

# Larimer/Weld

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## Job Vacancy Survey

Conducted  
February 9-28, 2001

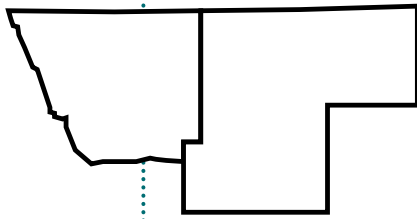
### Larimer and Weld Counties

June 2001



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





# Larimer/Weld Job Vacancy Survey

*Conducted February 9–28, 2001*

**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

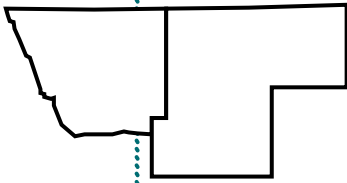
The Colorado Workforce Development Council

June 2001



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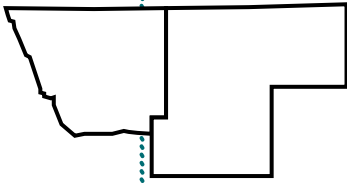
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# Contents

List of Figures .....	iii
List of Tables .....	iii
Introduction .....	1
How to Use This Report .....	2
Employers .....	2
Job Seekers .....	2
Workforce Centers .....	3
Economic Developers .....	3
Caveats .....	4
Executive Summary .....	5
Larimer/Weld Region .....	6
The JVS Sample .....	8
The Survey Instrument .....	8
Timing Considerations .....	8
Labor Market Conditions .....	9
Vacancies by Industry .....	10
Services .....	10
Retail Trade .....	10
Manufacturing .....	10
Construction .....	11
Transportation, Communication and Public Utilities (TCPU) .....	11
Finance, Insurance and Real Estate (FIRE) .....	11
Government .....	11
Wholesale Trade .....	11
Agriculture .....	11
Mining .....	11
Vacancies and Wages .....	12
Medical Insurance and Wages .....	13
Education and Experience Requirements .....	14
Education and Wages .....	14
Experience and Wages .....	15
Difficulty to Fill .....	16
Sign-On Bonus .....	17
Occupations .....	18
OES Wage Data Listing of Occupations .....	20
OES Wage Data Listing of Occupations with Less than 10 Vacancies .....	23
Methodology .....	27
Survey Instrument and Redesign .....	27
Survey Sample Methodology .....	28
Data Editing and Cleaning .....	28
Definitions .....	29
Appendix .....	30
Survey Instrument .....	30

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

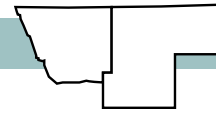


# List of Figures

1. Unemployment Rates for February 2001 .....	6
2. Employment by Industry .....	6
3. Larimer/Weld Region Employers and Employees in the 1st Quarter, 2000.....	7
4. Annual Growth Difference Between Employment and Labor Force .....	7
5. Historical Employment Trends for Larimer/Weld Region .....	8
6a. Permanent vs. Temporary, Part-Time vs. Full-Time.....	9
6b. Vacancies by Firm Size .....	9
7. Total Employment and Number of Vacancies by Industry .....	10
8. Average Wage by Firm Size .....	12
9. Average Wage by Status .....	12
10. Average Wage by Industry .....	12
11. Employer's Contribution to Medical Insurance Premium .....	13
12. Wage by Contribution to Medical Insurance Premiums.....	13
13. Medical Insurance by Vacancy Status .....	13
14. Vacancies by Education .....	14
15. Range of Average Wages by Education .....	15
16. Vacancies by Experience .....	15
17. Average Wage by Experience .....	15
18. Difficulty to Fill .....	16
19. Duration of Vacancies.....	16
20. Average Wage by Difficulty to Fill.....	16
21. Average Wage by Vacancy Duration .....	16
22. Sign-On Bonus .....	17
23. Sign-On Bonus by Industry .....	17
24. Vacancies by Major Occupational Groups .....	18
25. Range of Average Wages by Major Occupational Group.....	19

# List of Tables

1. Experience Requirements by Educational Level .....	14
2. Occupations .....	20
3. Occupations With Less Than 10 Vacancies .....	23



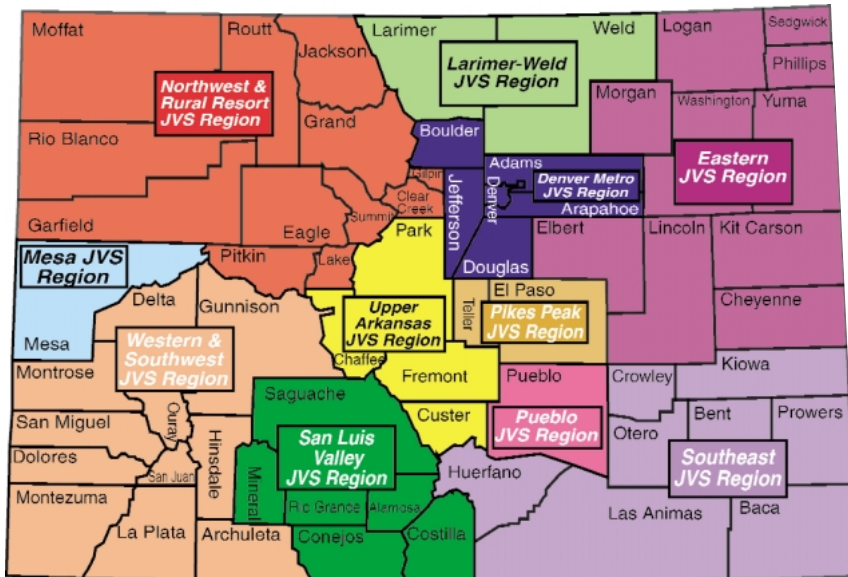
# Introduction

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.

## Colorado Job Vacancy Survey Regions



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 JVS, the survey instrument was revised to eliminate 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.

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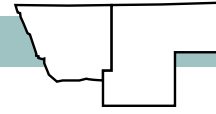
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## How to Use This Report

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,
- ◆ or compensation packages that are insufficient as a recruitment tool when compared to market standards.

The JVS will also identify specific issues regarding current vacancies and prompt decision-makers to take remedial actions where necessary. For example, upon review of the JVS 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

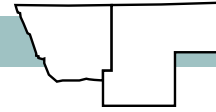
skilled workers. Delays in filling vacancies despite increases in wages and/or benefits may be attributed to an overall shortage of applicants in the area. Similarly, if a low percentage of vacancies exist for a particular position with the same educational and/or experience requirement, but an employer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

Employers from outside the region considering relocating to the area can review the JVS results and determine if the company's employment needs will be filled with minimum delay (current low vacancies). In addition, the JVS 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 the JVS report is a roadmap that can be used to determine where the best paying jobs are given their skills and level of education. The JVS illustrates the current demands of the local job market and provides associated average wages. A job seeker can review LMI's occupational projections in addition to the

JVS to see if current opportunities can contribute to long-term career goals. With information the JVS provides, job seekers can better tailor their education and training efforts toward industries and occupations that lead to more permanent positions.



## **Workforce Centers**

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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 an immediate clear picture of the area's current employment needs. Workforce Centers can direct job seekers towards high demand occupations to increase placement success, or in a direction that might better suit the needs of the applicants' future career goals.

Workforce Center staff can also review the nature of job vacancies and decide where to focus placement efforts. Future investments in the workforce can be directed towards occupations or industries that continuously contribute to the local economy.

Current vacancy conditions as presented by the JVS, 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. LMI's Employment and Wages publication (ES-202 data) provides monthly, county and statewide industry data 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 as indicated by LMI quarterly data. Longer-term industry trends in employment are also recorded on an annual basis in the same report for each county.

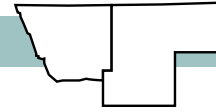
In addition, LMI provides statewide occupational projections available at <http://lmi.cdle.state.co.us/wra.home.htm>, which includes projected employment growth, and identifies growing as well as declining occupations. This information, used with the JVS's identification of current vacancies, can help Workforce Centers identify occupations in demand now and in the future. Workforce Centers can subsequently plan for future training programs in cooperation with businesses and educators.

## **Economic Developers**

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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

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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.

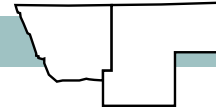
The results of the survey are based only on the sample of responses collected from February 9 through February 28, 2001 and should not be considered as necessarily portraying the exact distribution of job vacancies in the Larimer/Weld Region. After several years of JVS data are available, patterns may 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.



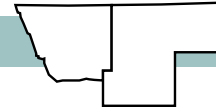


## Executive Summary

The first Larimer/Weld Job Vacancy Survey was conducted from February 9th through February 28th, 2001. Over the survey period, 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.

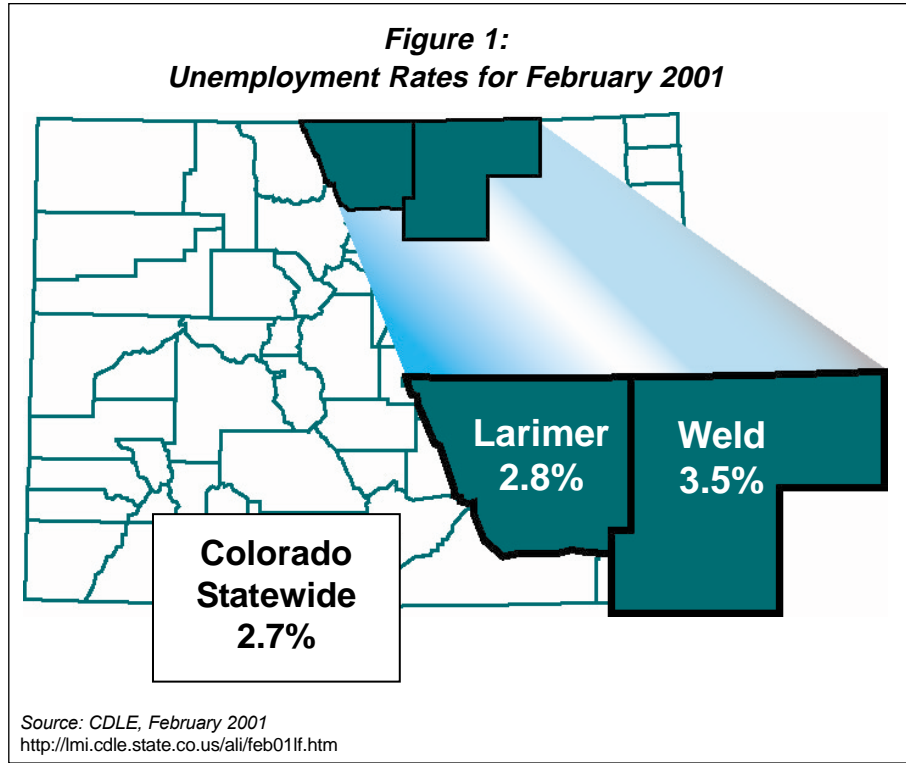
A total of 1,815 employers (29% of the Larimer/Weld employers), representing 27% of the region's total employment responded to the survey. Out of these, 37 are large employers (200 or more employees) and 1,778 are from the small to mid-size category (5-199 employees). The major findings of the survey are as follows:

- ◆ It is estimated that a total of 4,165 jobs were open for hire in the Larimer/Weld Region during the survey period.
- ◆ Three thousand forty jobs are estimated to be full-time, permanent openings while 750 are part-time, permanent openings.
- ◆ Two hundred fifty jobs are estimated to be part-time, temporary and 125 are full-time, temporary positions.
- ◆ About 57% of the estimated job openings are in Services and Retail Trade.
- ◆ The overall average wage for all vacancies is \$12.00 per hour. Average wages for permanent positions exceed those of temporary positions at both the full-time and part-time levels.
- ◆ Both education and experience required have a significant positive influence on wages offered.
- ◆ Forty-six percent of the openings require experience in the specific position or in a related occupation.
- ◆ Fifty-three percent of the job openings are either very difficult or somewhat difficult to fill.
- ◆ Employers offer sign-on bonuses for only 3% of the vacancies.

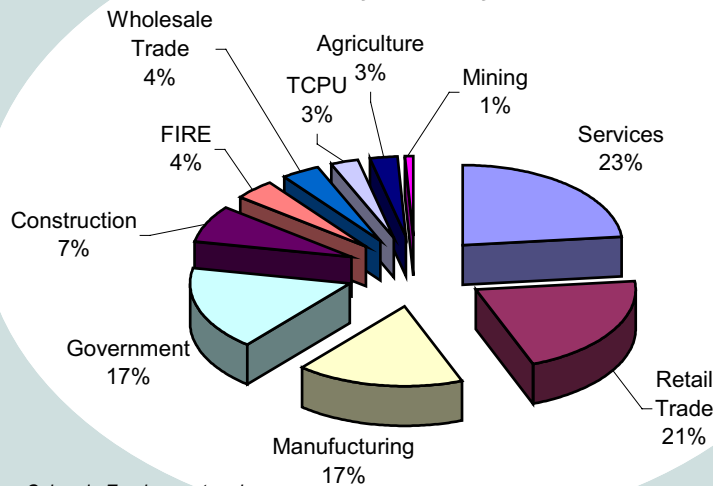


# Larimer/Weld Region

The Larimer/Weld Region (LWR), made up of Larimer and Weld counties, has a population of more than 430,000 residents.<sup>1</sup> The area employed over 220,200 individuals from a labor force pool of about 227,000 people in February 2001, according to Colorado's Labor Market Information, Local Area Unemployment Statistics. Larimer County accounts for 64% of the employment as compared to 36% in Weld County. In the period between February 2000 and February 2001, the labor force in the area increased by 0.5%. Total employment in the area increased by 0.6% over the same period reducing unemployment by 4.5%. While overall the unemployment rate for the region was 3%, unemployment was 2.8% and 3.5% in Larimer and Weld counties respectively (Figure 1).



**Figure 2: 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 and Government are tied at 17%. Other division employment shares range from 1% in Mining to 7% in Construction (Figure 2).

Source: Colorado Employment and Wages (ES-202), 1st Quarter 2000

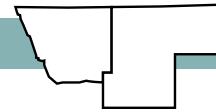
Agriculture includes Forestry and Fishing  
FIRE—Finance, Insurance, and Real Estate  
TCPU—Transportation, Communication and Public Utilities

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 the Service division, followed by the Manufacturing, Retail Trade and Government divisions in Weld County. In Larimer County, employment is concentrated in Services followed by Retail Trade, Government and Manufacturing.

<sup>1</sup>US Census Bureau, Census 2000

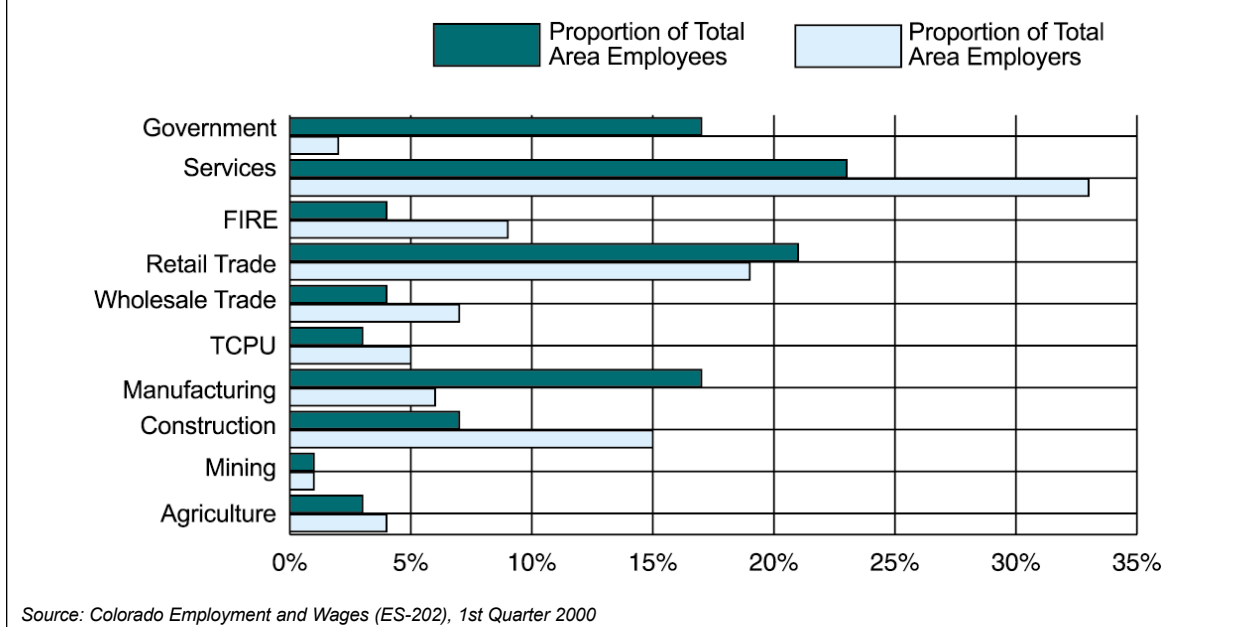
<sup>2</sup>Colorado Labor Market Information, Local Area Unemployment Statistics



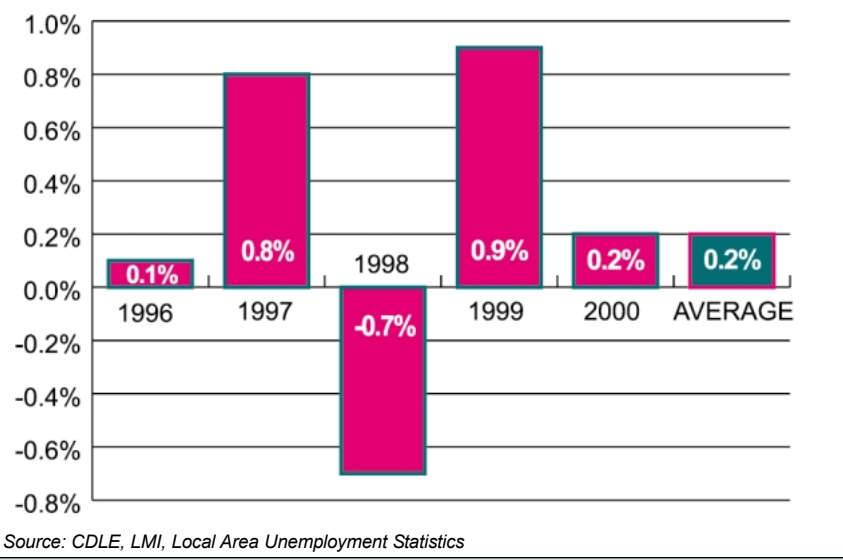
The region is dominated by a large number of firms with less than five employees, which account for 61% of the firms in the area. However, in terms of employment, these firms account for only 11% of total employment in the area. The small to mid-size firms (5-199 employees) account for about 38% of all firms in the region and employ 62% of the total employees. Large firms, on the other hand, employing more than

200 individuals, account for 1% of the regional firms and employ 27% of the total employees. Figure 3 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.

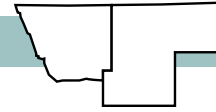
**Figure 3: Larimer/Weld Region Employers and Employees in the 1st Quarter, 2000**



**Figure 4: Annual Growth Difference Between 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 -0.7% (1998) to a high of 0.9% in 1999. Overall, the growth in employment exceeded the growth in labor force by close to a quarter percentage point (Figure 4).



## The JVS Sample

The premier Larimer/Weld Job Vacancy Survey was conducted from February 9th, through February 28th, 2001. The survey instrument used (*Appendix 1*) was developed, tested, and enhanced to increase information available for analysis by the Workforce Research and Analysis office of Colorado Department of Labor and Employment.

For the purpose of this report, all employers with 5 or more employees 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 200 employees are referred to as “large employers.” They account for about 30% of the employment in the sample universe. Firms employing 5 to 199 individuals are considered “small to mid-size employers,” and account for the remaining 70% of sample universe employment.

For the small to mid-size employers, the survey was stratified by major industry. The sample was designed to achieve a solid representation from each industry group. For groups that contained fewer than 100 employers, a 60% response rate was targeted. Sixty responses were required for industry groups containing 100 to 120 firms and a 50% response rate, or 360 completed responses, whichever was less, was targeted for groups containing more than 120 employers. Attempts were made to contact all employers in the “large employer” category (certainty units) in the region.

Over the survey period a total of 1,815 employers, approximately 29% of the LWR employers in the sample universe responded to the survey. Out of these, 37 were large employers and 1,778 were small to mid-size employers.

## The Survey Instrument

Employers were asked if they had job vacancies, or open positions, which they were actively seeking to fill. About one-fifth of the firms contacted reported at least one vacancy. 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.<sup>3</sup> Whenever necessary, employers were contacted again to clarify responses.

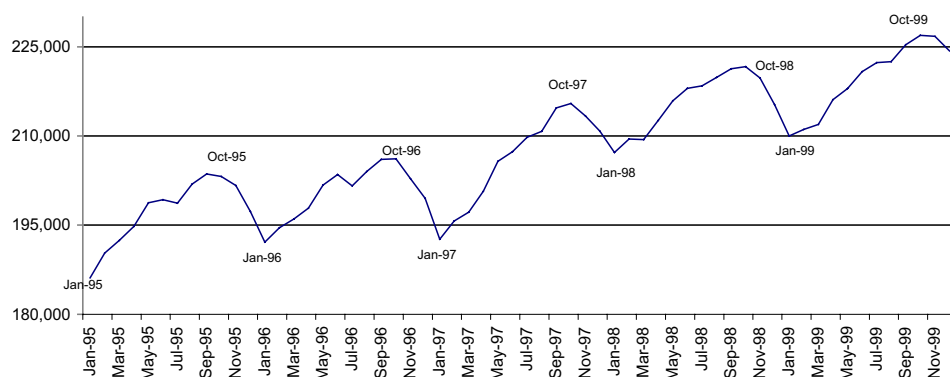
Employers were also asked whether or not a sign-on bonus and/or health insurance was offered for the position. This information was collected in addition to the minimum and maximum wages offered to describe in more detail the compensation offered.

## Timing Considerations

The timing of the survey was developed with the intent of measuring demand for labor at intervals that provide the most useful information.

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

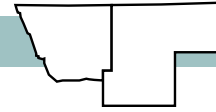
**Figure 5: Historical Employment Trends for Larimer/Weld Region**



Source: Colorado Employment and Wages (ES-202)

February and September to measure demand for labor when employment begins to rise and immediately before reaching its peak (*Figure 5*).

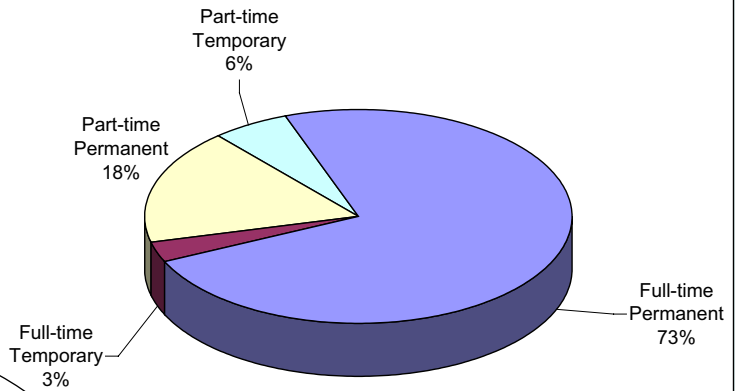
<sup>3</sup>Refer to Methodology section



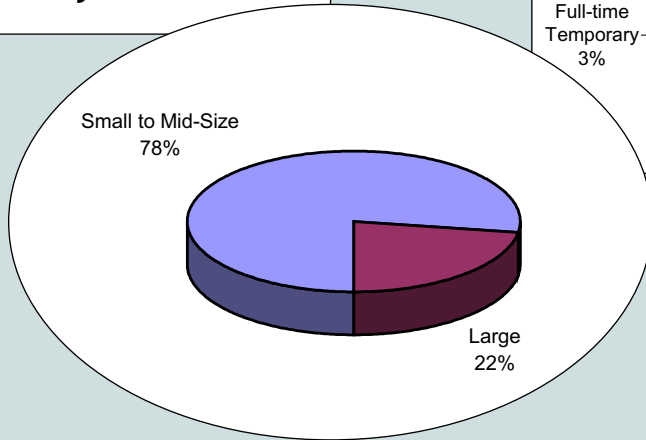
# Labor Market Conditions

During the survey period, an estimated 4,165 vacancies were open for immediate hire in the Larimer/Weld Region. About 73% of the reported vacancies are for full-time permanent employment and 18% are for part-time permanent positions. Vacancy distribution between part-time temporary and full-time temporary employment is 6% and 3% respectively (Figure 6a).

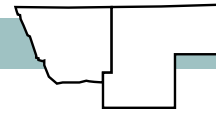
**Figure 6a: Permanent vs. Temporary, Part-Time vs. Full-Time**



**Figure 6b: Vacancies by Firm Size**



Small to mid-size firms, (comprising of approximately 78% of the region's total employment) account for 3,229 (78%) of the total estimated vacancies while large firms account for 936 (22%) of the estimated vacancies (Figure 6b).

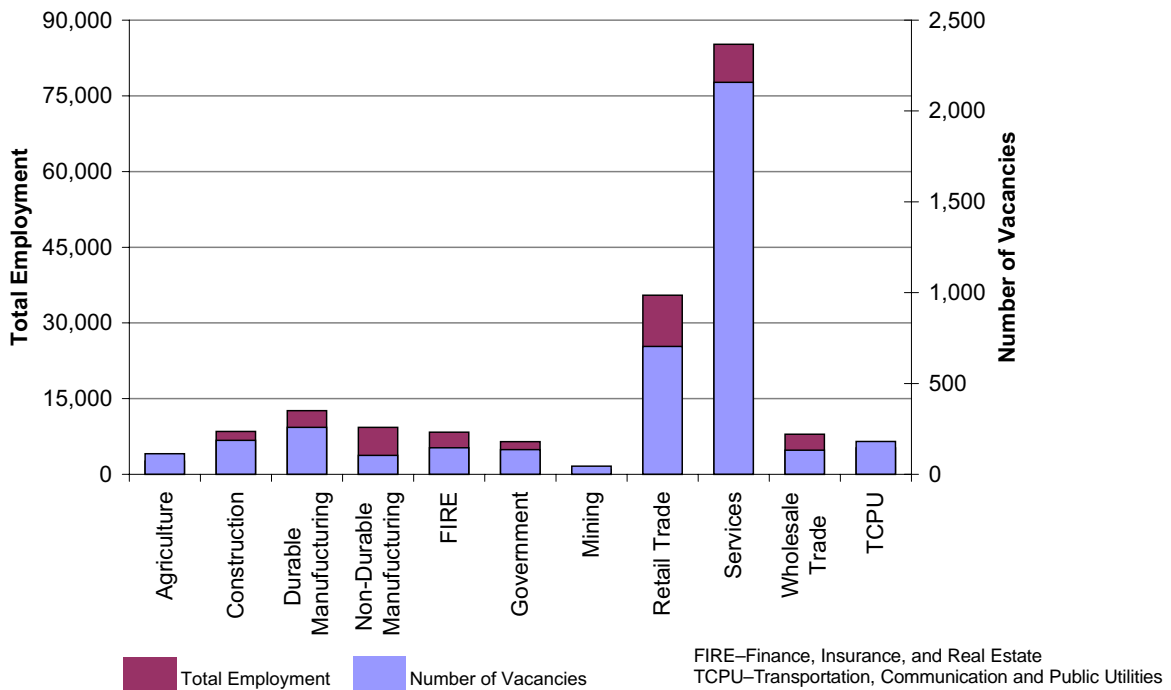


# Vacancies by Industry

The number of estimated vacancies varies greatly from one industry to another. The overall vacancy rate<sup>4</sup> for all industries is 2.3%. Agriculture,

Mining, and Transportation, Communications and Public Utilities (TCPU), have less than 10,000 employees combined.

**Figure 7: Total Employment and Number of Vacancies by Industry**



Total employment for TCPU, Mining, and Agriculture are 5,228, 926 and 2595 respectively.

## Services

The Services division is the largest in the Larimer/Weld Region and the fourth fastest in growth. It had the highest share of job vacancies (52%) during the survey period and its job vacancy rate of 2.7% is the fourth highest in the region.

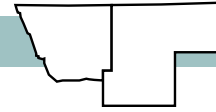
## Retail Trade

This is the second largest division in the LWR and accounts for the second largest proportion of vacancies (16.9%). With its moderate vacancy rate of 1.9% and average growth rate of 3.8%, Retail Trade is one of the rapidly growing industries in the region.

## Manufacturing

Manufacturing, both Durable and Non-Durable Goods, was found to have the third largest proportion of estimated vacancies (8.7%) during the survey period. It is also the third largest employing division in the region. This industry's vacancy rate of 3.2% is higher than the 2.3% average vacancy rate for all industries in the region. Employment growth in this division peaked in the third quarter of 1998, and declined to the second quarter of 1999 before it resumed an upward trend.

<sup>4</sup>See Definitions section



## **Construction**

This industry was found to have the fourth largest proportion of vacancies (4.5%). Its vacancy rate of 2.7% is above the average for the region. Over time, employment growth in this industry has remained strong and has recorded the highest average growth rate (8.7%) in the region.

## **Transportation, Communication and Public Utilities (TCPU)**

TCPU has experienced a rapid increase in employment since the fourth quarter of 1998. The industry has the fifth largest proportion of estimated vacancies (4.3%) and recorded the third highest vacancy rate of 3.5% during the survey period.

## **Finance, Insurance, and Real Estate (FIRE)**

This sixth largest employing division in the Larimer/Weld Region, also ranked sixth in its share of estimated vacancies (3.5%) during the survey period. Survey results show that this division has a vacancy rate of 1.8%.

## **Government**

Government at all levels (federal, state, and local) is the eighth largest employer in the LWR. Employment in this division is seasonal with peaks in the second quarter of each year and lows in the third quarter. While survey results show a vacancy rate of 1.9%, the division's share of estimated vacancies

during the survey is 3.3%. Although Federal employment has declined and state government has experienced slow to moderate growth throughout the 1990s, local government has increased rapidly in an attempt to keep up with population growth and efforts to decrease school classroom size.

## **Wholesale Trade**

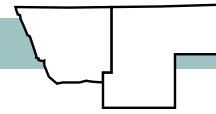
Wholesale Trade ranks eighth in total estimated vacancies (3.2%). The industry has a job vacancy rate of 1.7%. Employment growth in the industry is moderate compared to other industries. The industry ranks the seventh largest employer in the region. Employment in Wholesale Trade is highly seasonal and peaks around the third quarter and the Christmas holiday season.

## **Agriculture**

Employment in Agriculture revolves around Construction and the growing/harvesting seasons. It peaks in the third quarter and sharply declines during the fourth and first quarters of each year. Survey results show a vacancy rate of 4.2%, the second largest in the region. This industry accounts for 2.7% of the estimated vacancies in the Larimer/Weld Region.

## **Mining**

Mining has been in decline since the mid-80s. Although the industry ranks last on total employment size among other industries and in proportion of total estimated vacancies (1.1%), it has the highest job vacancy rate in the region during the survey period (4.9%).



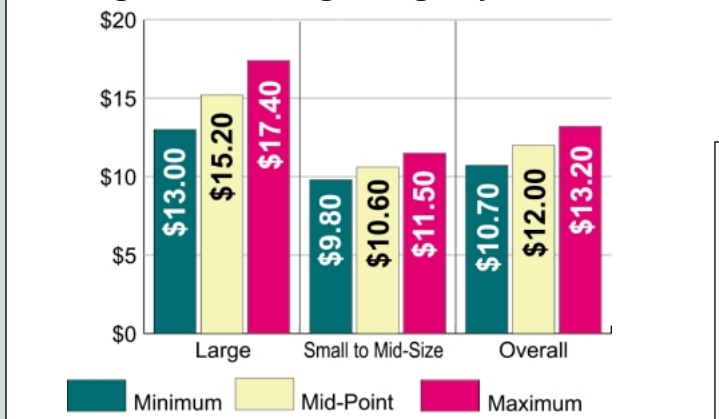
# Vacancies and Wages

Since wages offered may vary with the level of education and experience of the applicant, employers were asked to provide the range of wages offered for the vacancies and the average was calculated based on the mid-point of that range. Based on the information employers reported, analysis reveals the following (Figure 8):

- ◆ The overall average wage offered for all vacancies is \$12.00 per hour.
- ◆ The average minimum wage offered for all vacancies is \$10.70 and the average maximum is \$13.20 per hour.

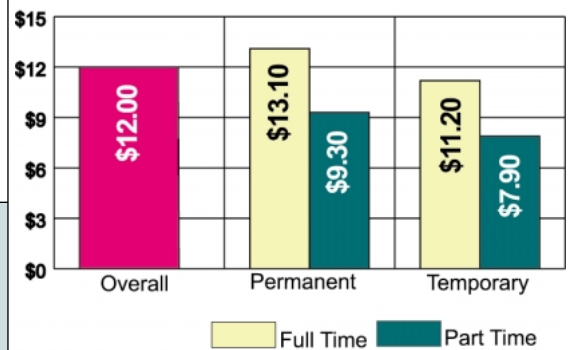
- ◆ Forty-five percent of the vacancies offer a wage rate lower than the overall average.
- ◆ Approximately 70% of the positions for which wages are lower than the overall average are in the Retail Trade and Services industries.
- ◆ Sixty-five percent of the vacancies offering wages above the overall average are in the Services, Retail, and Manufacturing industries.

**Figure 8: Average Wage by Firm Size**



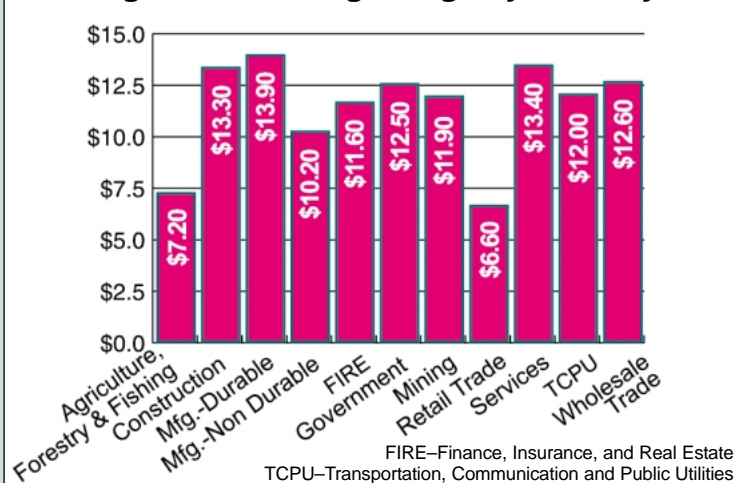
Large companies reported wages that average approximately \$5.00 an hour higher than those offered by small to mid-size firms. The wage differential prevails at both the minimum and maximum wage levels.

**Figure 9: Average Wage by Status**



Permanent positions pay roughly \$2.00 more per hour than temporary positions. Average wages are consistently higher for permanent vs. temporary positions regardless of the positions full or part-time status (Figure 9).

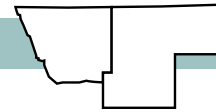
**Figure 10: Average Wage by Industry**



Average wages offered are well over \$10.00 per hour for all industries except for Agriculture and Retail Trade (Figure 10). The highest average wage offered, which is in the Durable Goods Manufacturing industry, exceeded the lowest average wage offered by the Retail Trade industry, by about \$7.30 per hour.

About 2.5% of total estimated vacancies are in Non-Durable Goods Manufacturing while 17% are in Retail Trade. Services, which has the largest share of vacancies (52%), offers an average wage of \$13.60 per hour.

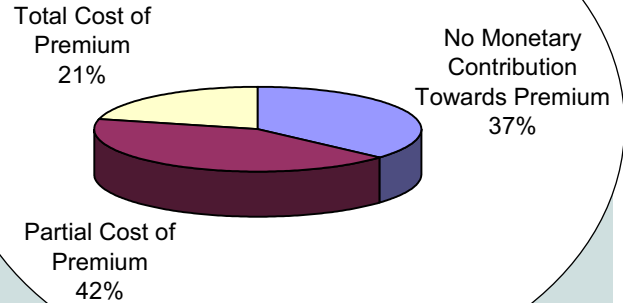




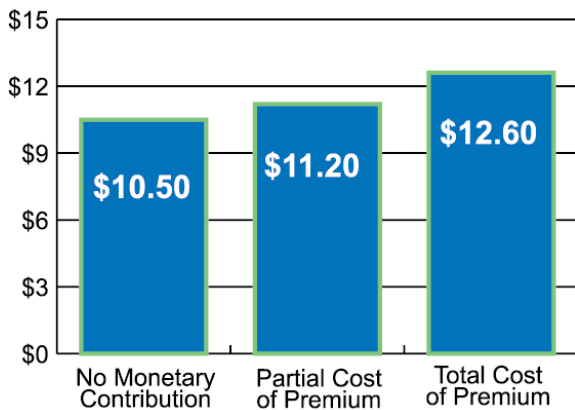
## Medical Insurance and Wages

**Figure 11: Employer's Contribution to Medical Insurance Premium**

Approximately two-thirds of the vacancies reported by employers include some form of medical insurance. Employers offer to pay the entire premium for 21% of all vacancies reported and a portion of the premium for 42% of the vacancies.



**Figure 12: Wage by Contribution to Medical Insurance Premiums**

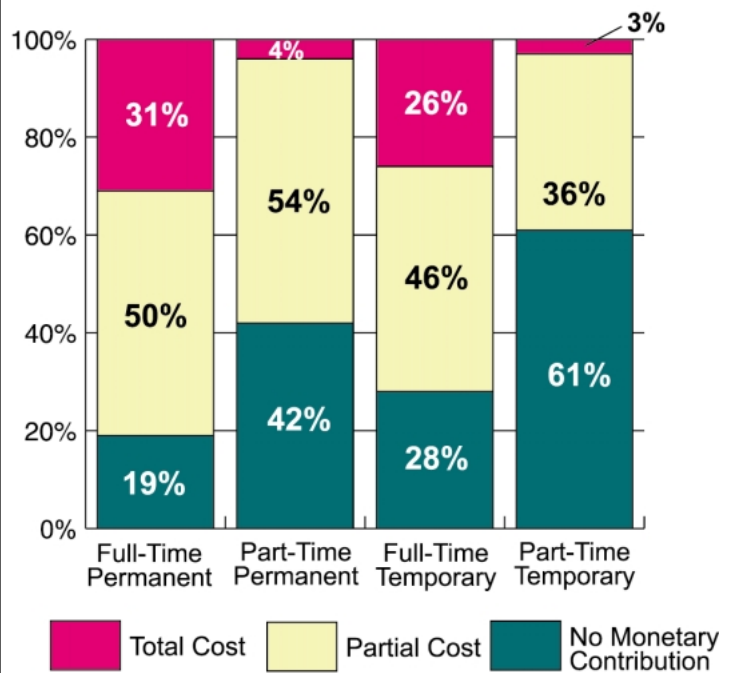


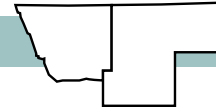
Survey results reveal a positive relationship between wage and medical insurance coverage offered (Figure 12). As higher paying jobs require higher levels of education and experience, employers offer better medical insurance packages to attract qualified candidates. Businesses that pay the total cost of the medical insurance premium offer an average wage of \$12.60 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 \$10.50 per hour.

Survey results also reveal the following (Figure 13):

- ◆ The proportion of vacancies for which employers offer to pay a portion of the medical insurance premium is higher for permanent positions than temporary.
- ◆ The proportion of vacancies for which employers offer to pay the total cost of the medical insurance premium payment is higher for full-time positions than part-time regardless of whether it is permanent or temporary.
- ◆ The proportion of vacancies for which employers offer no monetary contribution towards the premium is higher in temporary than permanent vacancies.

**Figure 13: Medical Insurance by Vacancy Status**





## 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	19%	8%	25%	48%
High School Diploma/GED	30%	10%	42%	18%
Vocational Training/Certification	33%	29%	30%	8%
Two-Year Degree	30%	37%	13%	20%
Bachelor's Degree	17%	65%	11%	7%
Advanced Degree	19%	71%	0%	10%

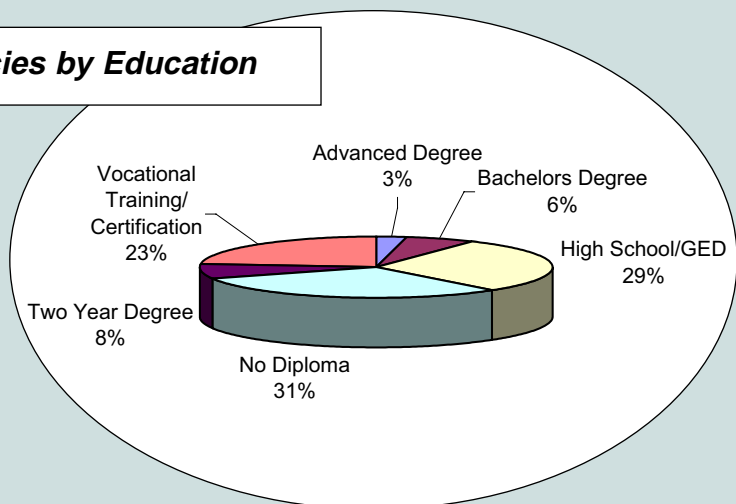
Employers' experience requirements are as follows (*Table 1*):

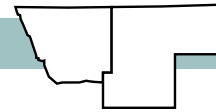
- ◆ The majority of positions requiring no diploma (48%) require experience in the occupation.
- ◆ For positions at the high school diploma/GED level, 60% of employers are seeking to hire people with experience in a related field or in the specific occupation.
- ◆ Most vacancies requiring vocational training or certification do not require specific experience in the occupation.
- ◆ Fifty-seven percent of vacancies requiring a two-year degree also required general work experience or experience in the specific occupation.
- ◆ A majority of positions that require at least a bachelor's degree also require general work experience.

## Education and Wages

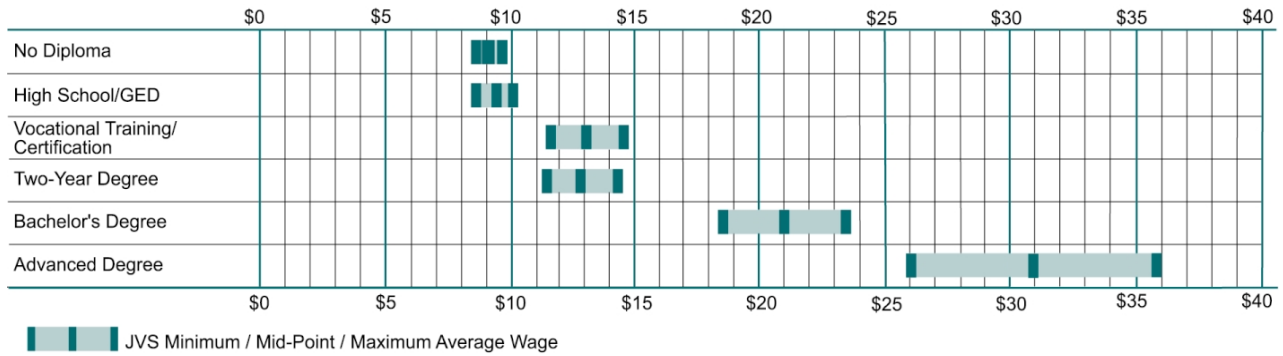
**Figure 14: Vacancies by Education**

Employers were asked what level of education is required of an applicant in order to be considered for a particular vacancy. Results show that about 60% of the positions reported by employers require no post-secondary education. Twenty-three percent require vocational training or certification.





**Figure 15: Range of Average Wages by Education**



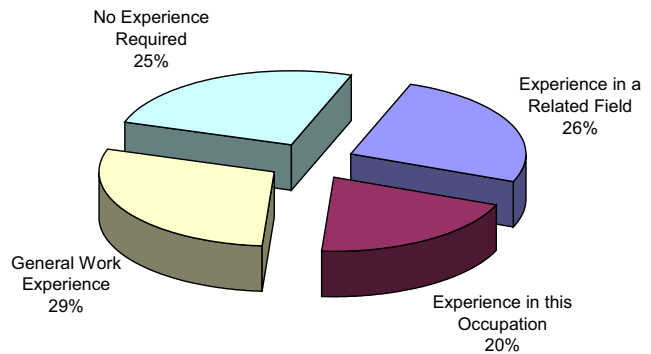
Employers add a substantial premium to wage compensation when requiring higher levels of educational attainment (Figure 15). The highest wage rate difference (\$8.10 per hour) was found

between a two-year and a Bachelor's degree. The requirement of vocational training or certification increases the wage rate by \$3.70 per hour from a high school diploma/GED.

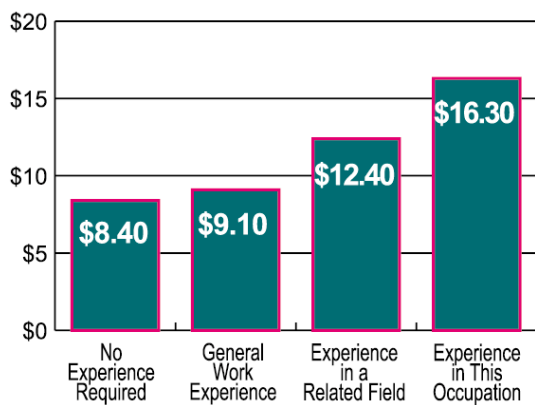
## Experience and Wages

One-fourth of the reported job openings do not require prior work experience compared to 55%, which require general work experience or experience in a related field. Openings requiring experience in the occupation form 20% of all reported vacancies.

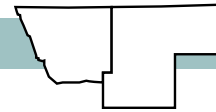
**Figure 16: Vacancies by Experience**



**Figure 17: Average Wage by Experience**



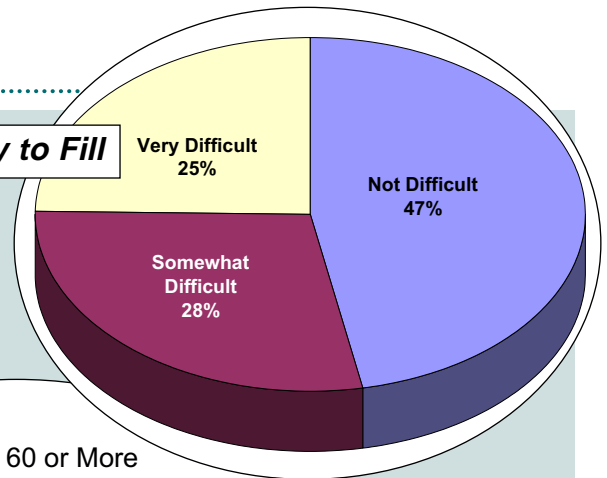
Survey results indicate that employers offer premiums for higher experience levels. These premiums range from less than \$1.00 per hour at the general work experience level to almost \$4.00 at the experience in this occupation level.



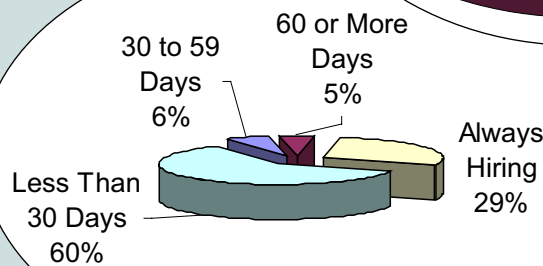
## Difficulty to Fill

To establish the level of difficulty in filling vacancies, employer's perception and data on how long each position had been open at the time of the survey were gathered. Survey results show that employers do perceive difficulties in filling open positions. Fifty-three percent of the vacancies reported are classified as either somewhat difficult or very difficult to fill with the remaining 47% considered not difficult to fill (Figure 18).

**Figure 18: Difficulty to Fill**



Twenty-nine percent of the vacancies, however, are reported as always hiring compared to 60% which are open for a period less than 30 days (Figure 19).



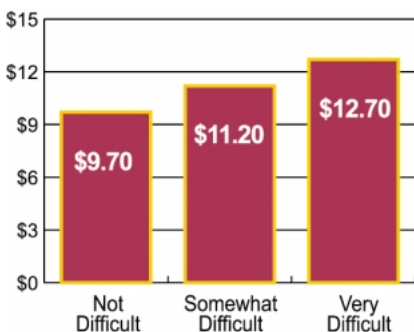
**Figure 19: Duration of Vacancies**

Analysis of wage information reported by employers highlight two observations:

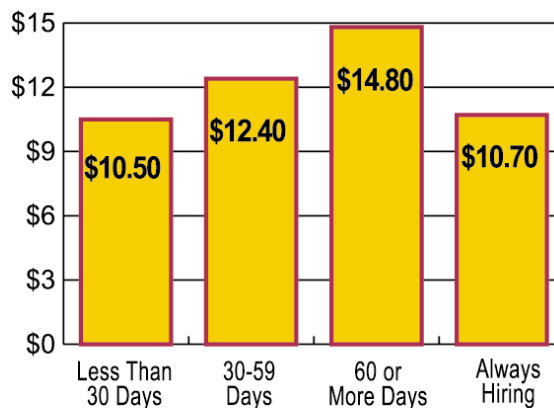
1. Positions for which employers offered higher wages tend to be more difficult, and take longer to fill. Most likely this could be due to the training and skills required to fill these positions.
2. Jobs for which lower wages are offered tend to be filled quickly if the wage offered is around the market average. Positions that pay significantly less than the average are typically more challenging to fill.

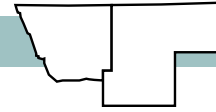
Employers offer wages for positions perceived to be very difficult and somewhat difficult to fill that are approximately 31% and 16% over the average wage offered for positions not difficult to fill, respectively. Vacancies open for continuous hire offer an average wage of \$10.70 per hour (Figure 21).

**Figure 20: Average Wage by Difficulty to Fill**



**Figure 21: Average Wage by Vacancy Duration**





**OTHER FINDINGS:**

- ◆ Seventy-one percent of positions requiring no diploma and 63% of positions requiring a high school diploma/GED were open for less than 30 days. In each category, 25% of these positions were always open for hire.
- ◆ The majority of positions requiring either vocational training/certification or two-year degrees have been open for less than 60 days. Between

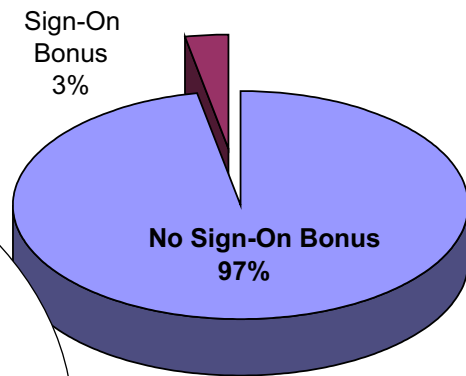
15% and 24% of these positions are always open for hire.

- ◆ Eighty-six percent of positions for which an advanced degree is preferred were open for less than 30 days as compared to about 49% for positions requiring a Bachelor’s degree. None of the positions requiring an advanced degree and about 21% of those requiring a Bachelor’s degree are open for continuous hire.

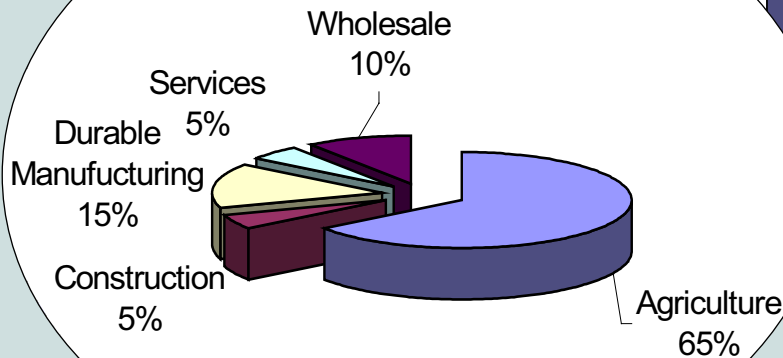
**Sign-On Bonus**

Only small to mid-size firms reported offering a sign-on bonus during the survey period. Of all vacancies reported, 3% offer unspecified amounts for sign-on bonuses (*Figure 22*).

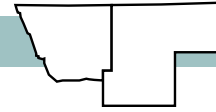
**Figure 22: Sign-On Bonus**



**Figure 23: Sign-On Bonus by Industry**



Slightly more than three-fifths of all vacancies for which a sign-on bonus was offered are in Agriculture. Others are Wholesale Trade (10%) and Manufacturing (15%). Services and Construction each account for 5% of the vacancies (*Figure 23*).

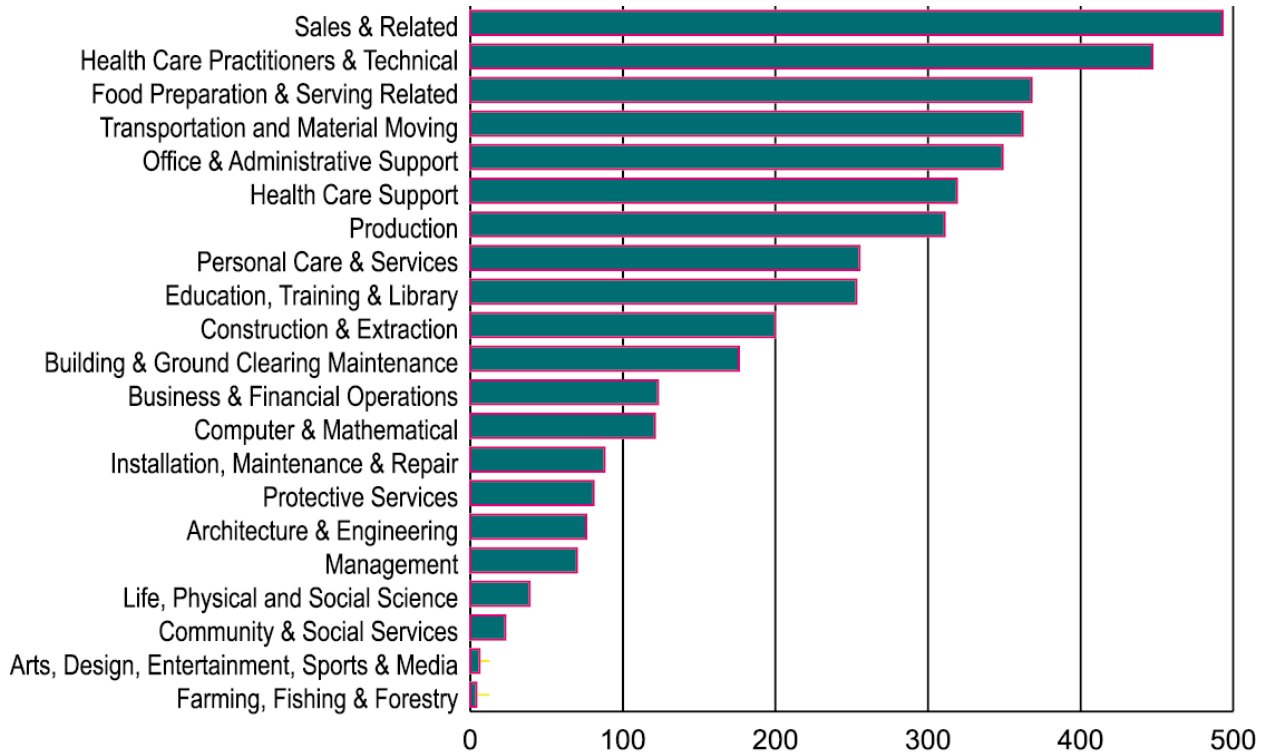


# Occupations

Number of vacancies varies greatly between major occupational groups. Out of the 21 major occupational groups, thirteen groups

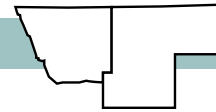
have more than 100 openings. More than three-fifths of the estimated vacancies fall in the top seven major occupational groups in figure 24.

**Figure 24: Vacancies by Major Occupational Groups**

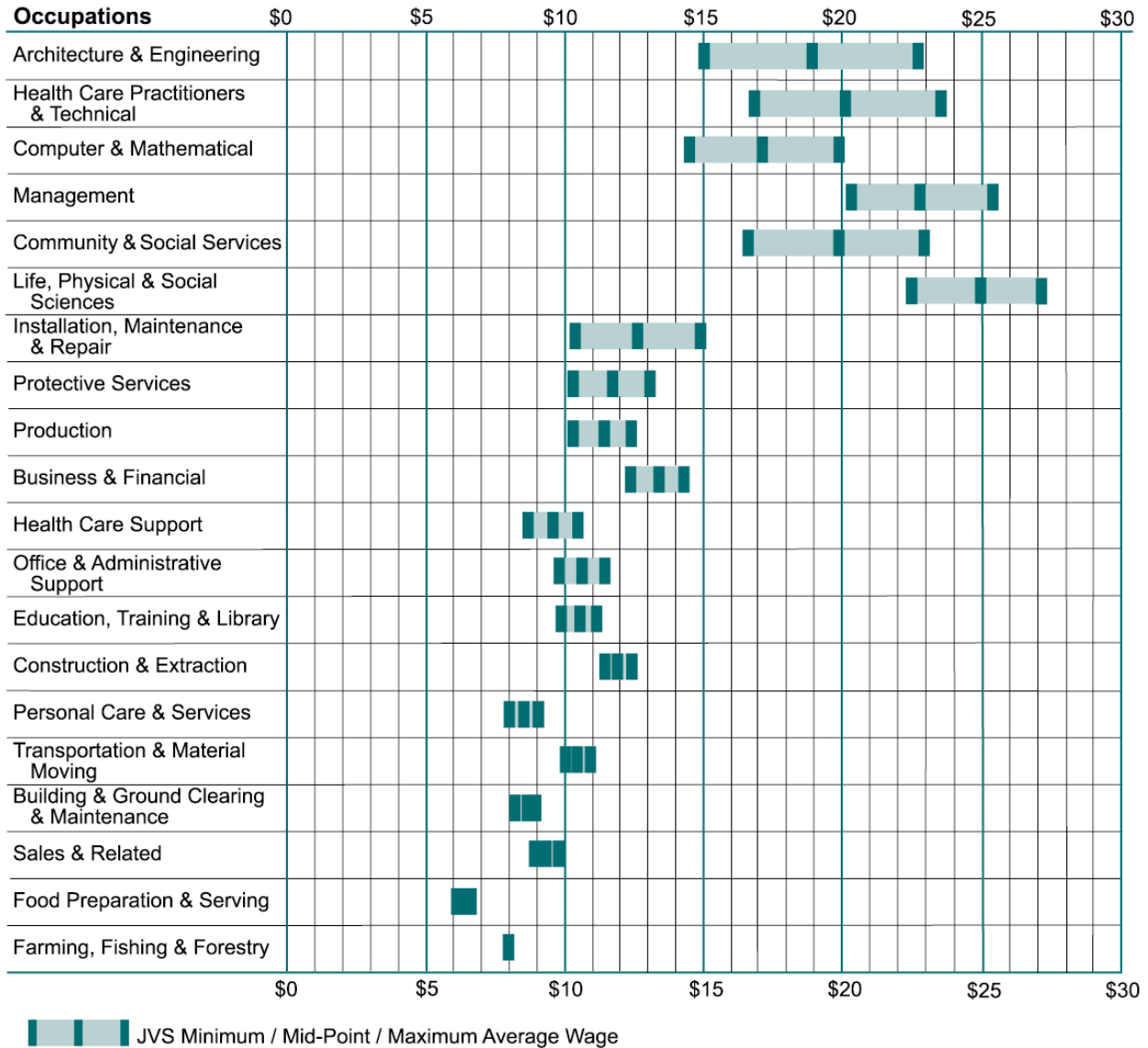


Employers reported 228 different occupations with at least one vacancy. The average number of job openings per occupation is 18. About 24% of all occupations are above the average while the remaining 76% are below the average number of vacancies per occupation.

Occupational groups with high levels of educational requirements such as Architecture & Engineering, Healthcare Practitioners, Technical, Computer and Mathematical, Management, as well as Life, Physical & Social Services, offer the highest wages. Wages for these occupational groups also have a wider range between the minimum and maximum offered (Figure 25).

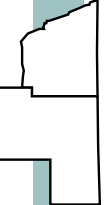


**Figure 25: Range of Average Wages by Major Occupational Group**



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 & Serving Related, Building and Grounds Cleaning and Maintenance, Personal Care & Service, Sales & Related, and Farming, Fishing and Forestry.

Over one-third of the vacancies reported are in the top ten occupations by openings (*Table 2*). Furthermore, 74% of the openings are in the top 25% of the occupations listed.



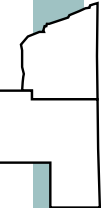
**Table 2: Occupations**

O*Net Code	O*Net Occupation Title	Estimated Number of Vacancies	Average Wage Offered, Spring 2001	Occupational Employment Statistics Wage Data							
				1999-2000			Percentile Distribution				
				Entry	Overall	Experienced	10th	25th	50th	75th	90th
29-1111.00	Registered Nurses	279	\$25.20	\$15.78	\$19.60	\$21.51	\$14.56	\$17.10	\$19.32	\$22.07	\$25.11
41-2011.00	Cashiers	208	\$6.20	\$6.07	\$8.67	\$9.97	\$5.71	\$6.47	\$7.67	\$9.22	\$14.89
31-1012.00	Nursing Aides, Orderlies, and Attendants	161	\$8.60	\$7.16	\$8.58	\$9.28	\$6.78	\$7.37	\$8.34	\$9.81	\$11.11
39-5012.00	Hairdressers, Hairstylists, and Cosmetologists	135	\$10.90	\$6.29	\$8.21	\$9.16	\$5.84	\$6.86	\$8.28	\$9.64	\$10.45
41-2031.00	Retail Salespersons	110	\$7.00	\$5.98	\$9.43	\$11.15	\$5.64	\$6.34	\$7.77	\$10.11	\$15.46
51-9198.01	Production Laborers	98	\$10.00	\$5.75	\$6.17	\$6.38	\$5.33	\$5.61	\$6.07	\$6.53	\$7.54
37-3011.00	Landscaping and Groundskeeping Workers	94	\$6.90	\$7.12	\$9.66	\$10.92	\$6.87	\$7.56	\$8.84	\$10.63	\$14.87
15-1041.00	Computer Support Specialists	89	\$14.30	\$7.36	\$11.17	\$13.08	\$7.02	\$7.58	\$8.66	\$14.90	\$18.03
51-4041.00	Machinists	88	\$13.00	\$10.14	\$15.17	\$17.68	\$9.14	\$11.88	\$15.25	\$18.38	\$20.95
31-9092.00	Medical Assistants	85	\$9.60	\$8.65	\$9.36	\$9.71	\$8.07	\$8.84	\$9.53	\$10.21	\$10.63
13-2011.01	Accountants	83	\$12.30	\$12.48	\$18.17	\$21.01	\$11.39	\$14.25	\$17.01	\$20.86	\$24.99
35-3031.00	Waiters and Waitresses	82	\$5.90	\$5.77	\$6.94	\$7.53	\$5.37	\$5.61	\$6.00	\$6.67	\$8.93
43-9061.00	Office Clerks, General	81	\$8.70	\$6.55	\$8.59	\$9.61	\$6.03	\$7.10	\$8.37	\$9.87	\$10.99
35-2011.00	Cooks, Fast Food	76	\$6.00	\$5.78	\$6.70	\$7.16	\$5.47	\$5.84	\$6.49	\$7.56	\$8.53
25-2022.00	Middle School Teachers, Except Special and Vocational Education	72	\$9.80	*	*	*	*	*	*	*	*
35-2014.00	Cooks, Restaurant	72	\$7.20	\$6.33	\$8.14	\$9.05	\$5.81	\$6.66	\$7.96	\$9.47	\$10.95
25-2021.00	Elementary School Teachers, Except Special Education	72	\$13.60	*	*	*	*	*	*	*	*
53-3033.00	Truck Drivers, Light or Delivery Services	68	\$9.40	\$6.66	\$9.57	\$11.03	\$6.13	\$7.37	\$9.21	\$11.53	\$14.11
53-3032.01	Truck Drivers, Heavy	65	\$12.20	\$9.65	\$13.38	\$15.25	\$9.05	\$10.86	\$13.58	\$15.81	\$17.77
47-2061.00	Construction Laborers	54	\$10.00	\$7.82	\$10.03	\$11.14	\$7.12	\$8.63	\$9.78	\$11.36	\$13.85
37-2011.00	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	52	\$8.30	\$6.21	\$7.88	\$8.72	\$5.71	\$6.57	\$7.58	\$8.60	\$10.26
53-7062.00	Laborers and Freight, Stock, and Material Movers, Hand	50	\$9.80	\$7.03	\$8.81	\$9.71	\$6.78	\$7.37	\$8.36	\$9.98	\$11.80
39-9021.00	Personal and Home Care Aides	49	\$8.30	\$5.80	\$6.97	\$7.55	\$5.49	\$6.01	\$6.72	\$8.06	\$8.95
43-4171.00	Receptionists and Information Clerks	42	\$8.90	\$7.25	\$9.07	\$9.98	\$6.70	\$7.59	\$8.92	\$10.32	\$11.78
33-9092.00	Lifeguards, Ski Patrol, and other Recreational Protective Service Workers	39	\$8.70	*	*	*	*	*	*	*	*
35-9021.00	Dishwashers	37	\$6.20	\$5.75	\$6.56	\$6.97	\$5.44	\$5.87	\$6.60	\$7.54	\$8.14
41-9091.00	Door-To-Door Sales Workers, News and Street Vendors, and Related Workers	35	\$10.00	\$7.52	\$7.52	\$7.52	\$6.93	\$7.19	\$7.63	\$8.06	\$8.33
53-7064.00	Packers and Packagers, Hand	34	\$9.00	\$5.80	\$6.76	\$7.25	\$5.51	\$5.91	\$6.56	\$7.67	\$8.71
53-3032.00	Truck Drivers, Heavy and Tractor-Trailer	33	\$12.00	\$9.65	\$13.38	\$15.25	\$9.05	\$10.86	\$13.58	\$15.81	\$17.77
31-1013.00	Psychiatric Aides	33	\$9.00	\$8.81	\$10.81	\$11.81	\$8.24	\$9.23	\$10.59	\$12.47	\$14.04
25-2031.00	Secondary School Teachers, Except Special and Vocational Education	33	*	*	*	*	*	*	*	*	*
29-2061.00	Licensed Practical and Licensed Vocational Nurses	29	\$14.30	\$11.39	\$13.94	\$15.22	\$10.91	\$11.64	\$13.70	\$15.62	\$17.09
13-2072.00	Loan Officers	28	\$13.30	\$13.99	\$21.43	\$25.15	\$12.99	\$15.03	\$19.17	\$26.79	\$34.41
43-4051.00	Customer Service Representatives	28	\$12.50	\$7.46	\$10.18	\$11.54	\$7.16	\$7.85	\$9.25	\$11.33	\$14.68



**Table 2: Occupations - Page 2**

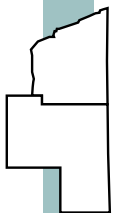
O*Net Code	O*Net Occupation Title	Estimated Number of Vacancies	Average Wage Offered, Spring 2001	Occupational Employment Statistics Wage Data							
				Average Wages			Percentile Distribution				
				1999-2000 Entry	1999-2000 Overall	1999-2000 Experienced	10th	25th	50th	75th	90th
41-3021.00	Insurance Sales Agents	27	\$11.00	\$13.23	\$16.75	\$18.51	\$12.09	\$13.75	\$14.94	\$16.12	\$16.83
41-9041.00	Telemarketers	27	\$8.30	\$7.06	\$7.85	\$8.24	\$6.78	\$7.12	\$7.69	\$8.26	\$9.57
25-2011.00	Preschool Teachers, Except Special Education	26	\$9.00	\$7.29	\$8.36	\$8.89	\$6.59	\$7.21	\$8.01	\$9.03	\$10.40
51-4121.00	Welders, Cutters, Solderers, and Brazers	26	\$16.30	\$9.24	\$13.05	\$14.96	\$8.83	\$10.37	\$11.68	\$14.49	\$18.15
43-2021.00	Telephone Operators	26	\$5.80	\$5.75	\$10.61	\$13.03	\$5.58	\$6.23	\$9.27	\$17.10	\$19.74
39-3091.00	Amusement and Recreation Attendants	26	\$8.00	\$5.75	\$6.48	\$6.85	\$5.35	\$5.64	\$6.13	\$6.61	\$8.11
31-1011.00	Home Health Aides	26	\$6.30	\$7.11	\$8.41	\$9.06	\$6.70	\$7.34	\$8.30	\$9.61	\$10.57
49-9042.00	Maintenance and Repair Workers, General	26	\$9.90	\$7.31	\$11.49	\$13.59	\$6.46	\$8.38	\$10.78	\$13.70	\$17.94
41-9022.00	Real Estate Sales Agents	25		\$9.52	\$19.18	\$24.01	\$9.38	\$10.02	\$12.20	\$22.20	\$47.88
53-7051.00	Industrial Truck and Tractor Operators	24	\$10.90	\$7.97	\$10.72	\$12.10	\$7.28	\$8.77	\$10.05	\$11.68	\$15.03
35-1012.00	First-Line Supervisors/Managers of Food Preparation and Serving Workers	24	\$6.00	\$7.46	\$8.97	\$9.73	\$6.98	\$7.37	\$8.02	\$9.45	\$12.86
25-9041.00	Teacher Assistants	23	\$7.50	*	*	*	*	*	*	*	*
17-2071.00	Electrical Engineers	22		\$20.04	\$27.18	\$30.76	\$18.61	\$21.03	\$28.35	\$32.17	\$34.47
29-2012.00	Medical and Clinical Laboratory Technicians	20	\$16.10	\$10.26	\$16.01	\$18.88	\$8.68	\$12.37	\$16.29	\$19.94	\$23.38
37-2012.00	Maids and Housekeeping Cleaners	20	\$7.00	\$5.86	\$6.91	\$7.44	\$5.55	\$5.99	\$6.73	\$7.86	\$8.72
29-1051.00	Pharmacists	19	\$31.90	\$26.98	\$30.19	\$31.79	\$23.95	\$28.23	\$31.40	\$34.73	\$41.11
35-9031.00	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	19	\$5.80	\$5.78	\$6.55	\$6.94	\$5.43	\$5.76	\$6.39	\$7.40	\$8.29
15-1031.00	Computer Software Engineers, Applications	19	\$38.50	\$19.09	\$26.77	\$30.61	\$18.10	\$20.48	\$24.22	\$29.48	\$39.77
43-3011.00	Bill and Account Collectors	19	\$10.60	\$7.64	\$10.94	\$12.60	\$6.73	\$8.83	\$10.53	\$12.80	\$16.34
43-6014.00	Secretaries, Except Legal, Medical, and Executive	18	\$10.60	\$7.54	\$9.93	\$11.13	\$7.11	\$8.25	\$9.57	\$10.99	\$14.03
47-2152.02	Plumbers	18	\$20.70	\$11.31	\$16.42	\$18.98	\$10.28	\$12.63	\$15.73	\$19.81	\$23.79
43-3071.00	Tellers	17	\$11.50	\$7.37	\$8.72	\$9.40	\$6.60	\$7.41	\$8.47	\$9.78	\$10.91
21-1093.00	Social and Human Service Assistants	16	\$9.20	\$5.88	\$8.34	\$9.57	\$5.67	\$6.44	\$8.63	\$9.92	\$10.70
51-2022.00	Electrical and Electronic Equipment Assemblers	16	\$9.80	\$8.99	\$11.28	\$12.42	\$8.60	\$9.53	\$11.13	\$12.88	\$14.95
53-3032.02	Tractor-Trailer Truck Drivers	15	\$14.30	\$9.65	\$13.38	\$15.25	\$9.05	\$10.86	\$13.58	\$15.81	\$17.77
43-3031.00	Bookkeeping, Accounting, and Auditing Clerks	15	\$11.00	\$8.11	\$11.48	\$13.17	\$7.35	\$9.05	\$11.13	\$13.33	\$15.83
47-5081.00	Helpers-Extraction Workers	15	\$13.00	*	*	*	*	*	*	*	*
43-6011.00	Executive Secretaries and Administrative Assistants	14	\$13.40	\$10.10	\$13.48	\$15.17	\$9.30	\$10.90	\$13.18	\$15.83	\$18.47
35-3021.00	Combined Food Preparation and Serving Workers, Including Fast Food	14	\$5.60	\$5.79	\$6.62	\$7.04	\$5.48	\$5.85	\$6.45	\$7.34	\$8.43
43-3021.02	Billing, Cost, and Rate Clerks	13	\$12.40	\$8.37	\$10.94	\$12.22	\$7.60	\$9.23	\$10.84	\$12.65	\$14.63
53-7061.00	Cleaners of Vehicles and Equipment	13	\$6.00	\$5.84	\$7.29	\$8.02	\$5.47	\$5.93	\$7.18	\$8.23	\$8.99
53-2011.00	Airline Pilots, Copilots, and Flight Engineers	13	\$10.00	*	*	*	*	*	*	*	*
39-9041.00	Residential Advisors	13	\$7.60	\$7.52	\$9.98	\$11.21	\$7.20	\$7.88	\$9.32	\$11.75	\$14.71
29-2021.00	Dental Hygienists	13	\$19.30	\$14.83	\$22.18	\$25.86	\$13.62	\$16.42	\$22.37	\$25.59	\$36.89
25-2043.00	Special Education Teachers, Secondary School	13		*	*	*	*	*	*	*	*
51-4121.02	Welders and Cutters	13	\$13.50	\$9.24	\$13.05	\$14.96	\$8.83	\$10.37	\$11.68	\$14.49	\$18.15
43-5032.00	Dispatchers, Except Police, Fire, and Ambulance	13	\$11.50	\$7.49	\$11.62	\$13.69	\$6.82	\$7.97	\$9.76	\$14.64	\$18.69
11-1011.01	Government Service Executives	13		\$26.15	\$45.11	\$54.59	\$23.28	\$31.62	\$41.54	\$69.02	\$70.01
33-3021.02	Police Identification and Records Officers	12	\$18.80	\$19.73	\$24.51	\$26.89	\$18.32	\$20.84	\$23.75	\$27.76	\$37.62



**Table 2: Occupations - Page 3**

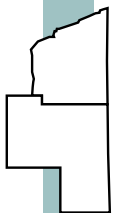
O*Net Code	O*Net Occupation Title	Estimated Number of Vacancies	Average Wage Offered, Spring 2001	Occupational Employment Statistics Wage Data							
				Average Wages			Percentile Distribution				
				1999-2000	10th	25th	50th	75th	90th		
47-2073.00	Operating Engineers and Other Construction Equipment Operators	12	*	\$11.41	\$14.29	\$15.73	\$10.66	\$12.44	\$14.13	\$15.99	\$17.96
41-1011.00	First-Line Supervisors/Managers of Retail Sales Workers	12	\$9.50	\$9.93	\$16.83	\$20.28	\$9.28	\$10.62	\$13.97	\$16.99	\$29.06
51-5011.00	Bindery Workers	12	\$9.80	\$5.75	\$6.88	\$7.45	\$5.47	\$5.95	\$6.75	\$7.92	\$8.95
41-3041.00	Travel Agents	11	\$12.00	\$6.49	\$10.05	\$11.84	\$5.92	\$7.16	\$9.53	\$11.72	\$15.05
49-9098.00	Helpers--Installation, Maintenance, and Repair Workers	11	\$8.50	\$7.01	\$10.26	\$11.89	\$6.40	\$7.38	\$8.96	\$13.17	\$15.74
41-1012.00	First-Line Supervisors/Managers of Non-Retail Sales Workers	11	\$14.50	\$13.38	\$18.78	\$21.48	\$12.22	\$14.07	\$16.36	\$20.41	\$29.39
11-3040.00	Human Resources Managers	11	\$19.10	\$15.05	\$24.76	\$29.61	\$14.02	\$17.24	\$23.25	\$32.80	\$42.42
35-2012.00	Cooks, Institution and Cafeteria	11	\$8.50	\$6.04	\$7.83	\$8.73	\$5.73	\$6.49	\$7.62	\$8.87	\$10.46
29-2055.00	Surgical Technologists	10	\$12.10	\$8.55	\$12.44	\$14.38	\$6.75	\$10.28	\$12.06	\$14.08	\$16.62
29-2034.01	Radiologic Technologists	10	\$18.70	\$11.85	\$16.01	\$18.09	\$10.85	\$13.57	\$15.79	\$18.76	\$21.09
29-1123.00	Physical Therapists	10	\$22.60	\$18.80	\$23.66	\$26.10	\$17.66	\$20.32	\$23.11	\$25.76	\$33.36
39-1021.00	First-Line Supervisors/Managers of Personal Service Workers	10	\$11.80	\$10.08	\$12.87	\$14.27	\$8.39	\$11.11	\$12.23	\$13.36	\$19.10
11-3011.00	Administrative Services Managers	10	\$26.20	\$8.95	\$19.42	\$24.66	\$7.28	\$11.07	\$15.41	\$27.83	\$34.91
35-9011.00	Dining Room and Cafeteria Attendants and Bartender Helpers	10	\$7.30	\$5.77	\$5.99	\$6.09	\$5.35	\$5.56	\$5.91	\$6.43	\$6.91
35-3041.00	Food Servers, Nonrestaurant	10	\$6.47	\$6.47	\$7.65	\$8.23	\$6.05	\$6.92	\$7.60	\$8.28	\$9.67
35-2021.00	Food Preparation Workers	10	\$8.00	\$5.75	\$7.45	\$8.30	\$5.62	\$6.32	\$7.28	\$8.13	\$10.18

\* No wage data available



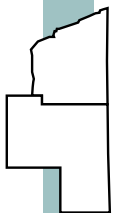
**Table 3: Occupations With Less Than 10 Vacancies**

O*Net Code	O*Net Occupation Title	Occupational Employment Statistics Wage Data								
		Average Wages			Percentile Distribution					
		Entry	Overall	Experienced	10th	25th	50th	75th	90th	
17-3031.00	Surveying and Mapping Technicians	\$11.63	\$15.43	\$17.33	\$10.28	\$13.03	\$15.61	\$18.12	\$19.80	
53-6021.00	Parking Lot Attendants	\$7.84	\$8.96	\$9.52	\$7.48	\$8.40	\$9.23	\$9.81	\$10.15	
33-3051.01	Police Patrol Officers	\$13.55	\$18.53	\$21.02	\$12.72	\$15.02	\$18.29	\$21.81	\$24.63	
33-2011.00	Fire Fighters	\$14.00	\$20.02	\$23.03	\$11.67	\$16.73	\$21.18	\$23.95	\$26.11	
33-1012.00	First-Line Supervisors/Managers of Police and Detectives	\$18.33	\$26.28	\$30.25	\$16.98	\$20.09	\$27.25	\$33.07	\$39.49	
13-1051.00	Cost Estimators	\$14.82	\$21.70	\$25.13	\$13.81	\$16.42	\$21.12	\$25.23	\$32.33	
47-5041.00	Continuous Mining Machine Operators	*	*	*	*	*	*	*	*	
47-2111.00	Electricians	\$12.53	\$18.22	\$21.07	\$10.73	\$14.12	\$17.10	\$20.92	\$26.31	
11-1021.00	General and Operations Managers	\$16.05	\$31.28	\$38.90	\$13.94	\$19.47	\$26.82	\$39.85	\$64.63	
47-2031.01	Construction Carpenters	\$9.64	\$14.29	\$16.62	\$8.30	\$11.54	\$14.44	\$16.67	\$20.05	
39-6021.00	Tour Guides and Escorts	*	*	*	*	*	*	*	*	
29-2034.02	Radiologic Technicians	\$11.85	\$16.01	\$18.09	\$10.85	\$13.57	\$15.79	\$18.76	\$21.09	
29-2011.00	Medical and Clinical Laboratory Technologists	\$14.10	\$19.01	\$21.46	\$11.82	\$16.65	\$19.01	\$21.28	\$25.57	
21-1014.00	Mental Health Counselors	\$15.03	\$17.91	\$19.36	\$14.04	\$14.99	\$16.56	\$20.78	\$24.58	
19-1042.00	Medical Scientists, Except Epidemiologists	\$19.26	\$29.40	\$34.47	\$18.35	\$20.37	\$30.87	\$36.81	\$40.97	
49-3031.00	Bus and Truck Mechanics and Diesel Engine Specialists	\$11.23	\$15.35	\$17.41	\$10.95	\$12.58	\$15.28	\$18.03	\$20.28	
49-3023.00	Automotive Service Technicians and Mechanics	\$7.87	\$14.46	\$17.75	\$6.65	\$9.56	\$12.80	\$18.74	\$23.94	
49-3021.00	Automotive Body and Related Repairers	\$12.38	\$16.41	\$18.42	\$11.04	\$14.33	\$16.61	\$19.22	\$20.82	
47-4011.00	Construction and Building Inspectors	\$16.67	\$20.38	\$22.23	\$15.25	\$17.67	\$19.97	\$23.07	\$25.54	
47-2031.03	Carpenter Assemblers and Repairers	\$9.64	\$14.29	\$16.62	\$8.30	\$11.54	\$14.44	\$16.67	\$20.05	
47-1011.00	First-Line Supervisors/Managers of Construction Trades and Extraction Workers	\$16.13	\$21.24	\$23.79	\$14.66	\$17.28	\$19.99	\$24.71	\$30.44	
43-9011.00	Computer Operators	\$9.28	\$13.12	\$15.04	\$8.81	\$10.28	\$12.98	\$15.49	\$17.05	
43-4081.00	Hotel, Motel, and Resort Desk Clerks	\$5.96	\$7.04	\$7.58	\$5.60	\$6.12	\$6.95	\$8.04	\$8.73	
43-4071.00	File Clerks	\$6.05	\$7.88	\$8.80	\$5.71	\$6.41	\$7.51	\$8.79	\$10.75	
43-2011.00	Switchboard Operators, Including Answering Service	\$7.18	\$9.07	\$10.02	\$6.77	\$7.65	\$9.09	\$10.24	\$12.15	
39-9032.00	Recreation Workers	\$6.43	\$9.60	\$11.18	\$5.93	\$6.95	\$8.06	\$13.74	\$15.70	
37-1012.00	First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	\$13.11	\$19.53	\$22.74	\$11.32	\$14.66	\$17.73	\$23.06	\$31.42	
31-9091.00	Dental Assistants	\$8.07	\$10.32	\$11.45	\$7.23	\$8.87	\$10.12	\$12.15	\$13.39	
29-2071.00	Medical Records and Health Information Technicians	\$8.19	\$10.30	\$11.36	\$7.46	\$8.76	\$9.72	\$10.68	\$15.13	
25-2041.00	Special Education Teachers, Preschool, Kindergarten, and Elementary School	*	*	*	*	*	*	*	*	
19-3031.03	Counseling Psychologists	\$14.87	\$19.93	\$22.45	\$14.13	\$15.47	\$18.71	\$23.89	\$26.87	
19-2043.00	Hydrologists	\$19.83	\$25.43	\$28.23	\$17.35	\$21.91	\$24.98	\$29.39	\$34.32	
17-3027.00	Mechanical Engineering Technicians	\$14.89	\$23.34	\$27.56	\$13.24	\$16.55	\$24.63	\$29.66	\$32.56	
11-9032.00	Education Administrators, Elementary and Secondary School	*	*	*	*	*	*	*	*	
19-2031.00	Chemists	\$15.47	\$22.88	\$26.58	\$12.96	\$17.80	\$21.67	\$29.01	\$37.83	
53-7032.01	Excavating and Loading Machine Operators	\$11.66	\$14.18	\$15.44	\$11.20	\$12.33	\$13.71	\$15.82	\$18.26	
49-9021.00	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	\$11.95	\$17.11	\$19.68	\$10.84	\$13.64	\$16.52	\$21.26	\$24.15	



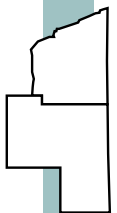
**Table 3: Occupations With Less Than 10 Vacancies - Page 2**

		Occupational Employment Statistics Wage Data 1999-2000							
O*Net Code	O*Net Occupation Title	Average Wages			Percentile Distribution				
		Entry	Overall	Experienced	10th	25th	50th	75th	90th
47-2181.00	Roofers	\$7.58	\$11.27	\$13.11	\$7.30	\$8.26	\$10.37	\$14.05	\$17.27
47-2073.01	Grader, Bulldozer, and Scraper Operators	\$11.41	\$14.29	\$15.73	\$10.66	\$12.44	\$14.13	\$15.99	\$17.96
47-2031.00	Carpenters	\$9.64	\$14.29	\$16.62	\$8.30	\$11.54	\$14.44	\$16.67	\$20.05
51-2092.00	Team Assemblers	\$6.76	\$8.87	\$9.93	\$6.27	\$7.18	\$8.19	\$10.12	\$13.17
47-2221.00	Structural Iron and Steel Workers	\$13.16	\$17.47	\$19.62	\$11.64	\$15.42	\$18.09	\$19.99	\$21.40
17-2072.00	Electronics Engineers, Except Computer	\$23.95	\$31.16	\$34.76	\$21.24	\$26.93	\$30.96	\$35.35	\$42.06
53-2021.00	Air Traffic Controllers	*	*	*	*	*	*	*	*
11-2031.00	Public Relations Managers	\$11.38	\$25.66	\$32.79	\$7.97	\$14.55	\$26.84	\$33.56	\$41.09
43-1011.02	First-Line Supervisors, Administrative Support	\$10.36	\$16.32	\$19.31	\$9.44	\$11.90	\$15.45	\$19.36	\$24.58
53-7021.00	Crane and Tower Operators	\$11.45	\$16.20	\$18.57	\$11.01	\$11.89	\$17.21	\$19.56	\$20.97
51-9071.04	Bench Workers, Jewelry	\$9.39	\$11.37	\$12.37	\$9.12	\$9.68	\$11.69	\$12.92	\$13.64
51-3011.01	Bakers, Bread and Pastry	\$6.79	\$9.16	\$10.35	\$6.06	\$7.20	\$8.45	\$11.59	\$13.12
47-2121.00	Glaziers	\$7.59	\$10.76	\$12.35	\$6.09	\$8.97	\$10.46	\$13.42	\$15.57
43-4151.00	Order Clerks	\$7.92	\$13.99	\$17.03	\$7.32	\$8.68	\$14.31	\$18.71	\$21.18
35-2015.00	Cooks, Short Order	\$5.84	\$7.23	\$7.93	\$5.68	\$6.27	\$7.23	\$8.27	\$9.44
25-1194.00	Vocational Education Teachers Postsecondary	\$9.92	\$16.77	\$20.19	\$8.32	\$11.64	\$15.79	\$20.28	\$27.32
17-3024.00	Electro-Mechanical Technicians	\$14.29	\$18.78	\$21.03	\$10.82	\$17.44	\$19.46	\$21.47	\$24.92
53-3021.00	Bus Drivers, Transit and Intercity	\$7.87	\$11.06	\$12.65	\$6.83	\$9.22	\$11.72	\$13.13	\$14.51
51-8031.00	Water and Liquid Waste Treatment Plant and System Operators	\$13.88	\$18.01	\$20.07	\$13.01	\$15.48	\$17.85	\$19.83	\$22.94
43-5031.00	Police, Fire, and Ambulance Dispatchers	\$11.23	\$15.36	\$17.43	\$10.04	\$12.68	\$15.39	\$18.19	\$20.53
43-4031.03	License Clerks	\$8.52	\$12.95	\$15.17	\$6.69	\$10.40	\$13.03	\$15.50	\$17.28
33-3051.00	Police and Sheriff's Patrol Officers	\$13.55	\$18.53	\$21.02	\$12.72	\$15.02	\$18.29	\$21.81	\$24.63
17-3011.00	Architectural and Civil Drafters	\$12.00	\$14.29	\$15.44	\$11.27	\$12.05	\$13.35	\$15.83	\$18.97
17-2111.02	Fire-Prevention and Protection Engineers	\$18.57	\$27.92	\$32.59	\$17.86	\$21.50	\$25.52	\$36.04	\$43.47
51-5023.09	Printing Press Machine Operators and Tenders	\$8.48	\$12.17	\$14.02	\$7.77	\$9.17	\$10.74	\$14.33	\$19.42
51-4031.03	Press and Press Brake Machine Setters and Set-Up Operators, Metal and Plastic	\$7.45	\$9.48	\$10.50	\$7.06	\$7.60	\$8.49	\$11.40	\$13.21
49-9021.01	Heating and Air Conditioning Mechanics	\$11.95	\$17.11	\$19.68	\$10.84	\$13.64	\$16.52	\$21.26	\$24.15
47-3015.00	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	\$8.94	\$10.99	\$12.02	\$8.57	\$9.47	\$10.78	\$12.37	\$13.74
47-3013.00	Helpers--Electricians	\$9.31	\$13.26	\$15.24	\$8.53	\$10.43	\$12.61	\$16.48	\$19.50
47-2152.03	Pipelaying Fitters	\$11.31	\$16.42	\$18.98	\$10.28	\$12.63	\$15.73	\$19.81	\$23.79
47-2131.00	Insulation Workers, Floor, Ceiling and Walls	*	*	*	*	*	*	*	*
11-9021.00	Construction Managers	\$20.99	\$28.92	\$32.89	\$19.04	\$22.51	\$27.04	\$32.95	\$40.56
37-1011.00	First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	\$7.57	\$10.27	\$11.62	\$6.88	\$8.46	\$9.97	\$12.19	\$14.42
19-1011.00	Animal Scientists	*	*	*	*	*	*	*	*
51-5023.00	Printing Machine Operators	\$8.48	\$12.17	\$14.02	\$7.77	\$9.17	\$10.74	\$14.33	\$19.42
47-5071.00	Roustabouts, Oil and Gas	\$9.70	\$10.47	\$10.86	\$9.25	\$9.67	\$10.38	\$11.22	\$11.80
51-6011.00	Laundry and Dry-Cleaning Workers	\$6.45	\$7.40	\$7.87	\$5.95	\$6.87	\$7.48	\$8.09	\$8.46
43-9041.01	Insurance Claims Clerks	\$12.30	\$19.48	\$23.07	\$9.43	\$14.51	\$16.89	\$25.94	\$30.92
43-4161.00	Human Resources Assistants, Except Payroll and Timekeeping	\$9.95	\$13.37	\$15.08	\$9.37	\$10.84	\$13.00	\$15.69	\$18.46



**Table 3: Occupations With Less Than 10 Vacancies - Page 3**

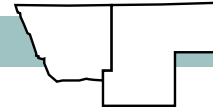
O*Net Code	O*Net Occupation Title	Occupational Employment Statistics Wage Data 1999-2000							
		Average Wages			Percentile Distribution				
		Entry	Overall	Experienced	10th	25th	50th	75th	90th
43-4021.00	Correspondence Clerks	\$15.16	\$15.16	\$15.16	\$13.85	\$14.38	\$15.25	\$16.13	\$16.65
31-9094.00	Medical Transcriptionists	\$8.19	\$11.37	\$12.96	\$7.37	\$8.29	\$11.91	\$13.25	\$15.28
31-9093.00	Medical Equipment Preparers	\$9.51	\$9.78	\$9.92	\$8.75	\$9.13	\$9.76	\$10.39	\$10.98
29-9091.00	Athletic Trainers	*	*	*	*	*	*	*	*
29-2051.00	Dietetic Technicians	\$9.25	\$10.90	\$11.72	\$8.30	\$10.19	\$11.31	\$11.95	\$12.82
29-2041.00	Emergency Medical Technicians and Paramedics	\$9.10	\$13.19	\$15.23	\$8.80	\$10.10	\$11.92	\$14.64	\$20.77
29-1126.00	Respiratory Therapists	\$14.61	\$17.73	\$19.29	\$14.03	\$15.80	\$17.89	\$19.61	\$21.15
29-1062.00	Family and General Practitioners	\$40.95	\$53.73	\$60.12	\$22.18	\$56.28	\$60.88	\$65.49	\$68.25
25-3011.00	Adult Literacy, Remedial Education, and GED Teachers and Instructors	\$8.28	\$9.73	\$10.45	\$7.60	\$8.66	\$9.53	\$10.41	\$12.67
19-4031.00	Chemical Technicians	\$8.85	\$10.64	\$11.53	\$8.33	\$8.98	\$9.85	\$10.71	\$15.53
19-3031.02	Clinical Psychologists	\$14.87	\$19.93	\$22.45	\$14.13	\$15.47	\$18.71	\$23.89	\$26.87
15-1081.00	Network Systems and Data Communications Analysts	\$14.92	\$23.52	\$27.81	\$10.01	\$19.39	\$24.35	\$29.22	\$33.22
15-1071.01	Computer Security Specialists	\$17.06	\$24.12	\$27.65	\$15.46	\$17.85	\$20.39	\$29.60	\$40.14
15-1061.00	Database Administrators	\$16.72	\$25.79	\$30.32	\$14.54	\$19.54	\$26.84	\$35.72	\$41.54
15-1032.00	Computer Software Engineers, Systems Software	\$25.05	\$30.18	\$32.74	\$20.79	\$28.14	\$30.82	\$33.49	\$38.09
13-2011.00	Accountants and Auditors	\$12.48	\$18.17	\$21.01	\$11.39	\$14.25	\$17.01	\$20.86	\$24.99
11-1011.00	Chief Executives	\$26.15	\$45.11	\$54.59	\$23.28	\$31.62	\$41.54	\$69.02	\$70.01
51-4122.00	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	\$8.87	\$10.59	\$11.45	\$8.45	\$9.46	\$10.83	\$11.97	\$12.92
51-4121.01	Welders, Production	\$9.24	\$13.05	\$14.96	\$8.83	\$10.37	\$11.68	\$14.49	\$18.15
51-2041.00	Structural Metal Fabricators and Fitters	\$5.75	\$11.35	\$14.15	\$5.59	\$6.24	\$8.80	\$17.72	\$20.22
49-3011.00	Aircraft Mechanics and Service Technicians	*	*	*	*	*	*	*	*
27-1027.01	Set Designers	\$19.26	\$19.26	\$19.26	\$17.45	\$18.13	\$19.25	\$20.37	\$21.05
27-1013.00	Fine Artists, Including Painters, Sculptors, and Illustrators	\$19.26	\$19.26	\$19.26	\$17.45	\$18.13	\$19.25	\$20.37	\$21.05
17-3023.01	Electronics Engineering Technicians	\$13.58	\$18.17	\$20.46	\$12.56	\$14.52	\$16.70	\$21.56	\$26.17
11-2021.00	Marketing Managers	\$16.36	\$30.95	\$38.24	\$14.70	\$18.01	\$31.44	\$41.19	\$50.34
51-9061.05	Production Inspectors, Testers, Graders, Sorters, Samplers, Weighers	\$8.04	\$12.26	\$14.37	\$7.17	\$9.19	\$11.60	\$14.54	\$18.41
51-4191.00	Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	\$10.15	\$12.09	\$13.05	\$8.30	\$11.80	\$12.69	\$13.42	\$13.86
51-2023.00	Electromechanical Equipment Assemblers	\$9.01	\$12.75	\$14.62	\$8.61	\$9.62	\$14.02	\$15.60	\$16.54
49-2094.00	Electrical and Electronics Repairers, Commercial and Industrial Equipment	\$12.47	\$19.63	\$23.21	\$10.57	\$15.20	\$18.72	\$21.43	\$31.58
41-9031.00	Sales Engineers	\$21.46	\$28.95	\$32.70	\$18.57	\$24.68	\$29.68	\$32.85	\$38.07
17-2141.00	Mechanical Engineers	\$17.80	\$24.16	\$27.34	\$17.01	\$18.37	\$21.71	\$29.27	\$36.06
17-2112.00	Industrial Engineers	\$16.88	\$24.77	\$28.71	\$15.31	\$17.97	\$23.04	\$30.42	\$34.02
11-3061.00	Purchasing Managers	\$12.60	\$22.30	\$27.14	\$11.27	\$14.28	\$20.72	\$28.90	\$39.83
43-4141.00	New Accounts Clerks	\$9.16	\$11.02	\$11.95	\$8.86	\$10.03	\$11.21	\$12.05	\$13.24
41-3031.02	Sales Agents, Financial Services	\$6.78	\$24.85	\$33.89	\$5.79	\$6.76	\$15.62	\$34.46	\$70.00
17-1012.00	Landscape Architects	\$13.33	\$20.35	\$23.85	\$12.42	\$15.53	\$19.18	\$24.23	\$30.08
11-3041.00	Compensation and Benefit Managers	*	*	*	*	*	*	*	*
43-5052.00	Postal Service Mail Carriers	\$13.23	\$17.18	\$19.16	\$12.10	\$14.42	\$17.91	\$19.80	\$20.94
51-4122.02	Welding Machine Operators and Tenders	\$8.87	\$10.59	\$11.45	\$8.45	\$9.46	\$10.83	\$11.97	\$12.92



**Table 3: Occupations With Less Than 10 Vacancies - Page 4**

O*Net Code	O*Net Occupation Title	Occupational Employment Statistics Wage Data 1999-2000							
		Average Wages			Percentile Distribution				
		Entry	Overall	Experienced	10th	25th	50th	75th	90th
49-2022.04	Telecommunications Facility Examiners	\$18.04	\$22.05	\$24.05	\$15.18	\$21.48	\$23.41	\$25.33	\$26.48
45-2091.00	Agricultural Equipment Operators	*	*	*	*	*	*	*	*
	First-Line Supervisors and Manager/Supervisors								
45-1011.04	- Horticultural Workers	\$12.00	\$13.57	\$14.36	\$11.07	\$11.54	\$12.33	\$13.12	\$22.86
41-2022.00	Parts Salespersons	\$7.80	\$12.07	\$14.20	\$7.14	\$8.48	\$10.57	\$14.85	\$18.91
19-1021.01	Biochemists	\$30.52	\$30.52	\$30.52	\$27.98	\$29.06	\$30.88	\$32.69	\$33.78
11-2022.00	Sales Managers	\$14.69	\$32.98	\$42.12	\$14.25	\$16.14	\$31.72	\$43.30	\$64.73
51-9198.02	Production Helpers	\$5.75	\$6.17	\$6.38	\$5.33	\$5.61	\$6.07	\$6.53	\$7.54
	Punching Machine Setters and Set-Up Operators,								
51-4031.02	Metal and Plastic	\$7.45	\$9.48	\$10.50	\$7.06	\$7.60	\$8.49	\$11.40	\$13.21
47-2211.00	Sheet Metal Workers	\$10.16	\$16.08	\$19.04	\$9.38	\$11.33	\$15.32	\$21.03	\$24.74
47-2081.02	Drywall Installers	\$9.58	\$14.31	\$16.67	\$8.51	\$10.86	\$14.44	\$18.03	\$20.11
47-2081.00	Drywall and Ceiling Tile Installers	\$9.58	\$14.31	\$16.67	\$8.51	\$10.86	\$14.44	\$18.03	\$20.11
47-2071.00	Paving, Surfacing, and Tamping Equipment Operators	\$11.71	\$14.77	\$16.30	\$11.17	\$12.50	\$14.69	\$16.81	\$18.88
47-2041.00	Carpet Installers	\$8.94	\$14.11	\$16.69	\$8.03	\$10.35	\$14.47	\$18.52	\$20.31
43-5071.00	Shipping, Receiving, and Traffic Clerks	\$7.10	\$9.56	\$10.79	\$6.69	\$7.68	\$9.27	\$10.87	\$13.37
31-9096.00	Veterinary Assistants and Laboratory Animal Caretakers	\$7.52	\$7.52	\$7.52	\$6.93	\$7.19	\$7.63	\$8.06	\$8.33
29-2056.00	Veterinary Technologists and Technicians	\$11.47	\$13.29	\$14.20	\$10.93	\$11.81	\$13.29	\$15.12	\$16.25
29-1131.00	Veterinarians	\$16.64	\$27.46	\$32.88	\$15.09	\$17.78	\$22.40	\$38.11	\$48.89

\* No wage data available



## 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 forms and gradations. Decisions were made to address the core of what was required in order to stay within the defined limits. Page one (Part A) of 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 page two (Part B) 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.

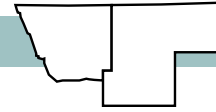
**E**–“Is medical insurance offered?” In addition, the revised survey prompted for the portion (if any) that the firm contributed. To better understand the relationship between types of positions, pay, vacancies, and the existence of medical insurance, it was important to note to what degree the firm 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 required. 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. Only firms with five or more employees were surveyed. The list of firms used for this survey, with their contact information, staff size and industry classification was obtained from the American Labor Market Information System (ALMIS) database.

The survey was conducted by telephone. In some cases copies of the survey form were faxed to employers upon request. A sample of the survey form can be found in the Appendix section of this report.

### Stratifications

Employers with at least 200 employees are referred to as “large employers.” They account for approximately 30% of the employment in the sample universe. Firms employing between 5 and 199 individuals are considered “small to mid-size employers,” accounting for the remaining 70% of the sample universe. Attempts were made to contact all large employers. The survey sample was then stratified into the following major industry classifications as defined by the 1987 *Standard Industrial Classification Manual* for small to mid-size employers.

- ◆ Construction
- ◆ Durable Goods Manufacturing
- ◆ Non-Durable Goods Manufacturing
- ◆ Transportation, Communication, and Public Utilities (TCPU)
- ◆ Wholesale Trade
- ◆ Retail Trade
- ◆ Finance, Insurance, and Real Estate (FIRE)
- ◆ Services
- ◆ Government

The lists of small to mid-sized employers for were randomized and a sample of sufficient size was drawn to achieve a proportional representation from each major industry.

<sup>5</sup>See O\*NET occupation codes in Definitions section

## 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

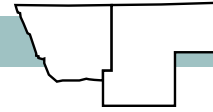
Job titles and their descriptions were used to match vacancies with the appropriate O\*NET occupational titles.<sup>5</sup> In some cases a second interview with the employer was necessary to decide on a specific occupational title.

### Wage Conversion

Standard conversions were used to convert salaries into hourly wages: 2,080 hours for annual salaries, 173 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.





## 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. For example: Consider three households A, B and C, with annual income of \$30,000, \$44,000 and \$40,000 respectively. The average income for the three households will be calculated as follows:

$$\begin{aligned} & \text{Average Household income} \\ = & \frac{\text{The sum of individual households income}}{\text{The number of households}} \\ = & \frac{\$30,000 + \$44,000 + \$40,000}{3} = \$38,000 \end{aligned}$$

### 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, bachelors, 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.

### O\*Net Occupation Codes

The O\*NET database includes information on skills, abilities, knowledge, work activities, and interests associated with occupations. This information can be used to facilitate career exploration, vocational counseling, and a variety of human resources functions, such as developing job orders and position descriptions and aligning training with current workplace needs.

Information on O\*NET is available for over 950 occupations. Each occupational title and code is based on the most current version (1999) of the Standard Occupational Classification system.

Definition from the O\*NET Welcome web page: <http://online.onetcenter.org/>

### 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

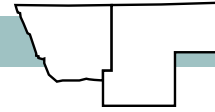
An additional financial incentive offered by a firm to new employees in order to influence their decisions to agree to employment with that firm. The bonus, for purposes of this survey, is a monetary lump sum.

### 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).



## Appendix - Survey Instrument

BILL OWENS  
Governor

VICKIE L. ARMSTRONG  
Executive Director

JEFFREY M. WELLS  
Deputy Executive Director



### DEPARTMENT OF LABOR AND EMPLOYMENT

LABOR MARKET INFORMATION  
WORKFORCE RESEARCH AND ANALYSIS

Two Park Central, Suite 300  
1515 Arapahoe Street  
Denver, Colorado 80202-2117  
(303) 620-4852 (303) 620-4988

Dear Employer,

The State of Colorado is conducting a survey the results of which will assist businesses, policy makers, and education professionals in addressing the current worker shortage. **Your participation in the study is essential to developing accurate, useful information.**

All responses to the survey are considered confidential. No data identifying individual firms directly or indirectly will be published or released. If you have any questions regarding this survey, feel free to contact Wande Reweta, the Workforce Research and Analysis unit's administrator for this survey, toll-free at (877) 224-6081.

The aggregate results of this survey will be made available to the public. The final publication will provide information on:

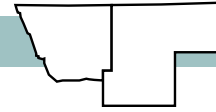
- The number of vacancies by industry, occupation, and education requirements for your labor market area
- Average wage or salary being offered by occupation
- Whether or not firms are offering health insurance and/or sign-on bonuses for those vacancies, and
- How much, on average, those sign-on bonuses are

If you provide us with a fax number or e-mail address, we will send you notification when it becomes available. At that time you may either order a copy at no cost to you, or download the publication from our website, which will be printed on the announcement.

Thank you for your time and participation in this important study.

Sincerely,

Alexandra E. Hall  
Senior Economist  
Workforce Research and Analysis



## Larimer/Weld Job Vacancy Survey

Survey ID: 267002011

Company ID: \_\_\_\_\_

### Survey Instructions

- Please direct this survey to the manager or human resources professional responsible for hiring and recruitment at your business.
- Please **respond within three business days**. Your assistance will allow us to complete this survey in a timely manner.
- Return this survey by fax to (877) 222-0921. **This number is toll-free.**

For the purposes of this survey, a vacancy at your company is a job opening for which your firm is actively recruiting. Only provide information for job vacancies within Larimer and Weld Counties.

### Part A: About Your Firm

1. Who may we contact regarding job vacancies at your location and at other locations in the two county area? \_\_\_\_\_
2. Contact's:
  - a. Job Title \_\_\_\_\_
  - b. Phone # \_\_\_\_\_
  - c. Fax # \_\_\_\_\_
  - d. E-Mail Address \_\_\_\_\_
3. Company Name: \_\_\_\_\_
4. Number of Employees working within Larimer and Weld Counties: \_\_\_\_\_
5. Do you have any job vacancies for which your firm is actively recruiting?
 

Yes       No
6. Would you like to be notified when the survey results are released?
 

Yes       No

**If you answered yes to question number five, please complete the next page of this survey.** If you have more vacancies than will fit on the next page, please make copies before you begin filling out the form. Thank you very much for your participation in the survey. **We look forward to providing you with a final copy of the study.**

**Part B: About Your Vacancies, See next page ➡**

