current vacancies and provides information to employers who may be experiencing difficulty in filling positions due to:

- ◆ worker shortage,
- ◆ an imbalance between job seekers' skills and employers' needs,
- ◆ compensation packages that are insufficient as a recruitment tool when compared to market standards.

This report identifies certain characteristics of current vacancies according to general categories. For example, upon review of the results, an employer observes a high percentage of vacancies in the region's firms requiring a specific level of education or experience. This observation might indicate that the labor force and/or its skills fall short of the market needs, thus calling for a decision to increase investment in training or import skilled workers. Delays in filling vacancies despite increases in wages and/or benefits

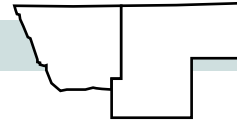
may be attributed to an overall shortage of applicants in the area. Similarly, if a low percentage of vacancies exist for a particular position with the same educational and/or experience requirement, but an employer is finding it difficult to fill, a comparison between the wages offered to the market average may indicate a need for an adjustment.

After a series of surveys from the same time of year have been conducted, current and prospective employers will be able to identify industries and/or occupations that may be consistently oversupplied, in equilibrium, or undersupplied. Employers relocating to the area can review the report and determine how easily the company's employment needs will be met by reviewing current low vacancies. In addition, the Job Vacancy Survey results and Occupational Employment Statistics (OES) wage data (a measure of current wages being paid by occupation) can be used to develop a benchmark of wages to offer for the upcoming positions.

Job Seekers

For current job seekers, this report is a roadmap that can be used to determine where the best paying jobs are given their skills and level of education. The Job Vacancy Survey helps to illustrate the current balance of supply and demand in the local job market. It also provides average wages for open jobs as reported by survey respondents. Job seekers can review Labor

Market Information's occupational projections in addition to the Job Vacancy Survey to see if current opportunities in the job market can contribute to their long-term career goals. This information can help them better tailor education and training efforts toward industries and occupations with the potential to meet their career needs.



Workforce Centers

Public officials, educational institutions, and government agencies can use the Job Vacancy Survey information to allocate resources more efficiently among education, training, and job placement programs. The survey provides a short-term picture of the area's current employment needs. Workforce Center representatives can increase placement success by directing job seekers toward high demand occupations, or pointing them in a direction that might better suit the needs of the applicants' career goals.

Workforce Center officials can also review the nature of job vacancies and decide where to focus placement efforts. Investments in the workforce can be directed toward occupations or industries that continuously contribute to the local economy or to those where there is a constant need for workers.

Current vacancy conditions as presented by the Job Vacancy Survey, coupled with other Labor Market Information reports, can offer a better picture of

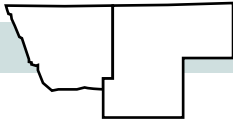
seasonality and long-term trends that might affect the provisions of future training programs. The Employment and Wage publication (ES-202 data) provides monthly county and statewide industry data reported on a quarterly basis. To prepare for the high demand of seasonal workers where vacancies persist, Workforce Centers and educators can offer training during the off-season guided by the quarterly data. Long-term industry trends in employment are also recorded on an annual basis in the same report for each county.

In addition, Labor Market Information provides statewide occupational projections available at www.coworkforce.com/lmi/oeo/oeo.htm, which includes projected employment growth, and identifies growing as well as declining occupations. This information, used with the Job Vacancy Survey's identification of current vacancies, can help Workforce Centers identify occupations in demand now as well as in the future. Workforce Centers can subsequently plan for future training programs in cooperation with businesses and educators.

Economic Developers

Economic development professionals can use the JVS data to track the labor status of key industries and evaluate the area's economic growth and development potential. The survey results can help determine where bottlenecks may occur should current vacancies

persist. Economic developers can also generate a comprehensive picture of the region by determining where current labor demand stands today, as identified by the JVS, and where the local market is trending using LMI's employment projections.



Caveats

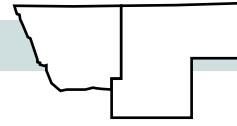
The JVS data should be used as indicators, not actual values of the demand for workers in the Larimer/Weld Region. Figures from the survey should not be interpreted as annual vacancies; rather, they are estimates of openings at a point-in-time. Users should consider, when comparing the results of one survey to another, the effects seasonality and the business cycle will have on the data. For instance, a decrease in vacancies for construction workers from April to November would represent seasonal variations, not necessarily a long-term decrease in the demand for such workers.

The results of the survey are based only on the sample of responses collected from October 8 through November 6, 2001 and should not be considered as necessarily portraying the exact distribution of job vacancies in the region. After several years of JVS data are available, patterns may begin to emerge that more accurately reflect changing labor market conditions. It

should be recognized that the survey identifies current vacancies only, and does not explain whether the vacancies are due to employment growth in the occupations or if vacancies are due to job turnover. In addition, not all surveyed firms participated. However, the employers who did participate enabled the production of statistically reliable results.

Users should keep in mind that the authors of this report are not attempting to project the level of vacancies into the future. In addition, events that have occurred since the time period analyzed, such as plant closings or the migration of people in and out of the area, may have had an effect on the vacancy status of some occupations.

Given the caveats, appropriate application by the user is the most important element for making the information in this report a relevant tool in job vacancy analysis.

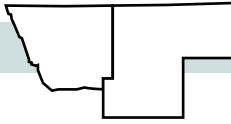


Executive Summary

The second Larimer/Weld Job Vacancy Survey was conducted from October 8th through November 6th, 2001. Over the survey period, the government, large and randomly selected employers with at least five employees were contacted in the region. Employers were asked if they were actively hiring at the time of the survey, and a variety of questions about positions they were seeking to fill.

A total of 1,954 employers responded to the survey out of 2,015 contacted (97% effective response rate). Out of these, 81 are large employers (150 or more employees), 1,790 are from the small to mid-size category (5-149 employees) and 83 are government agencies. The major findings of the survey are as follows:

- ◆ It is estimated that a total of 2,870 jobs were open for hire in the Larimer/Weld Region during the survey period.
- ◆ About 2,270 jobs are estimated to be full-time permanent openings while 340 are part-time permanent openings.
- ◆ An estimated 230 jobs are estimated to be part-time temporary and 30 are full-time temporary positions.
- ◆ About 75% of the estimated job openings are in Services and Retail Trade.
- ◆ The overall average wage for all vacancies is \$15.00 per hour. Average wages for permanent positions exceed those of temporary positions for full-time vacancies. The average wage for part-time, temporary positions is higher than for part-time, permanent vacancies.
- ◆ Both education and experience required have a significant positive influence on wages offered.
- ◆ Fifty-seven percent of the openings require experience in the specific position or in a related occupation.
- ◆ Sixty-five percent of the job openings are either very difficult or somewhat difficult to fill.
- ◆ Employers offered sign-on bonuses for only 4% of the vacancies.
- ◆ Sixteen percent of the employers contacted reported at least one vacancy.



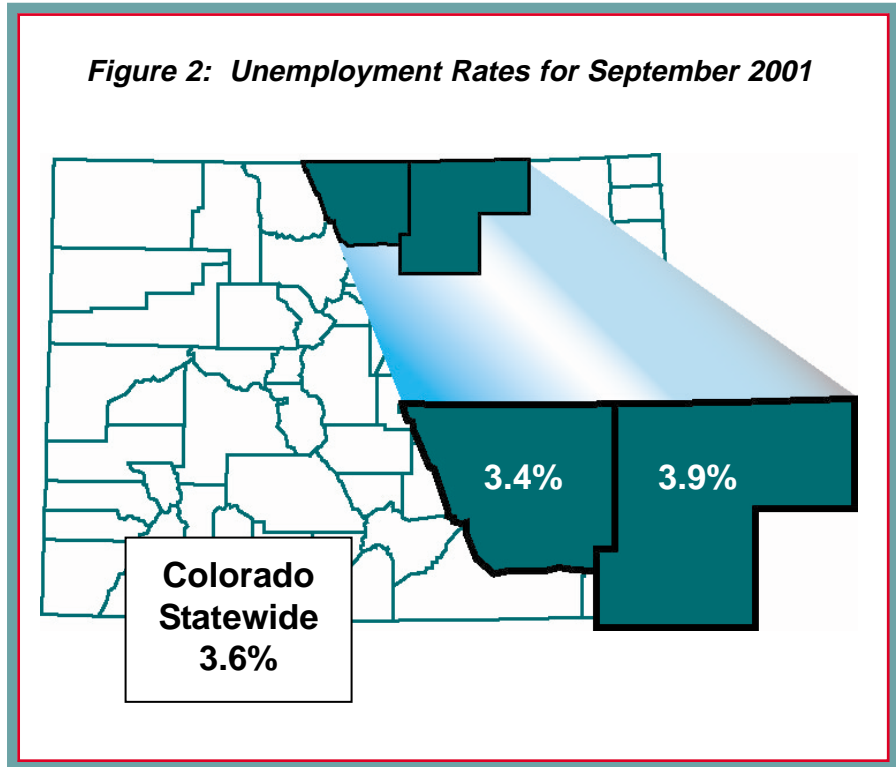
Larimer/Weld Region

The Larimer/Weld Region (LWR), made up of Larimer and Weld counties, has a population of more than 430,000 residents¹. Larimer County has 58% of the population (about 250,000 residents) and grew at a rate of 35% over the 1990 to 2000 period, almost 5% higher than the state's growth rate of 31% over the same period. Weld County, with 42% of the population, experienced a growth rate of 37%, i.e., 7% above the state's growth rate.

The area employed over 229,900 individuals from a labor force pool of about 238,300 people in August 2001, according to Colorado's Labor Market Information, Local Area Unemployment Statistics. Larimer County accounts for 63% of the employment as compared to 37% in Weld County. In the period between October 2000 and

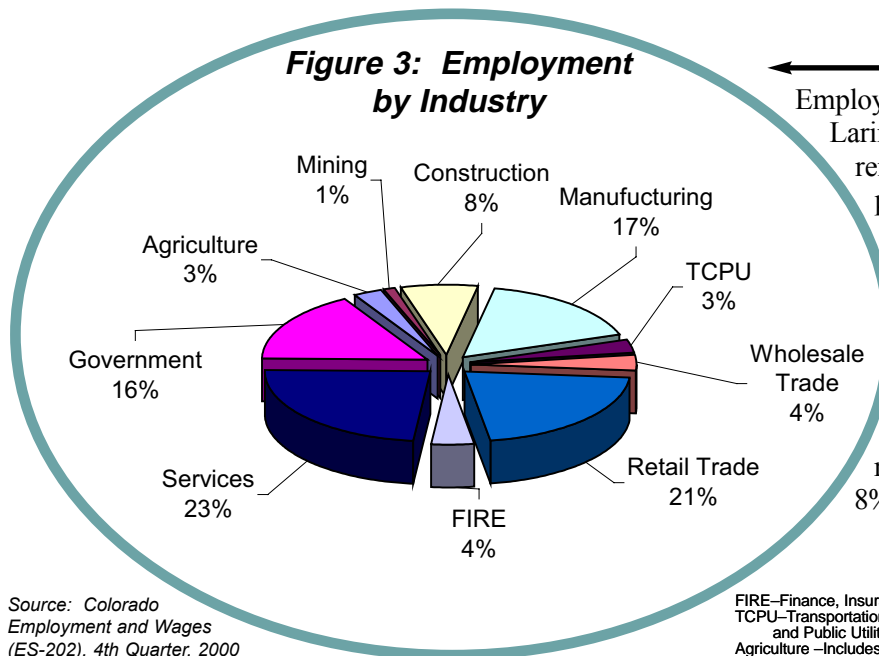
September 2001, the labor force and total employment in the region increased by 3.5% and 2.7%, respectively, increasing regional unemployment from 2.9% to 3.6%.

Figure 2: Unemployment Rates for September 2001



According to Labor Market Information's Local Area Unemployment Statistics, Colorado's unemployment rate was 3.6 % in September 2001 (Figure 2).

Figure 3: Employment by Industry

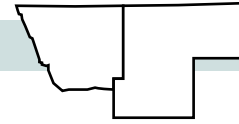


Employment by industry in the Larimer/Weld Region has remained fairly constant over the past six years. The Services division has the highest share (23%) followed by Retail Trade (21%). Manufacturing accounts for 17% of the regional employment, while Government has 16%. Other divisions' employment shares range from 1% in Mining to 8% in Construction (Figure 3).

Source: Colorado Employment and Wages (ES-202), 4th Quarter, 2000

FIRE—Finance, Insurance, and Real Estate
 TCPU—Transportation, Communications and Public Utilities
 Agriculture—Includes Fishing and Forestry

¹US Census Bureau, Census 2000

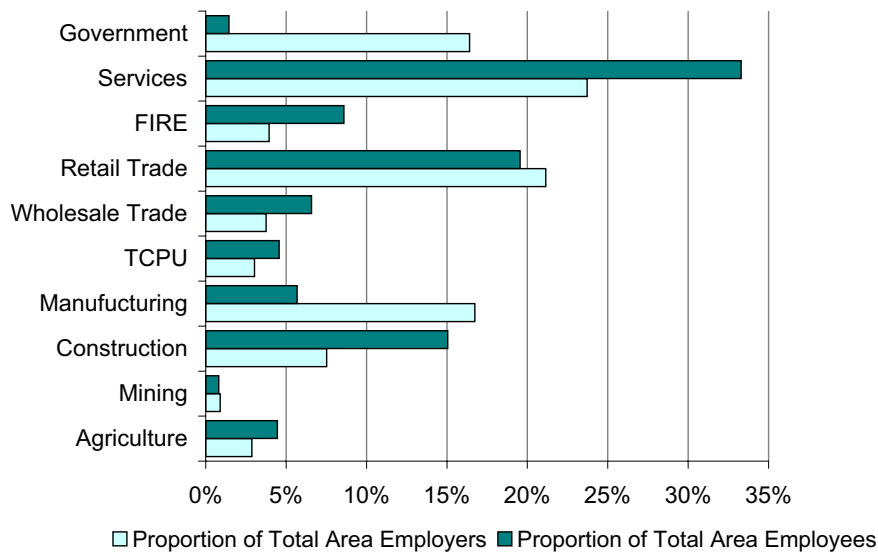


Although Weld County accounts for a smaller portion of the total employment in the region, the industry mix in the two counties is relatively similar. Each has the highest concentration of firms in the Services division followed by Retail Trade, Construction, and Finance, Insurance and Real Estate (FIRE). The total number of individuals employed is highest in Services, followed by Retail Trade, Manufacturing, and Government in Weld County. In Larimer County, employment is concentrated in Services followed by Retail Trade, Government and Manufacturing.

The region is dominated by a large number of firms with fewer than five employees, which account for 62% of the firms in the area. However, in terms of employment, these firms account for only 11% of the total. The small to mid-size firms (5-149 employees) account for about 38% of all firms in the region and 53% of the total employees. Large firms, on the other hand, with 150 or more employees, account for 1% of the regions firms and 36% of the total employees.

Figure 4 shows the distribution for each of the major industry divisions according to the 1987 release of the *Standard Industrial Classification Manual* during the first quarter of 2000.

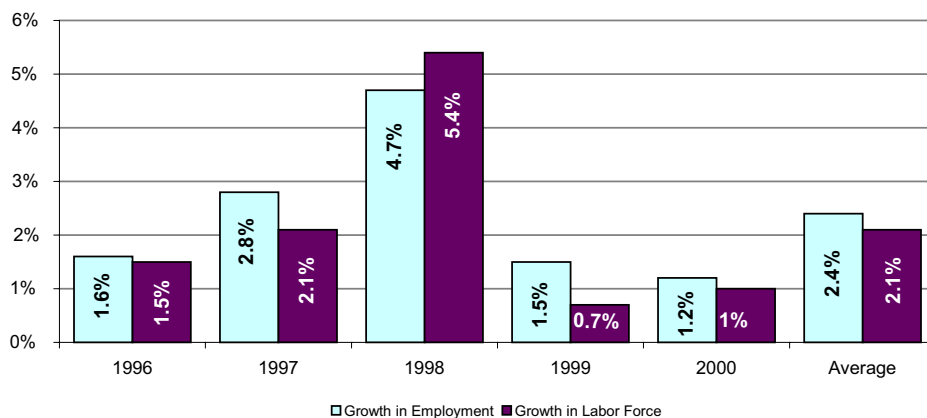
Figure 4: Larimer/Weld Region Employers and Employees in the 4th Quarter, 2000



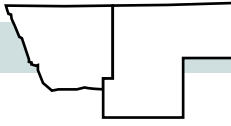
Source: Colorado Employment and Wages (ES-202), 4th Quarter, 2000

FIRE—Finance, Insurance, and Real Estate
 TCPU—Transportation, Communications and Public Utilities
 Agriculture —Includes Fishing and Forestry

Figure 5: Annual Growth of Employment and Labor Force



With the exception of 1998, employment growth in the Larimer/Weld Region outpaced that of the labor force in the past five years. The growth difference ranged from a low of 0.1% (1996) to a high of 1.2% in 2000. Overall, the growth in employment exceeded the growth in labor force by more than a third percentage point (Figure 5).



The Job Vacancy Survey Sample

The second Larimer/Weld Job Vacancy Survey was conducted from October 8th through November 6th, 2001. The survey instrument, upon which the telephone questionnaire used in this study is based, was tested in the Upper Arkansas Region in September, 2000, and is a revised version of the one used for the two Denver Metro pilot studies.

For the purpose of this report, private employers with 5 or more employees as well as all government employers are referred to as the “sample universe.” Workers in the sample universe account for approximately 90% of the total employment in the region. Employers with at least 150 employees are referred to as “large employers.” They account for about 40% of the employment in the sample universe. Firms

employing 5 to 149 individuals are considered “small to mid-size employers,” and account for the remaining 60% of sample universe employment.

Attempts were made to contact all government and large employers. The remaining small to mid-size employers were then stratified by major industry divisions as defined by the *1987 Standard Industrial Classification Manual*. Attempts were made to contact a sufficient sample from each classification in order to provide statistically reliable results. Over the survey period a total of 1,954 employers, approximately 31% of the LWR employers in the sample universe, responded to the survey. Out of these, 81 were large employers, 1,790 were small to mid-size employers, and 83 were government agencies.

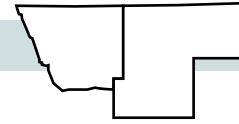
The Survey Instrument

Employers were asked if they had job vacancies, or open positions, which they were actively seeking to fill. Firms actively recruiting were then asked to provide more detail about each position. Information on compensation offered, the level of education and experience required, and the employer’s perceived difficulty in filling the vacancy as well as length of time the position

had been open was collected.² Whenever necessary, employers were contacted again to clarify responses.

Employers were also asked whether or not a sign-on bonus or health insurance was offered for the position. This information was collected in addition to the minimum and maximum wages offered to describe in more detail the compensation offered.

²See *Methodology section*

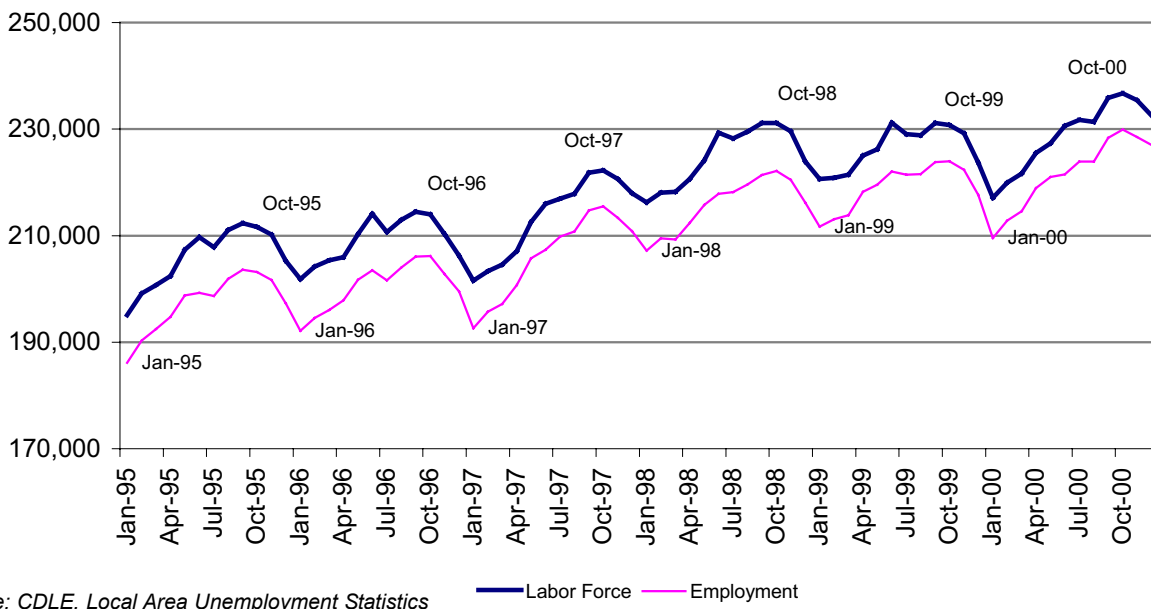


Timing Considerations

Analysis of historical employment trends for the Larimer/Weld Region indicates that employment levels are at their lowest in January and peak in or around the month of October. The Larimer/Weld JVS is conducted semi-annually in February and

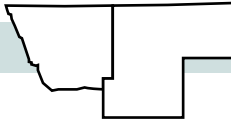
September to measure demand for labor when employment begins to rise and immediately before reaching its peak (*Figure 6*). Vacancies found in February represent demand for labor at a time of the year when employment is at its cyclical low.

Figure 6: Historical Employment and Labor Force Trends for Larimer/Weld Region



Source: CDLE, Local Area Unemployment Statistics

— Labor Force — Employment



Vacancies by Industry

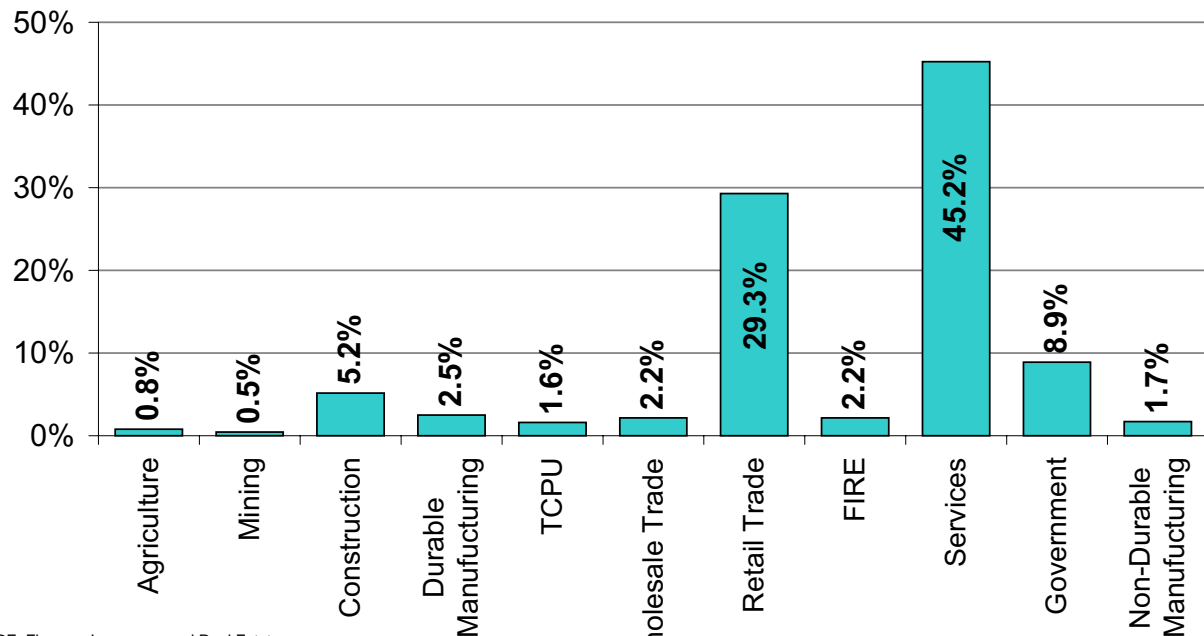
The number of estimated vacancies varies greatly from one industry to another. Services and Retail Trade, with vacancy rates³ of 2.6% and 2.3%, respectively, account for 71% of all vacancies in the region. While the overall vacancy rate for all industries is 1.1%, it varies from a low of 0.5% (Wholesale Trade) to a high of 2.6% in the Services industry. Government and Construction together account for 14% of all vacancies in the region.

All other industries combined make up the remaining 15% of the area's vacancies. Mining has a vacancy

rate of 1.1% while Durable Manufacturing and FIRE have vacancy rates of 0.8% and 0.6%, respectively. Non-durable manufacturing and TCPU have a vacancy rate of 0.7% each.

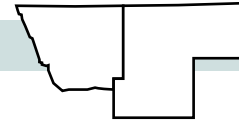
Large employers (firms with 150 or more employees) in Services, Agriculture, and Retail Trade experienced the highest vacancy rates at 3.9%, 3.5% and 2.5%, respectively, while small to mid-size firms in Mining, Retail Trade and Services experienced vacancy rates of 2.5% and 2.2%, respectively.

Figure 7: Proportion of Estimated Vacancies by Industry



FIRE—Finance, Insurance, and Real Estate
 TCPU—Transportation, Communications
 and Public Utilities
 Agriculture—Includes Fishing and Forestry

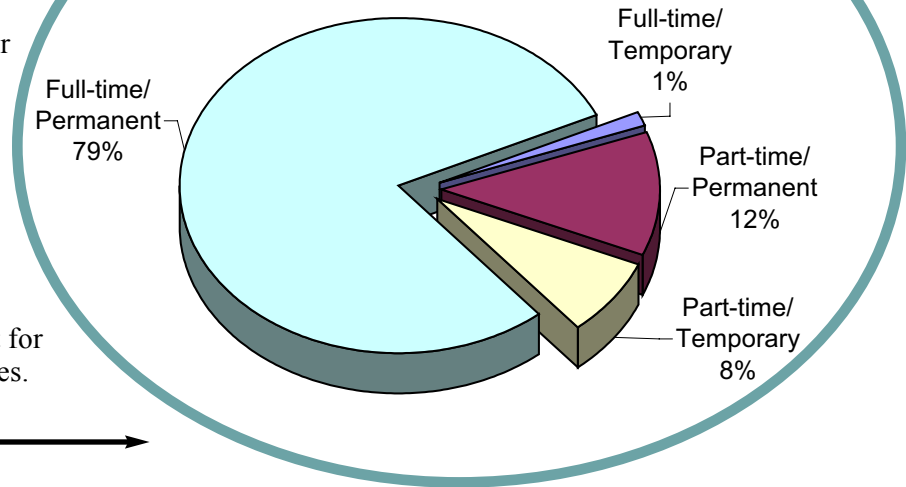
³See Definitions section



Estimated Vacancies and Wages

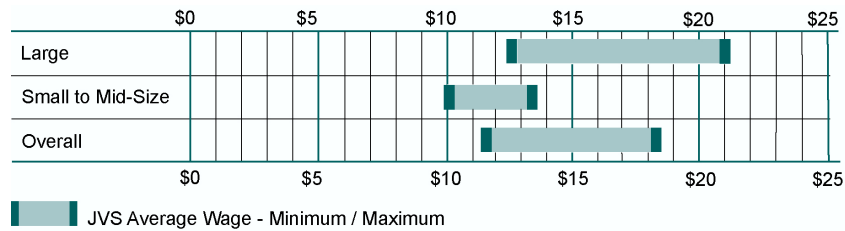
During the survey period, an estimated 2,870 vacancies were open for immediate hire in the Larimer/Weld Region. This estimation was derived from vacancy rates reported for actual employment levels and extrapolated to the total employment for the appropriate industry division. About 79% of the reported vacancies are for full-time permanent employment and 12% are for part-time permanent positions. Vacancy distribution between part-time temporary and full-time temporary employment is 8% and 1%, respectively (Figure 8). Small to mid-size firms account for 1,890 (66%) of the total estimated vacancies while large firms account for 980 (34%) of the estimated vacancies.

Figure 8: Permanent vs. Temporary, Part-time vs. Full-time



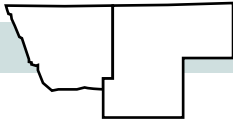
Since wages offered vary according to the individual applicant's qualifications, employers were asked to provide the range of wages offered for vacancies. The average wage was then calculated based on the mid-point of that range. Based on the information employers reported, analysis reveals the following (Figure 9):

Figure 9: Average Wage by Firm Size



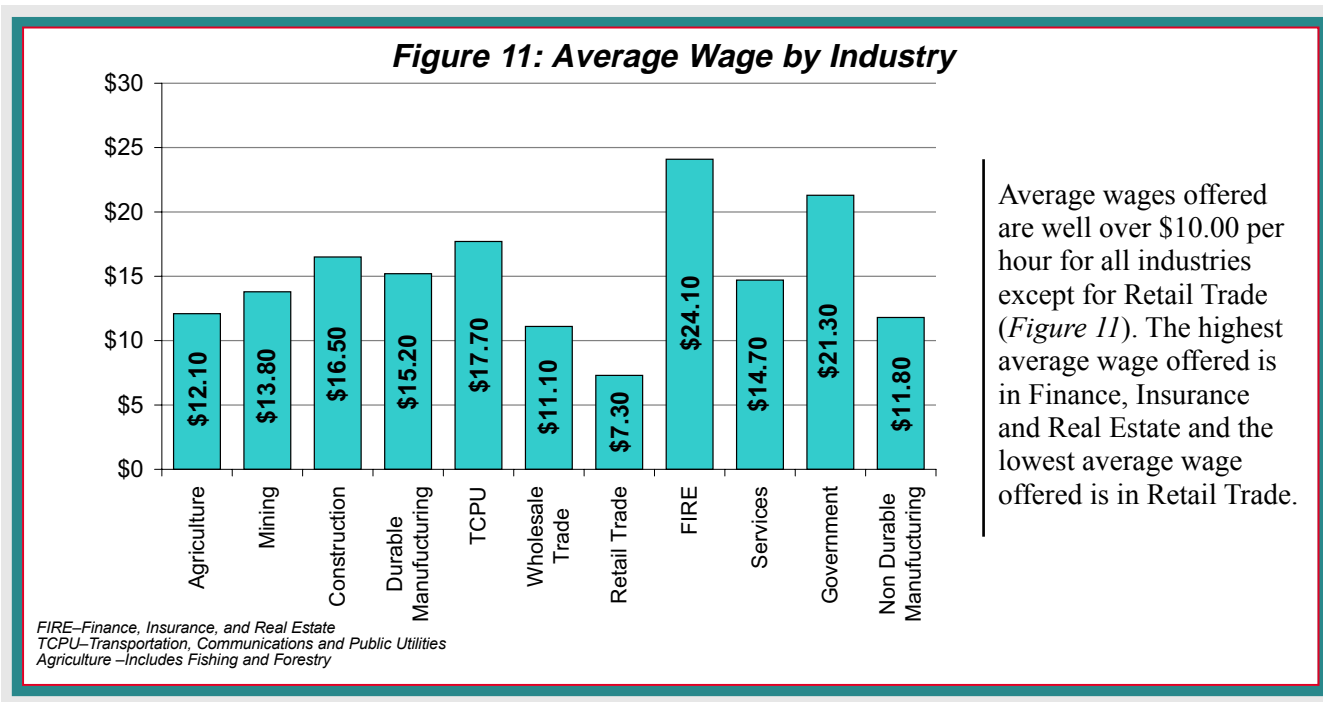
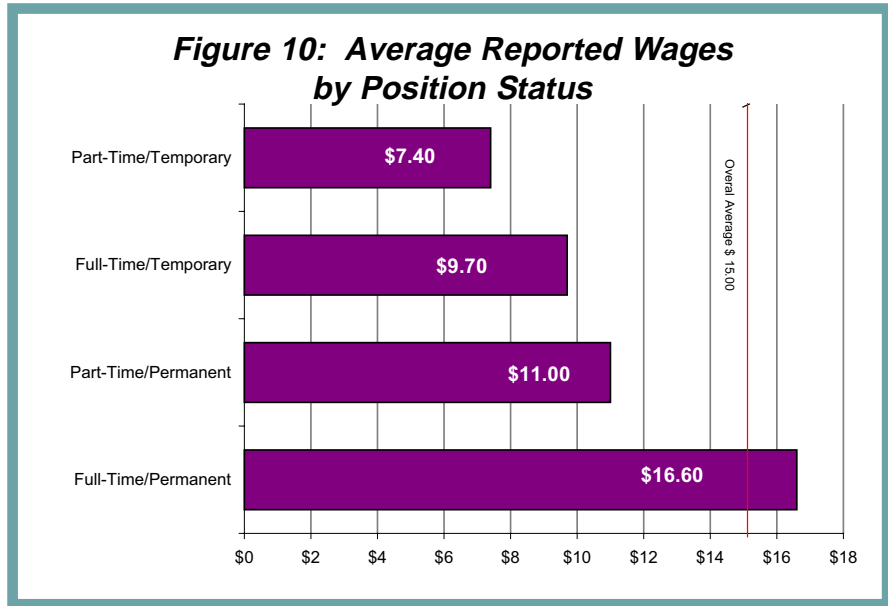
- ◆ The overall average wage offered for Larimer/Weld region was \$15.00 per hour.
- ◆ Fifty-five percent of the vacancies offer a wage rate lower than the overall average.

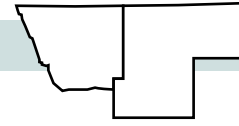
- ◆ Approximately 65% of the positions for which wages are lower than the overall average are in Retail Trade, Government and Services.
- ◆ Seventy-one percent of the vacancies offering wages above the overall average are in Government and Services.



Large companies reported wages that average approximately \$5.00 per hour higher than those offered by small to mid-size firms. The wage differential prevails at both the minimum and maximum wage levels.

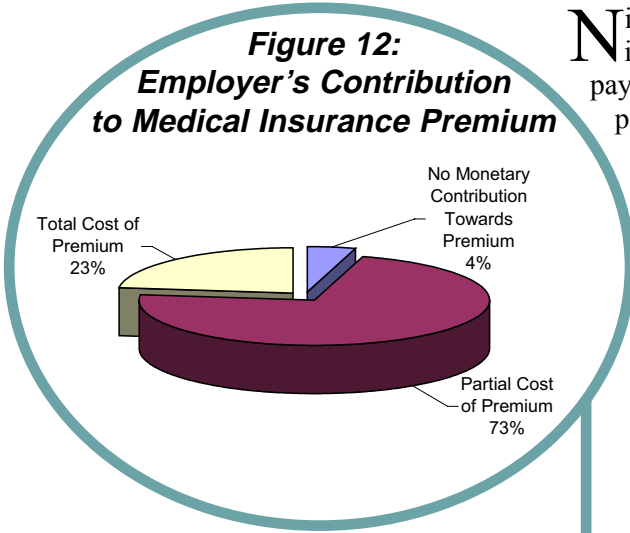
Average wages by position status are shown in *Figure 10*. Permanent positions pay roughly \$7.00 more per hour than temporary positions. Average wages are consistently higher for permanent positions regardless of the positions full or part-time status.





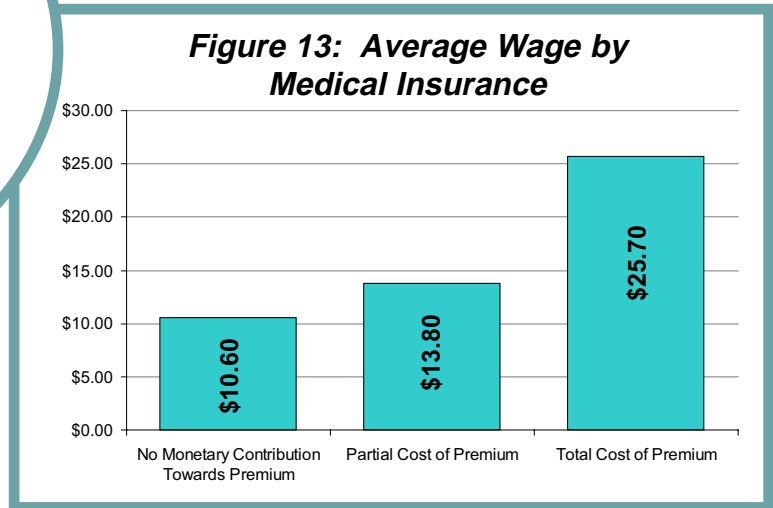
Medical Insurance and Wages

Figure 12: Employer's Contribution to Medical Insurance Premium



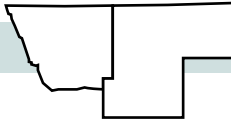
Ninety-six percent of the vacancies reported by employers include some form of medical insurance. Employers offer to pay the entire premium for 23% of all vacancies reported and a portion of the premium for 73% of the vacancies.

Figure 13: Average Wage by Medical Insurance



Survey results suggest a positive relationship between wage and medical insurance coverage offered (Figure 13). As higher paying jobs require higher levels of education and experience, employers offer better medical insurance packages to attract qualified candidates. Businesses that pay the total cost of the medical insurance premium offer an average wage of \$25.70 per hour for the reported vacancies. At the other end of the

spectrum, positions where no monetary contribution is offered towards the insurance premium pay an average wage of \$10.60 per hour.



Education and Experience Requirements

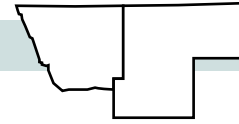
Table 1: Experience Requirements by Educational Level

	No Experience	General Work Experience	Experience in a Related Field	Experience in This Occupation	
No Diploma	76%	4%	10%	10%	
High School Diploma/GED	34%	34%	20%	12%	
Vocational Training/Certification	14%	10%	52%	24%	
Two-Year Degree	0%	1%	60%	39%	
Bachelor's Degree	1%	5%	42%	52%	
Advanced Degree	18%	2%	10%	70%	

Survey results show that vacancy experience requirement increase with education. Positions requiring vocational training or higher levels of education also require experience in a related field or in the specific occupation (*Table 1*).

- ◆ For positions at the high school diploma/GED level, 33% of employers are seeking to hire people with experience in a related field or in the specific occupation.

- ◆ Seventy-six percent of vacancies requiring vocational training or certification also require experience in a related field or specific experience in the occupation.
- ◆ Almost all vacancies requiring a two-year degree also required at least experience in a related field.
- ◆ A majority of positions that require at least a bachelor's degree also require at least some experience in a related field.



Education and Wages

Employers were asked what level of education is required of an applicant in order to be considered for a particular vacancy. Results show that more than 50% of the positions reported by employers require no post-secondary education. This is due, in part to the fact that most of the vacancies in the region are in Services and Retail Trade. Almost a quarter of the positions require vocational training or certification, while 15% require at least a Bachelor's degree.

Figure 14: Vacancies by Education

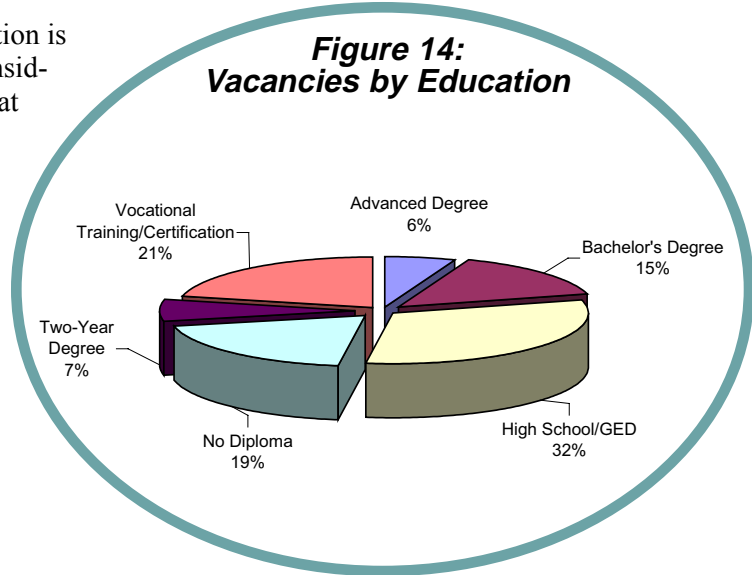
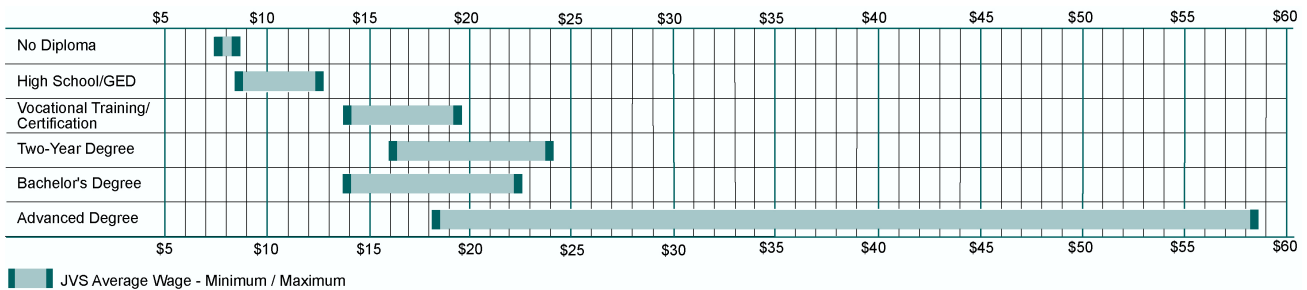
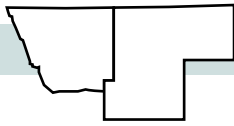


Figure 15: Range of Average Wages by Education



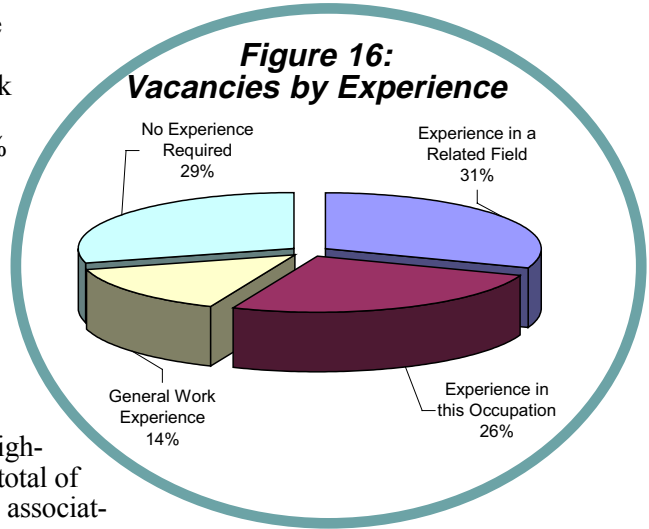
Employers add a substantial premium to wage compensation when requiring higher levels of education (Figure 15). The highest wage rate difference of more than \$20.00 per hour was found between a Bachelor's and an Advanced degree. The requirement of vocational

training or certification increases the wage rate by \$6.10 per hour from a high school diploma/GED. In addition to increasing average wage, the wage range broadens with increasing levels of education.



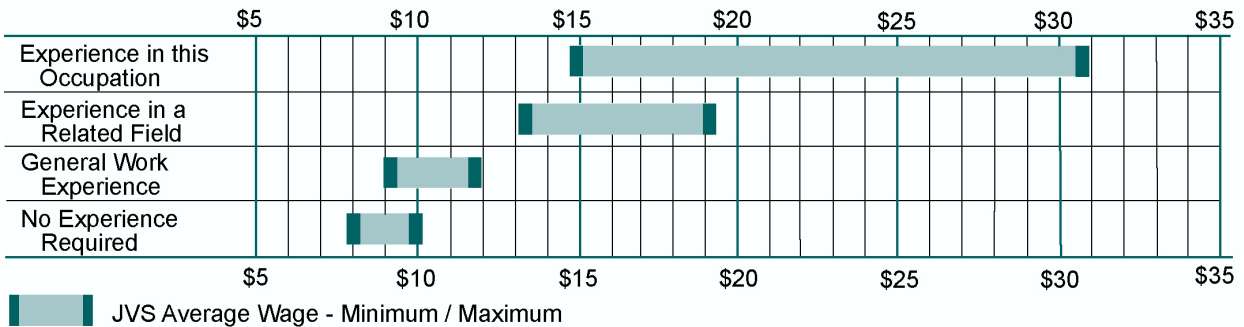
Experience and Wages

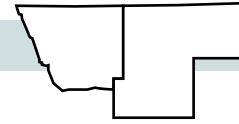
More than one half of the reported job openings require either experience in a related field or in the specific occupation. The remaining 43% require either general work experience or do not require prior work experience. Openings requiring experience in the occupation form 26% of all reported vacancies.



Similar to increasing levels of education, employers are willing to offer higher wages for job openings requiring more experience. Vacancies that require experience in a related field offer on average \$5.70 per hour more than those requiring general work experience. Employers are willing to pay an additional \$6.60 per hour for positions that require a higher level of experience within the occupation. This is a total of \$12.30 per hour above the average wage for vacancies associated with only the general work experience requirement.

Figure 17: Wage Ranges by Experience

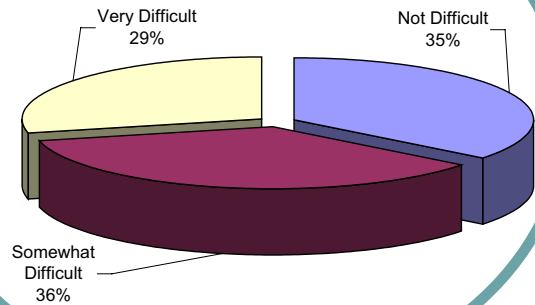




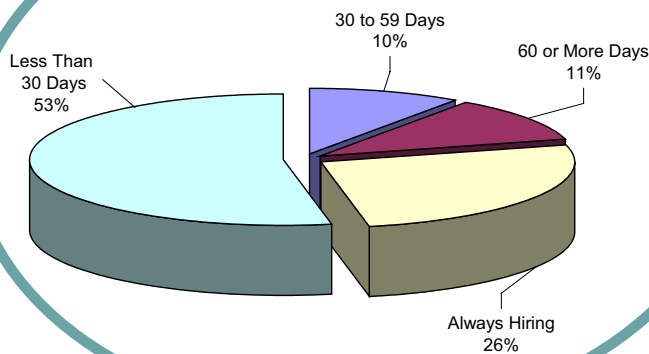
Difficulty to Fill

To estimate the level of difficulty in filling vacancies, employers were asked about their perceived level of difficulty in filling vacancies and the time period that positions had remained vacant at the time of the survey. Survey results indicate that 29% of the vacancies were perceived to be very difficult to fill. The remaining 71% of the vacancies were reported to be either not difficult to fill (35%) or somewhat difficult to fill (Figure 18).

**Figure 18:
Difficulty to Fill**



**Figure 19:
Duration of Vacancies**



Furthermore, 53% of the reported vacancies are open less than 30 days, and 10% are open 30 to 59 days. About a quarter of the vacancies are always open for hire and the remaining are open over 60 days.

Positions that employers reported as being either difficult or very difficult to fill were offered wages at two levels. Difficult to fill positions that are highly technical, requiring extensive education and experience, offer wages above \$25.00 per hour. Occupations in this category include software engineers, professors, registered nurses and various researchers and technicians. Vacancies reported as difficult to fill, but requiring little or no education and experience, offer wages closer to the region’s average or below (Figure 20). Examples of occupations in this category include high school teachers, part-time instructors, stylists, office assistants, cashiers, and various entry-level positions.

While a small portion of highly technical vacancies are open for less than 30 days, the majority of vacancies that are open for this short time period are those that require lower levels of education and experience, and are dispersed throughout all industries. Except for the small percentage of specialized vacancies, most of these quick to fill positions offer wages below the overall average. Close to 50% of the vacancies open for continuous hire offer wages above the overall average. Most of these vacancies are in Retail Trade, Services and Construction.

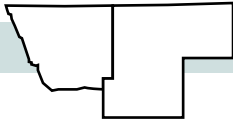
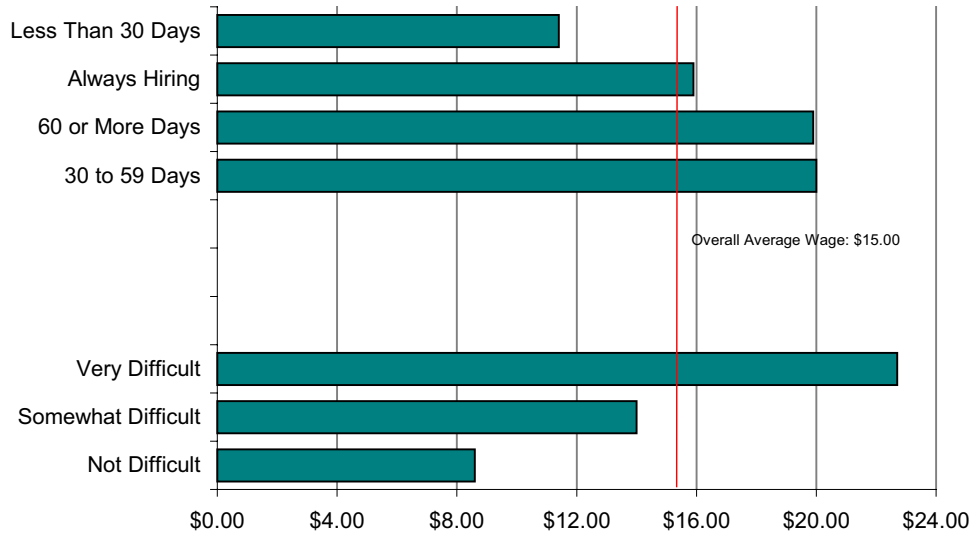


Figure 20: Average Wage by Difficulty to Fill/Time Open

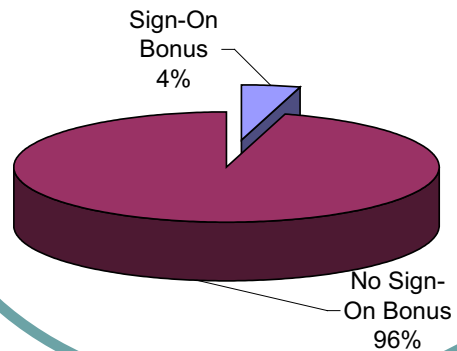


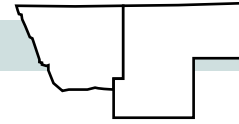
Sign-On Bonus

Employers were asked if they offered sign-on bonuses for the positions for which they were recruiting. Both large firms and small to mid-size firms reported offering a sign-on bonus during the survey period. Of all vacancies reported, 1% offer unspecified amounts for sign-on bonuses, while 3% offer on average a sign-on bonus of \$540 (Figure 21). Most of the vacancies for which sign-on bonus are offered are in Retail and Services. These positions are full-time permanent, with varied educational and experience requirements.



Figure 21: Sign-On Bonus



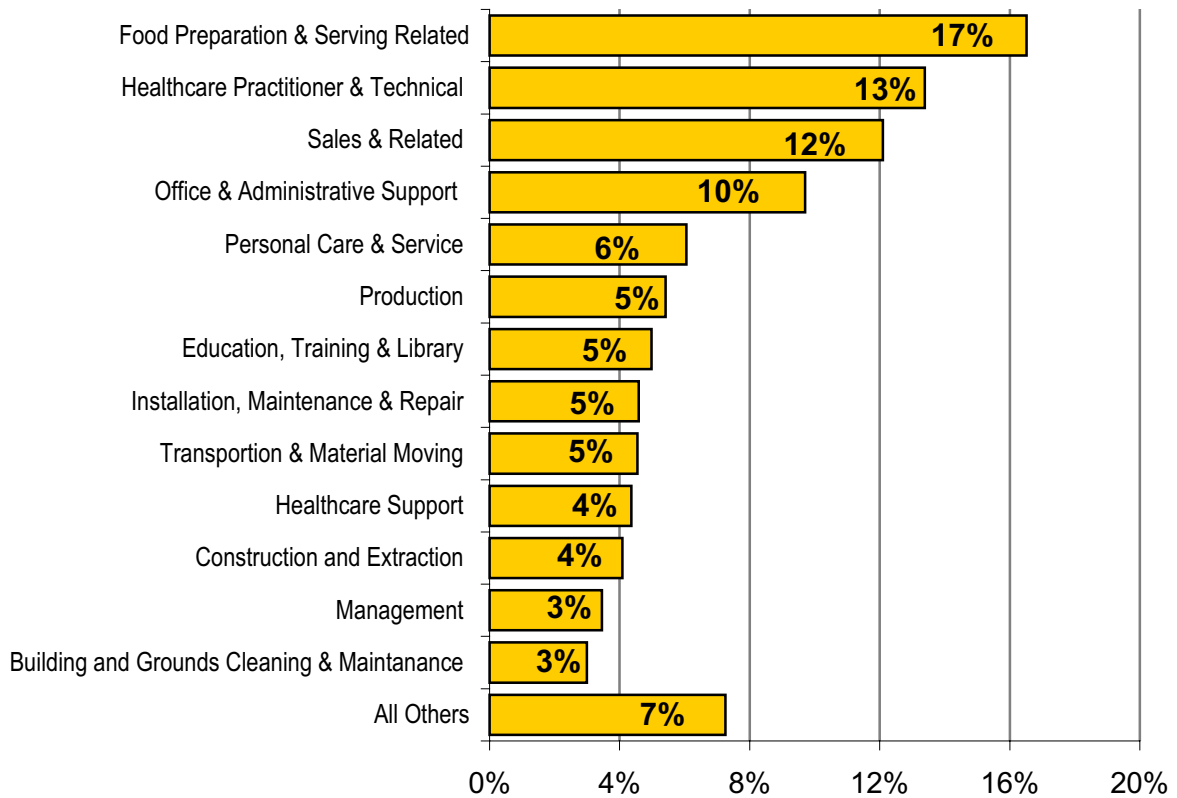


Occupations

In order to facilitate comparison between the results of this survey and other sources of employment statistics, all reported vacancies were assigned a Standard Occupational Classification (SOC) code and results reported for the major occupational groups as defined by the *Standard Occupational Classification Manual, 2000*. Although the number of vacancies varies greatly between major occupational groups, most are concentrated in Services and Retail Trade.

Occupational groups with fewer than 2% of the reported vacancies are grouped together and account for 7% of all reported vacancies. These occupational groups include: Community and Social Services; Life, Physical and Social Science; Computer and Mathematical; Arts, Design, Entertainment, Sports and Media; Protective Service; Farming, Fishing and Forestry; as well as Legal.

Figure 22: Proportion of Estimated Vacancies by Major Occupational Groups



Survey results show that vacancies in Architecture and Engineering, Business and Financial Operations, as well as Education, Training, and Library Occupations command the highest wages, followed by Management and Healthcare Practitioner and Technical Occupations (*Figure 23*). These occupational groups also require higher levels of education and experience.

Lower wages with less variation between the minimum and maximum are offered for major occupational groups with the least educational requirements. Such groups include: Food Preparation and Serving Related; Building and Grounds Cleaning and Maintenance; Personal Care and Service; Sales and Related; and Farming, Fishing and Forestry.

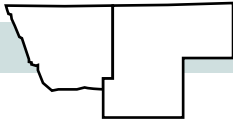


Figure 23: Range of Average Wages by Major Occupational Group

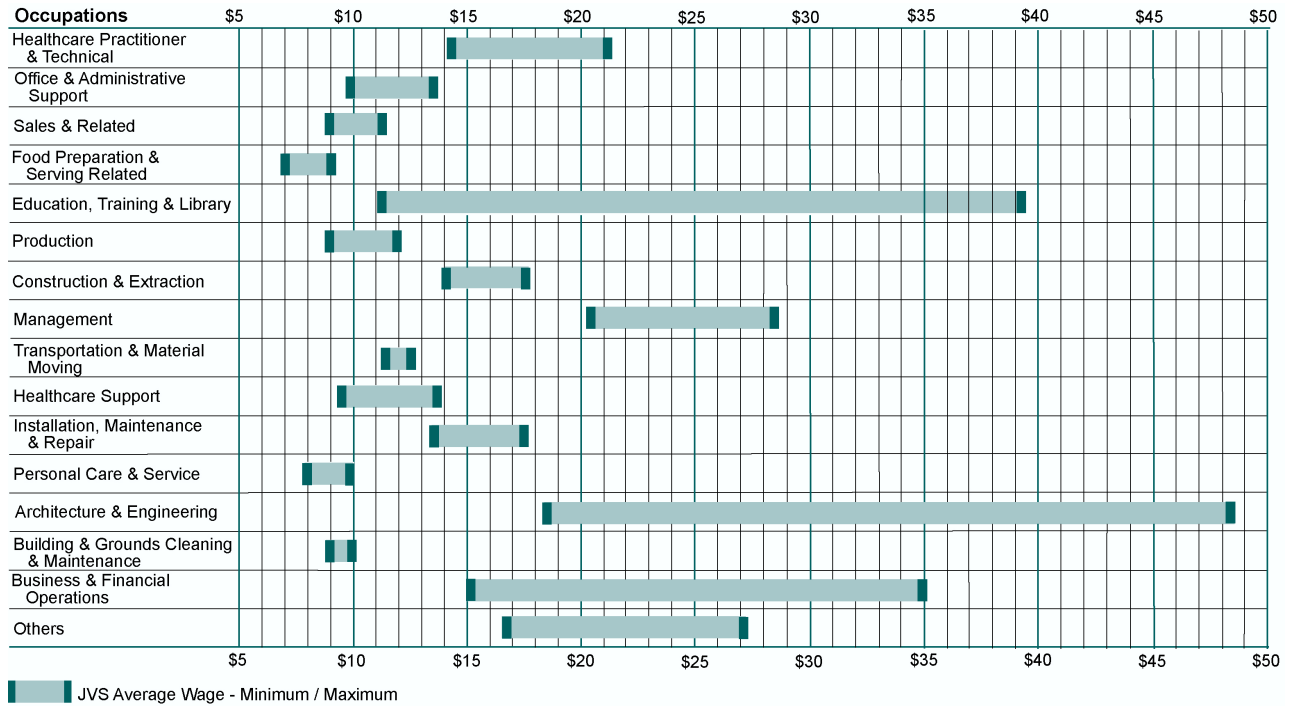


Table 2: Occupations with 10 or More Vacancies

SOC Code	SOC Title	Estimated Vacancies	Average Wage Offered	Occupational Employment Statistics Wage Data (2001)							
				Average Wages			Percentile Distribution				
				Entry Level	Overall	Experienced	10th	25th	50th	75th	90th
41-2031	Retail Salespersons	232	\$7.30	\$6.40	\$10.02	\$11.83	\$5.93	\$6.89	\$8.07	\$10.58	\$16.70
29-1111	Registered Nurses	230	\$21.30	\$16.64	\$20.60	\$22.58	\$15.26	\$17.84	\$20.24	\$23.43	\$26.59
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	149	\$7.40	\$5.95	\$6.97	\$7.48	\$5.66	\$6.16	\$6.92	\$7.83	\$8.42
35-3031	Waiters and Waitresses	139	\$5.80	\$5.86	\$8.26	\$9.46	\$5.49	\$5.91	\$6.60	\$8.42	\$10.21
31-1012	Nursing Aides, Orderlies, and Attendants	87	\$10.60	\$7.58	\$9.06	\$9.80	\$7.24	\$7.84	\$8.78	\$10.28	\$11.77
39-5012	Hairdressers, Hairstylists, and Cosmetologists	77	\$13.40	\$6.55	\$10.94	\$13.14	\$6.03	\$7.21	\$9.55	\$14.41	\$16.79
41-2010	Cashiers	70	\$7.00	\$6.15	\$8.56	\$9.77	\$5.82	\$6.68	\$7.72	\$9.51	\$13.81
53-3032	Truck Drivers, Heavy and Tractor-Trailer	61	\$13.80	\$10.77	\$14.05	\$15.70	\$10.01	\$11.74	\$13.98	\$16.20	\$18.59
43-4051	Customer Service Representatives	56	\$7.50	\$7.42	\$10.53	\$12.08	\$6.34	\$8.58	\$10.02	\$12.11	\$15.09
35-3020	Fast Food and Counter Workers	54	\$6.90	\$5.95	\$6.97	\$7.48	\$5.66	\$6.16	\$6.92	\$7.83	\$8.42
43-4171	Receptionists and Information Clerks	51	\$8.60	\$7.32	\$9.31	\$10.30	\$7.05	\$7.86	\$9.13	\$10.54	\$12.46
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	51	\$8.30	\$6.71	\$8.43	\$9.29	\$6.11	\$7.09	\$7.93	\$9.11	\$10.99
51-4010	Computer Control Programmers and Operators	48	\$11.80	\$9.42	\$14.02	\$16.32	\$9.03	\$10.06	\$12.54	\$16.21	\$23.94
25-9041	Teacher Assistants	42	\$7.10	*	*	*	*	*	*	*	*
47-2061	Construction Laborers	41	\$11.90	\$7.93	\$10.85	\$12.31	\$6.93	\$8.96	\$10.50	\$12.74	\$15.42
35-2010	Cooks	41	\$7.60	\$5.87	\$7.16	\$7.81	\$5.54	\$6.01	\$6.80	\$7.93	\$9.51
29-2061	Licensed Practical and Licensed Vocational Nurses	40	\$14.50	\$11.70	\$14.50	\$15.90	\$11.28	\$12.67	\$14.65	\$16.35	\$17.56
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	33	\$16.90	\$10.25	\$13.72	\$15.46	\$9.42	\$11.04	\$13.04	\$16.13	\$19.67
39-9021	Personal and Home Care Aides	32	\$7.80	\$6.76	\$7.93	\$8.52	\$6.29	\$7.01	\$7.76	\$8.55	\$10.22
43-3031	Bookkeeping, Accounting, and Auditing Clerks	31	\$11.90	\$9.08	\$12.45	\$14.14	\$8.63	\$10.07	\$12.11	\$14.52	\$16.92
39-9032	Recreation Workers	30	\$9.60	\$6.90	\$8.80	\$9.76	\$6.40	\$7.24	\$8.08	\$9.46	\$13.88
11-9111	Medical and Health Services Managers	29	\$24.70	\$19.47	\$31.00	\$36.77	\$16.37	\$22.54	\$27.21	\$38.20	\$50.79
43-5081	Stock Clerks and Order Fillers	27	\$7.30	\$7.03	\$10.73	\$12.58	\$6.59	\$7.68	\$9.75	\$13.80	\$16.60

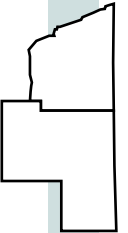


Table 2: Occupations with 10 or More Vacancies - Page 2

SOC Code	SOC Title	Estimated Vacancies	Average Wage Offered	Occupational Employment Statistics Wage Data (2001)							
				Average Wages			Percentile Distribution				
				Entry Level	Overall	Experienced	10th	25th	50th	75th	90th
53-3033	Truck Drivers, Light or Delivery Services	25	\$11.60	\$6.85	\$10.72	\$12.65	\$6.31	\$7.59	\$9.95	\$13.27	\$16.31
43-9061	Office Clerks, General	25	\$9.90	\$7.16	\$11.03	\$12.96	\$6.73	\$7.97	\$9.80	\$12.08	\$14.84
29-2034	Radiologic Technologists and Technicians	21	\$18.20	\$13.42	\$16.80	\$18.49	\$12.30	\$14.42	\$16.81	\$19.50	\$21.19
25-3099	Teachers and Instructors, All Other	19	\$18.60	*	*	*	*	*	*	*	*
37-2012	Maids and Housekeeping Cleaners	19	\$7.50	\$6.00	\$7.50	\$8.25	\$5.71	\$6.49	\$7.46	\$8.28	\$9.61
49-9042	Maintenance and Repair Workers, General	18	\$12.20	\$8.71	\$13.00	\$15.14	\$8.04	\$9.90	\$12.41	\$15.98	\$19.54
29-1031	Dietitians and Nutritionists	17	\$6.50	\$14.03	\$18.63	\$20.93	\$13.59	\$15.59	\$18.86	\$21.86	\$24.95
49-3020	Automotive Technicians and Repairers	17	\$16.10	\$11.82	\$18.29	\$21.52	\$9.83	\$14.31	\$17.88	\$21.29	\$27.31
43-3071	Tellers	17	\$8.30	\$7.70	\$9.30	\$10.11	\$7.37	\$8.10	\$9.23	\$10.39	\$11.74
43-6011	Executive Secretaries and Administrative Assistants	15	\$11.70	\$10.80	\$14.40	\$16.20	\$9.93	\$11.57	\$13.78	\$16.46	\$20.01
35-2021	Food Preparation Workers	15	\$6.10	\$6.05	\$7.94	\$8.88	\$5.82	\$6.59	\$7.59	\$8.61	\$11.39
35-3041	Food Servers, Nonrestaurant	15	\$7.10	\$5.83	\$6.70	\$7.14	\$5.41	\$5.80	\$6.45	\$7.61	\$8.43
35-9021	Dishwashers	15	\$5.60	\$5.85	\$6.75	\$7.19	\$5.51	\$5.99	\$6.78	\$7.68	\$8.23
43-5071	Shipping, Receiving, and Traffic Clerks	14	\$8.40	\$7.44	\$10.73	\$12.37	\$7.15	\$8.12	\$10.25	\$13.12	\$15.71
11-9199	Managers, All Other	14	\$21.30	\$16.33	\$28.61	\$34.75	\$14.54	\$19.46	\$26.65	\$36.30	\$46.90
17-2199	Engineers, All Other	14	\$26.50	\$22.30	\$32.81	\$38.06	\$20.49	\$25.44	\$32.29	\$40.04	\$47.38
11-1021	General and Operations Managers	14	\$20.80	\$17.38	\$32.55	\$40.13	\$15.11	\$20.63	\$29.65	\$41.33	\$57.54
39-9099	Personal Care and Service Workers, All Other	12	\$7.60	\$6.72	\$9.51	\$10.91	\$6.23	\$7.12	\$8.11	\$10.69	\$15.73
29-2056	Veterinary Technologists and Technicians	12	\$12.60	\$9.06	\$11.31	\$12.44	\$8.59	\$9.31	\$10.49	\$13.58	\$15.75
51-2092	Team Assemblers	12	\$10.30	\$7.89	\$10.59	\$11.94	\$7.32	\$8.49	\$10.38	\$12.57	\$14.68
35-9099	Food Preparation and Serving Related Workers, All Other	12	\$8.00	\$5.97	\$7.64	\$8.48	\$5.69	\$6.22	\$7.03	\$8.45	\$10.76
15-1030	Computer Software Engineers	12	\$36.10	\$19.55	\$30.91	\$36.59	\$18.65	\$22.08	\$28.52	\$38.23	\$45.37
31-1011	Home Health Aides	11	\$9.00	\$7.08	\$10.09	\$11.59	\$6.67	\$7.53	\$8.81	\$11.14	\$17.57
47-4011	Construction and Building Inspectors	11	\$18.50	\$14.06	\$18.77	\$21.12	\$14.00	\$15.98	\$18.87	\$21.48	\$25.21

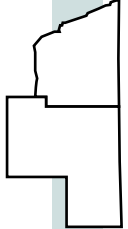
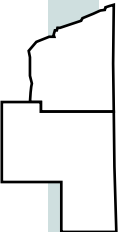


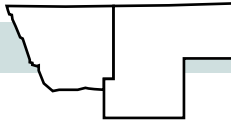
Table 2: Occupations with 10 or More Vacancies - Page 3

SOC Code	SOC Title	Estimated Vacancies	Average Wage Offered	Occupational Employment Statistics Wage Data (2001)							
				Average Wages			Percentile Distribution				
				Entry Level	Overall	Experienced	10th	25th	50th	75th	90th
49-3023	Automotive Service Technicians and Mechanics	11	\$8.20	\$8.99	\$15.99	\$19.49	\$7.69	\$10.56	\$15.77	\$20.46	\$24.85
49-9090	Repair Workers	11	\$15.10	*	*	*	*	*	*	*	*
15-1099	Computer Specialists, All Other	11	\$30.70	\$10.56	\$20.06	\$24.81	\$9.21	\$12.53	\$20.32	\$26.33	\$31.69
35-1010	First-Line Supervisors/Managers, Food Preparation and Serving Workers	11	\$11.80	\$7.68	\$10.59	\$12.04	\$7.31	\$7.97	\$9.39	\$11.96	\$14.97
21-1010	Counselors	10	\$8.80	\$11.96	\$14.49	\$15.76	\$11.26	\$11.38	\$12.92	\$14.52	\$21.37
37-3011	Landscaping and Groundskeeping Workers	10	\$9.70	\$7.23	\$9.91	\$11.25	\$6.92	\$7.86	\$9.36	\$11.04	\$14.51
47-2073	Operating Engineers and Other Construction Equipment Operators	10	\$14.40	\$13.29	\$15.59	\$16.74	\$12.11	\$14.08	\$15.62	\$17.23	\$19.68
39-3031	Ushers, Lobby Attendants, and Ticket Takers	10	\$7.00	\$5.90	\$6.97	\$7.50	\$5.50	\$5.86	\$6.45	\$8.71	\$9.93
51-3021	Butchers and Meat Cutters	10	\$6.80	\$8.83	\$12.65	\$14.56	\$8.19	\$9.78	\$13.00	\$15.64	\$16.93
53-3031	Driver/Sales Workers	10	\$7.10	\$5.90	\$10.93	\$13.44	\$5.66	\$6.41	\$10.08	\$14.16	\$18.95
51-4070	Molders and Molding Machine Setters, Operators, and Tenders, Metal and Plastic	10	\$8.70	\$7.58	\$11.30	\$13.15	\$7.28	\$8.05	\$9.57	\$14.01	\$18.93
47-2152	Plumbers, Pipefitters, and Steamfitters	10	\$12.80	\$11.33	\$16.70	\$19.39	\$10.77	\$12.95	\$16.36	\$20.67	\$24.52
13-1071	Employment, Recruitment, and Placement Specialists	10	\$12.30	\$13.03	\$18.28	\$20.91	\$11.97	\$14.49	\$16.77	\$21.75	\$25.92
51-2090	Miscellaneous Assemblers and Fabricators	10	\$11.50	\$6.83	\$9.28	\$10.51	\$6.22	\$7.20	\$8.09	\$10.85	\$15.03
29-2012	Medical and Clinical Laboratory Technicians	10	\$12.70	\$9.85	\$12.48	\$13.80	\$9.15	\$10.80	\$12.25	\$14.06	\$16.56

* No Wage data available

◆ State Average




Table 3a: Occupations with Fewer Than 10 Vacancies (Hourly Wage)

SOC Code	SOC Occupational Title	Occupational Employment Statistics Wage Data (2001)							
		Average Wages			Percentile Distribution				
		Entry Level	Overall	Experienced	10th	25th	50th	75th	90th
43-6014	Secretaries, Except Legal, Medical, and Executive	\$8.20	\$10.94	\$12.31	\$7.57	\$8.92	\$10.49	\$12.74	\$15.42
11-3031	Financial Managers	\$19.05	\$30.55	\$36.29	\$17.57	\$21.42	\$27.97	\$38.39	\$48.87
17-3025	Environmental Engineering Technicians	\$12.03	\$14.47	\$15.69	\$11.19	\$11.86	\$12.97	\$15.77	\$20.36
31-9092	Medical Assistants	\$9.15	\$10.30	\$10.88	\$8.65	\$9.20	\$10.02	\$10.91	\$13.25
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$8.09	\$12.46	\$14.64	\$7.44	\$8.91	\$11.89	\$14.73	\$18.78
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	\$11.23	\$15.81	\$18.10	\$11.06	\$12.61	\$15.18	\$18.80	\$22.80
17-2051	Civil Engineers	\$18.68	\$25.14	\$28.37	\$17.97	\$19.65	\$23.24	\$30.16	\$35.47
13-2011	Accountants and Auditors	\$14.25	\$19.89	\$22.71	\$13.47	\$15.24	\$18.32	\$22.32	\$28.79
47-2111	Electricians	\$11.56	\$17.66	\$20.70	\$10.36	\$12.94	\$17.09	\$20.76	\$26.19
25-1124	Foreign Language and Literature Teachers, Postsecondary	*	*	*	*	*	*	*	*
29-2032	Diagnostic Medical Sonographers	*	*	*	*	*	*	*	*
41-9099	Sales and Related Workers, All Other	\$7.99	\$14.06	\$17.09	\$7.39	\$8.57	\$11.05	\$16.40	\$25.23
53-3030	Driver/Sales Workers and Truck Drivers	\$5.90	\$10.93	\$13.44	\$5.66	\$6.41	\$10.08	\$14.16	\$18.95
25-1120	Arts, Communications, and Humanities Teachers, Postsecondary	*	*	*	*	*	*	*	*
35-3011	Bartenders	\$5.88	\$7.91	\$8.93	\$5.61	\$6.16	\$7.31	\$9.71	\$11.37
47-2181	Roofers	\$7.94	\$11.28	\$12.96	\$7.37	\$8.56	\$10.14	\$13.96	\$16.70
35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	\$5.85	\$6.38	\$6.65	\$5.42	\$5.77	\$6.34	\$7.06	\$7.92
29-2055	Surgical Technologists	\$11.57	\$15.20	\$17.02	\$10.98	\$11.86	\$13.31	\$16.39	\$23.90
31-9094	Medical Transcriptionists	\$11.63	\$13.43	\$14.33	\$11.08	\$11.91	\$13.30	\$15.21	\$16.44
43-6013	Medical Secretaries	\$9.45	\$11.69	\$12.81	\$9.05	\$9.99	\$11.53	\$13.21	\$15.30
13-2072	Loan Officers	\$14.49	\$22.11	\$25.91	\$13.02	\$16.47	\$19.86	\$26.49	\$33.77
41-3021	Insurance Sales Agents	\$14.13	\$21.54	\$25.24	\$13.01	\$14.77	\$16.63	\$23.96	\$36.34
37-1010	First-Line Supervisors/Managers, Building and Grounds Cleaning and Maintenance Workers	\$8.85	\$12.02	\$13.60	\$8.11	\$9.36	\$10.91	\$13.38	\$16.85
11-9033	Education Administrators, Postsecondary	\$16.64	\$28.20	\$33.97	\$14.83	\$18.75	\$24.28	\$34.19	\$44.93
19-4090	Miscellaneous Life, Physical, and Social Science Technicians	\$16.14	\$22.18	\$25.21	\$13.06	\$18.51	\$22.24	\$26.72	\$31.28
11-9039	Education Administrators, All Other	*	*	*	*	*	*	*	*
21-1029	Social Workers, All Other	*	*	*	*	*	*	*	*
39-9011	Child Care Workers	\$6.06	\$7.67	\$8.48	\$5.79	\$6.58	\$7.55	\$8.44	\$10.08
39-9030	Recreation and Fitness Workers	\$9.45	\$12.74	\$14.38	\$8.15	\$10.64	\$11.98	\$14.59	\$18.51
41-2021	Counter and Rental Clerks	\$6.14	\$9.22	\$10.76	\$5.83	\$6.67	\$8.12	\$11.07	\$14.47
43-4081	Hotel, Motel, and Resort Desk Clerks	\$6.42	\$7.75	\$8.42	\$5.86	\$6.87	\$7.72	\$8.52	\$10.03
49-9044	Millwrights	\$9.88	\$11.33	\$12.05	\$9.14	\$9.62	\$10.41	\$11.42	\$16.20
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	\$8.54	\$12.28	\$14.15	\$7.61	\$9.76	\$12.67	\$14.99	\$16.43
51-4121	Welders, Cutters, Solderers, and Brazers	\$8.51	\$11.93	\$13.64	\$7.75	\$9.18	\$11.28	\$13.93	\$16.88
51-6011	Laundry and Dry-Cleaning Workers	\$6.27	\$7.82	\$8.60	\$5.84	\$6.77	\$7.58	\$8.37	\$10.89
51-6021	Pressers, Textile, Garment, and Related Materials	\$7.06	\$7.46	\$7.66	\$6.66	\$7.12	\$7.61	\$8.11	\$8.40
53-7061	Cleaners of Vehicles and Equipment	\$6.18	\$8.35	\$9.44	\$5.78	\$6.67	\$7.87	\$9.46	\$11.80
51-7099	Woodworkers, All Other	*	*	*	*	*	*	*	*
47-2031	Carpenters	\$9.65	\$13.66	\$15.66	\$8.82	\$11.03	\$13.13	\$16.43	\$19.67
29-1123	Physical Therapists	\$20.54	\$23.86	\$25.53	\$19.00	\$21.79	\$24.13	\$26.32	\$28.17
41-1011	First-Line Supervisors/Managers of Retail Sales Workers	\$10.18	\$16.81	\$20.12	\$9.40	\$11.09	\$14.11	\$18.53	\$27.44
49-3013	Aircraft Mechanics and Service Technicians, Not FAA Certified	*	*	*	*	*	*	*	*
49-3093	Tire Repairers and Changers	\$7.17	\$9.00	\$9.91	\$6.52	\$8.04	\$9.23	\$10.12	\$10.65
51-6050	Tailors, Dressmakers, and Sewers	\$7.74	\$8.82	\$9.36	\$7.21	\$7.61	\$8.28	\$9.89	\$12.06

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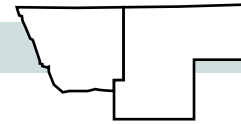


Table 3a: Occupations with Fewer Than 10 Vacancies (Hourly Wage) - Page 2

SOC Code	SOC Occupational Title	Occupational Employment Statistics Wage Data (2001)							
		Average Wages			Percentile Distribution				
		Entry Level	Overall	Experienced	10th	25th	50th	75th	90th
11-3061	Purchasing Managers	\$16.72	\$29.56	\$35.99	\$14.63	\$20.27	\$28.36	\$38.91	\$47.64
53-3020	Bus Drivers	\$8.61	\$10.19	\$10.98	\$7.99	\$9.12	\$10.06	\$11.18	\$13.01
29-1126	Respiratory Therapists	\$14.04	\$17.08	\$18.60	\$13.13	\$14.84	\$17.24	\$19.63	\$21.07
29-2051	Dietetic Technicians	\$6.39	\$9.59	\$11.19	\$5.93	\$6.95	\$8.97	\$11.81	\$14.01
29-2071	Medical Records and Health Information Technicians	\$9.06	\$12.23	\$13.81	\$8.66	\$9.49	\$10.76	\$15.06	\$18.57
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	\$5.87	\$6.83	\$7.31	\$5.54	\$6.00	\$6.77	\$7.72	\$8.32
51-3011	Bakers	\$7.00	\$10.06	\$11.60	\$6.46	\$7.69	\$9.77	\$12.58	\$14.12
47-3015	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	\$10.20	\$12.05	\$12.97	\$9.48	\$10.78	\$11.86	\$12.96	\$14.59
17-2141	Mechanical Engineers	\$19.85	\$28.48	\$32.80	\$18.13	\$23.03	\$29.14	\$33.33	\$39.53
17-2071	Electrical Engineers	\$26.44	\$34.08	\$37.89	\$23.97	\$28.72	\$33.02	\$39.66	\$47.41
53-7051	Industrial Truck and Tractor Operators	\$8.44	\$11.34	\$12.79	\$7.70	\$9.20	\$10.98	\$13.17	\$15.68
51-7011	Cabinetmakers and Bench Carpenters	\$5.97	\$9.92	\$11.90	\$5.76	\$6.38	\$9.29	\$12.66	\$16.65
35-2012	Cooks, Institution and Cafeteria	\$6.39	\$8.06	\$8.90	\$5.98	\$6.90	\$7.90	\$9.19	\$10.64
51-4120	Welding, Soldering, and Brazing Workers	\$9.85	\$11.57	\$12.42	\$9.42	\$10.43	\$11.72	\$12.89	\$13.60
49-2098	Security and Fire Alarm Systems Installers	*	*	*	*	*	*	*	*
15-1021	Computer Programmers	\$14.42	\$25.81	\$31.50	\$12.33	\$16.61	\$27.05	\$33.81	\$40.20
33-1021	First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	*	*	*	*	*	*	*	*
13-1199	Business Operations Specialists, All Other	\$13.41	\$19.43	\$22.45	\$12.34	\$14.74	\$18.89	\$21.59	\$27.51
43-5032	Dispatchers, Except Police, Fire, and Ambulance	\$9.35	\$13.54	\$15.64	\$8.20	\$10.83	\$13.84	\$16.13	\$18.36
29-1122	Occupational Therapists	\$16.69	\$21.23	\$23.50	\$14.99	\$18.22	\$21.30	\$24.89	\$26.93
29-1127	Speech-Language Pathologists	\$15.49	\$21.04	\$23.82	\$14.54	\$16.76	\$21.20	\$24.99	\$27.20
43-3021	Billing and Posting Clerks and Machine Operators	\$9.01	\$11.28	\$12.41	\$8.52	\$9.44	\$10.92	\$12.95	\$15.21
45-4011	Forest and Conservation Workers	\$10.67	\$14.53	\$16.46	\$9.75	\$11.60	\$13.85	\$17.17	\$20.13
13-1073	Training and Development Specialists	\$10.86	\$16.98	\$20.04	\$9.72	\$12.43	\$15.62	\$20.79	\$26.61
21-1020	Social Workers	\$13.18	\$16.93	\$18.81	\$12.11	\$14.10	\$16.42	\$18.67	\$22.84
13-2051	Financial Analysts	\$20.60	\$28.73	\$32.79	\$19.08	\$21.92	\$27.67	\$33.57	\$41.41
19-3051	Urban and Regional Planners	\$17.83	\$23.02	\$25.62	\$17.09	\$19.27	\$22.30	\$26.44	\$31.64
11-3011	Administrative Services Managers	\$13.04	\$24.16	\$29.73	\$11.64	\$15.73	\$24.79	\$31.61	\$37.55
11-9121	Natural Sciences Managers	\$27.75	\$37.66	\$42.61	\$25.07	\$32.65	\$39.03	\$45.12	\$51.35
17-3031	Surveying and Mapping Technicians	\$10.67	\$14.78	\$16.84	\$9.91	\$11.38	\$14.93	\$17.32	\$20.35
23-9099	Legal and Related Workers, All Other (OES Only)	\$11.17	\$17.88	\$21.24	\$8.95	\$13.78	\$18.54	\$21.34	\$26.25
25-1020	Math and Computer Teachers, Postsecondary	*	*	*	*	*	*	*	*
25-1190	Miscellaneous Postsecondary Teachers	\$10.22	\$17.19	\$20.67	\$8.67	\$12.02	\$15.26	\$18.19	\$30.51
33-9032	Security Guards	\$7.51	\$10.55	\$12.07	\$7.23	\$8.04	\$9.63	\$11.60	\$15.75
43-4061	Eligibility Interviewers, Government Programs	\$11.13	\$14.22	\$15.77	\$10.59	\$11.65	\$13.12	\$16.17	\$19.62
53-3022	Bus Drivers, School	\$8.61	\$10.19	\$10.98	\$7.99	\$9.12	\$10.06	\$11.18	\$13.10
13-2070	Loan Counselors and Officers	\$11.07	\$14.17	\$15.72	\$10.40	\$12.08	\$14.45	\$16.15	\$17.92
43-4131	Loan Interviewers and Clerks	\$9.50	\$11.98	\$13.23	\$9.02	\$9.79	\$11.37	\$13.61	\$16.26
49-2092	Electric Motor, Power Tool, and Related Repairers	\$11.46	\$17.31	\$20.23	\$8.60	\$15.22	\$18.46	\$20.24	\$21.30
51-4035	Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	\$12.32	\$15.95	\$17.77	\$11.54	\$13.47	\$16.40	\$18.92	\$20.50
51-9111	Packaging and Filling Machine Operators and Tenders	\$6.92	\$9.74	\$11.15	\$6.46	\$7.51	\$9.24	\$10.89	\$15.03
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	\$7.72	\$10.47	\$11.85	\$7.26	\$8.47	\$10.01	\$12.23	\$14.40
51-9121	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	\$8.11	\$10.62	\$11.87	\$7.59	\$8.59	\$10.47	\$12.51	\$13.92
27-4099	Media and Communication Equipment Workers, All Other	\$7.32	\$20.93	\$27.73	\$6.40	\$8.59	\$22.35	\$30.97	\$38.86

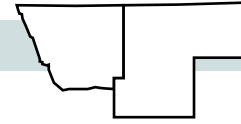


Table 3a: Occupations with Fewer Than 10 Vacancies (Hourly Wage) - Page 4

SOC Code	SOC Occupational Title	Occupational Employment Statistics Wage Data (2001)								
		Average Wages			Percentile Distribution					
		Entry Level	Overall	Experienced	10th	25th	50th	75th	90th	
43-2021	Telephone Operators	\$6.67	\$10.55	\$12.49	\$6.61	\$7.48	\$11.32	\$13.22	\$15.10	◆
43-6012	Legal Secretaries	\$9.93	\$11.56	\$12.38	\$9.21	\$9.72	\$10.56	\$13.74	\$16.07	
43-9011	Computer Operators	\$8.56	\$11.31	\$12.69	\$7.91	\$8.91	\$10.40	\$12.88	\$16.07	
45-2099	Agricultural Workers, All Other	*	*	*	*	*	*	*	*	
19-2043	Hydrologists	\$18.64	\$25.97	\$29.63	\$16.14	\$21.35	\$26.93	\$31.46	\$34.22	
47-5011	Derrick Operators, Oil and Gas	\$12.03	\$14.31	\$15.45	\$11.32	\$12.18	\$13.69	\$16.22	\$18.91	

* No wage data available

OES wages reported as average for more

** specific occupations

◆ State average

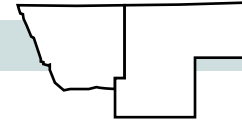
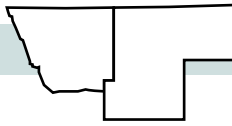


Table 3b: Occupations with Fewer Than 10 Vacancies (Annual Wage) - Page 2

SOC Code	SOC Occupational Title	Occupational Employment Statistics Wage Data (2001)							
		Average Wages			Percentile Distribution				
		Entry Level	Overall	Experienced	10th	25th	50th	75th	90th
25-1050	Physical Sciences Teachers, Postsecondary	*	*	*	*	*	*	*	*
25-1053	Environmental Science Teachers, Postsecondary	*	*	*	*	*	*	*	*
25-1070	Health Teachers, Postsecondary	*	*	*	*	*	*	*	*
25-1081	Education Teachers, Postsecondary	\$30,050	\$46,710	\$55,050	\$28,850	\$35,220	\$44,060	\$55,610	\$73,600
25-1122	Communications Teachers, Postsecondary	\$31,700	\$45,550	\$54,470	\$28,160	\$30,480	\$43,430	\$54,730	\$68,360
25-1193	Recreation and Fitness Studies	\$27,950	\$39,550	\$45,350	\$24,930	\$31,530	\$38,430	\$46,550	\$55,670

* No wage data available
 † Annual Regional Average
 State annual average



Methodology

Survey Instrument and Redesign

The Job Vacancy Survey was initiated in the Denver Metro area by Arapahoe/Douglas Works! through funding from the Employment and Training Administration in cooperation with Labor Market Information. The Denver Metro pilot studies were conducted along with pilot studies in five other metropolitan areas across the nation. As a result of the success of the Denver Metro Job Vacancy Survey, the Colorado Department of Labor and Employment initiated a plan to expand the studies across the entire state.

After the first two Denver Metro pilot studies, the survey instrument was evaluated and redesigned. In choosing questions, considerations were made regarding various form and gradations. Decisions were made to address the core of what was required in order to stay within the defined limits. The survey was expanded not only to state the purpose of the survey, but also to collect employer information; verifying addresses, number of employees, and establishing contact names. Email and fax numbers were added to provide a means of contacting employers for notification of the availability of survey results. A review of the survey questions follows:

A—The “Job Title” section remained relatively the same, although a definition of Full- versus Part-time was included.

B—“Number of vacancies for which your firm is actively recruiting”: The objective was to get a measure of the job market from the employer’s point of view. A variant of this question was, “Number of vacancies that your firm currently has.” Actively recruiting was queried due to the possible presence of vacancies that were deliberately left vacant. Also revised was the query for Permanent vs. Temporary identification.

C—The “Wages/Salary” question was revised to request the maximum and the minimum rates of pay to evaluate variations in pay given different applicant qualifications.

D—“Is a sign-on bonus offered to the person hired to fill this vacancy?” In addition to noting whether or not a bonus is offered, the revised survey allows a dollar amount to be entered.

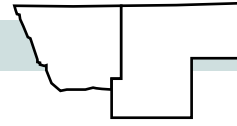
E—“Is medical insurance offered?” In addition, the revised survey prompted for the portion (if any) that the firm contributed. To better understand the relationship between types of positions, pay, vacancies, and the existence of medical insurance, it was important to note to what degree the firm contributes to the insurance premium.

F—“What is the typical education level required to fill this vacancy?” Examination of the nature of the job market and the needs of employers included the query of educational requirements.

G—“What is the typical type of experience required to qualify for this vacancy?” This also adds to the characteristics that employers are looking for in applicants. It was important to expand this question, allowing the firm to note the nature of the experience requested. During times of excess labor supply, qualifications demanded of applicants tend to increase. During periods of limited supply, the reverse tends to occur.

H—“How long has this vacancy been open?” This question was added to the revised survey to gauge the tightness of the labor market. It provides an objective measure that can be tracked and compared across time.

I—“How difficult is this vacancy to fill?” Questions H and I together help to evaluate the challenges employers face in the timely hiring of personnel and the degree to which the supply of labor falls short of demand.



Survey Sample Methodology

This survey is designed to find frequency of job vacancies in the Larimer/Weld Region and characteristics of those vacancies. Firms were ordered into groups, or stratifications by employment size and industry, and the resulting percentages of vacancies for each category were used to estimate total job vacancies for each group. The list of firms used for this survey, with their contact information, staff size and industry classification was obtained from the America's Labor Market Information System (ALMIS) database. Information regarding Government agencies was obtained from the Colorado Department of Labor and Employment's ES-202 (unemployment insurance) database.

The survey was conducted by telephone. Copies of the survey questions were faxed or e-mailed to employers upon request.

Stratifications

Attempts were made to contact all government employers regardless of size. Large private employers, those with at least 150 employees, were also censused. They account for about 40% of the employment in the sample universe. Private firms employing between 5 and 149 individuals are considered small to mid-size employers. These employers were stratified into major industry divisions based on the *1987 Standard Industrial Classification Manual*.

- ◆ Agriculture, Forestry and Fishing
- ◆ Mining
- ◆ Construction
- ◆ Durable Goods Manufacturing
- ◆ Non-Durable Goods Manufacturing
- ◆ Transportation, Communication, and Public Utilities (T.C.P.U.)
- ◆ Wholesale Trade
- ◆ Retail Trade
- ◆ Finance, Insurance, and Real Estate (F.I.R.E.)
- ◆ Services
- ◆ Government

The lists of small to mid-sized employers were randomized and a sample of sufficient size to achieve a predictable level of accuracy for the estimates of job vacancies was taken.

Data Editing and Cleaning

In preparing data for analysis, data entry was reviewed. Employers were called in cases to clarify questionable entries and/or inconsistencies

Occupational Coding

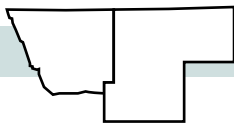
Job title and descriptions were used to match vacancies with the appropriate Standard Occupational Classification titles. In some cases a second interview with the employer was necessary to decide on a specific occupational title.

Wage Conversion

Standard conversions were used to convert salaries into hourly wages: 2,080 hours for annual salaries, 173.3 hours for monthly salaries.

All wages below the minimum wage level were adjusted upwards to \$5.15 per hour. When necessary employers were contacted a second time for more information on questionable wages.

Average wages are calculated based on the midpoint of the reported minimum and maximum that employers were offering to fill a vacancy at the time of the survey.



Definitions

Annual Salary

The monetary return for one year's work. The definition does not include benefits (*e.g.*, insurance, retirement program, or stock plans).

Average

The arithmetic average (also called the mean) for a group of items is defined as the sum of the values of the items divided by the number of items.

Full-time and Part-time Employment

To be classified as full-time employment a position must require a minimum of 35 hours of work a week. Part-time employment refers to cases where a position requires less than 35 hours of work a week.

Job Vacancy Rate

Is the number of openings in a specific occupation expressed as a share of total employment in that same occupation.

Level of Education

Refers to completed programs of work. High school diplomas, associate, professional, vocational, bachelor's, and graduate degrees all are examples of programs of work.

Medical Insurance Premium

Refers to the monthly payments that a holder of an insurance policy pays in order to keep his/her policy current.

Mid-Point

For the purpose of this survey, the Mid-Point refers to the wage halfway between the average minimum and average maximum wages as reported by survey respondents.

Permanent and Temporary Employment

Employment is classified as permanent if it will be filled for more than six months. Temporary employment on the other hand refers to those positions which will be filled for six months or less.

Sample Frame

The set of employers randomly chosen for the survey from the whole population of employers. Since vacancies and employment data were the central objectives of the survey, the sample frame was designed to allow necessary representation in those categories.

Sign-on Bonus

An additional financial incentive offered by a firm to new employees in order to influence their decisions to agree to employment with that firm. The bonus, for purposes of this survey, is a monetary lump sum.

SOC

The 1998 Standard Occupational Classification (SOC), with 822 detailed occupations, reflects the current occupational structure in the United States and was designed to provide a universal classification system. All federal agencies that collect occupational data will adhere to the new SOC. Information on the 1998 SOC, including its occupational structure, is available online.

Internet: http://stats.bls.gov/soc/soc_home.htm.

Source: *Occupational Outlook Handbook*, 2000-01 Edition, U.S. Department Of Labor, Bureau of Labor Statistics, January 2000.

Vacancy

An established position that is currently unfilled for which the firm is actively recruiting to fill. The definition does not include positions that are anticipated, but not yet created.

Wage

The monetary return per hour of work. The definition does not include benefits (*e.g.*, insurance, retirement program, or stock plans).