## Pueblo County



# Job Vacancy Survey 

Conducted September 6-24, 2001

## Pueblo County

## December 2001

# Pueblo County Job Vacancy Survey 

Conducted
September 6-24, 2001

## State of Colorado

Bill Owens, Governor

# Colorado Department of Labor \& Employment <br> Vickie Armstrong, Executive Director Jeffrey M. Wells, Deputy Executive Director 

Funding Provided in Part by The Colorado Workforce Development Council

December 2001

## Contents

Introduction ..... 1
How to Use This Report ..... 2
Employers .....  2
Job Seekers .....  2
Workforce Centers .....  3
Economic Developers .....  3
Caveats .....  4
Executive Summary ..... 5
Pueblo County .....  6
The Job Vacancy Survey Sample .....  6
The Survey Instrument .....  7
Timing Considerations .....  7
Estimated Vacancies and Reported Wages ..... 8
Education and Experience ..... 10
Difficulty to Fill ..... 12
Additional Compensation ..... 13
Occupations ..... 14
Characteristics of Major SOC Occupational Groups ..... 14
Reported Occupations and OES Wage Data ..... 17
Methodology ..... 21
Survey Instrument and Redesign ..... 21
Survey Sample Methodology ..... 22
Definitions ..... 23

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

## List of Figures

1. Industrial Frequency of Employers and Employment .....  6
2. Historical Pueblo Employment .....  7
3. Estimated Vacancies by Position Status .....  8
4. Average Reported Wage by Position Status ..... 8
5. Estimated Vacancies by Industry ..... 9
6. Average Reported Wage by Industry .....  9
7. Estimated Vacancies by Education ..... 10
8. Average Reported Wage by Education ..... 10
9. Estimated Vacancies by Experience ..... 11
10. Average Reported Wage by Experience ..... 11
11. Estimated Vacancies by Difficulty to Fill ..... 12
12. Estimated Vacancies by Time Open for Hire ..... 12
13. Average Reported Wage by Difficulty to Fill/Time Open for Hire ..... 12
14. Estimated Vacancies and Medical Insurance ..... 13
15. Estimated Vacancies by Major Occupational Groups ..... 14
16. Average Reported Wage by Major Occupational Groups ..... 15
17. Required Education by Major Occupational Groups ..... 16
18. Required Experience by Major Occupational Groups ..... 16
List of Tables
19. Reported Occupations and OES Wages ..... 17
20. Reported Occupations and OES Wages (Fewer than 5) ..... 19

## 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 skills are necessary to successfully compete in the contemporary labor market.

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

The Job Vacancy Survey was adopted by Colorado's Department of Labor and Employment 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

## Colorado Job Vacancy Survey Regions



## 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, job seekers, trainers and planning officials. While Labor Market Information 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 offering a more complete picture of local labor markets.

## Employers

TThe 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.

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 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

For economic development professionals, this report is a tool that can be used 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 labor 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 Job Vacancy Survey, and where the market, in general, is trending using Labor Market Information's employment projections.
$4 \quad$ Pueblo County Job Vacancy Survey

## Caveats

The Job Vacancy Survey statistics should be used as indicators, not actual values of the demand for workers in the 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 September 6th through 24th and should not be considered as necessarily portraying the exact distribution of job vacancies. After several years of Job Vacancy Survey 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 they 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

This Pueblo County Job Vacancy Survey was conducted from September 6th through 24th. Over the survey period randomly selected employers with between 4 and 200 employees were contacted in the survey region. Attempts were made to contact all government and large employers ( 200 or more employees). Employers were asked if they were actively hiring at the time of the survey and a variety of questions about positions that they were seeking to fill.

A total of 1,085 employers ( $59 \%$ of those in the sample universe), representing approximately $64 \%$ of the region's total employment, responded to the survey. Out of these, 23 were large employers ( 200 or more employees), 1,041 were from the small to midsized category ( $5-199$ employees), and 21 were government agencies. The major findings of the survey follow:

- It is estimated that a total of 950 jobs were open for hire in the region during September.
- Nearly two-thirds of the jobs are full-time openings.
- Small to mid-size employers account for $80 \%$ of all vacancies.
- Nearly $75 \%$ of the job openings are concentrated in the Services and Retail Trade industries.
- The overall average wage for all vacancies is $\$ 10.70$ per hour.
- Only one in three openings require at least some post-secondary education.
- Over half of total openings require no previous work experience.
- Job openings are evenly split between not difficult and either very difficult or somewhat difficult to fill.
- Fifty-seven percent of the vacancies have been open for hire for a period of less than 30 days.


## Pueblo County

According to the US Census Bureau, Pueblo County was home to over 140,000 people at the turn of the century. At the time of the survey, the area employed over 56,000 individuals from a labor pool of 59,000 resulting in a $4.7 \%$ unemployment rate (Local Area Unemployment Statistics, October 2001). Compared with the previous year, both the region's labor force and level of employment have declined with the rate of change in employment outpacing that of the labor force, resulting in higher unemployment. Over the past five years (1996-2001), however, Pueblo County's unemployment rate was cut in half and both labor force and employment have seen significant growth.

Like the rest of the state, both employers and employment in Pueblo County reside predominantly in the Services and Retail Trade industries. While the combined employment in these two industries make up over $50 \%$ of the region's employment, Government follows close behind with $19 \%$, despite accounting for just over $2 \%$ of employers in the area.


Figure 1: Industrial Frequency of Employers and Employment


## The Job Vacancy Survey Sample

For the purpose of this report, private employers with at least 5 employees as well as all government employers are referred to as the sample universe. Workers in the sample universe account for approximately $95 \%$ of the region's total employment. Employers with at least 200 employees are referred to
as large employers and account for about $20 \%$ of the employment in the sample universe. Firms employing between 4 and 200 individuals are considered small to mid-size employers, and account for the remaining $80 \%$ of the 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 division as defined by the 1987 Standard Industrial Classification Manual. Attempts were made to contact a sufficient sample from each of the stratifications in
order to provide statistically reliable results. Over the survey period a total of 1,085 employers, approximately $59 \%$ of employers in the sample universe, responded to the survey. Out of these, 23 were large employers, 1,041 were from the small to mid-sized category, and 21 were government agencies.

## The Survey Instrument

TThe survey instrument, upon which the telephone questionnaire used for 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.

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 education level 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. Whenever necessary, employers were contacted 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.

## Timing Considerations

TThe Pueblo Job Vacancy Survey is produced semi-annually in February and August. The timing of the survey was developed with the intent of measuring the demand for labor at intervals that provide the most useful information.

Analysis of the historical employment trends in the region indicate annual peaks in or around the month of August. Surveys conducted at this time of year represent the demand for labor at a time when employers are nearing peak employment, yet are still in the process of actively recruiting. Vacancies found in February represent the demand for labor at a time of year when employment is at its cyclical low. A study at this time indicates the type of occupations for which a labor shortage exists even when the labor supply is least constrained.

Figure 2: Historical Pueblo Employment


[^0]

## Estimated Vacancies and Reported Wages

During the survey period, it is estimated that 950 vacancies were open for immediate hire by firms in the sample universe for Pueblo County (see Job Vacancy Survey Sample, p.8). Approximately two-thirds of those offered full-time, permanent employment.

Because wages offered vary according to the individual applicant's qualifications, employers were asked to provide the range of wages offered for the vacancies. The average wage was then calculated based on the mid-point of that range. The overall average wage offered for all vacancies in Pueblo County was $\$ 10.70$ per hour.

As may be expected, the largest concentration of vacancies in Pueblo County occurs in the two largest industries: Services and Retail Trade. Following the national trend, Manufacturing employers, while accounting for the fourth largest concentration of Pueblo County employment, display week job opportunities. Vacancies in Durable and Nondurable manufacturing account for
Full-time/ -Temporary 1\% only $4 \%$ of the estimated total. This may be partially explained by the slightly lower than average wages offered in those industries (Figure 6).

Figure 4: Average Reported Wage by Position Status


Figure 5: Estimated Vacancies by Industry


Agriculture includes Forestry and Fishing
F.I.R.E.-Finance, Insurance, and Real Estate
T.C.P.U.-Transportation, Communication and Public Utilities

Figure 6: Average Reported Wage by Industry


## Education and Experience

Employers were asked what level of education and/or experience was required of an applicant in order to be considered for a particular vacancy. Typically, employers have to compete if they want to recruit the most educated and/or experienced candi-
dates. In general, this causes the wages offered to fill a position to increase along with both measures. The average wages reported in this survey, however, are also affected by the amount of information available. Either a significantly large employer with many vacancies, or even a small employer in a category with relatively few other employers may greatly skew the average reported for that category. Figures 9 and 10 show that the average wage offered to fill vacancies reported in this survey were not significantly affected by information limitations. The following graphs summarize the results of this survey with respect to these vacancy requirements.

Figure 8: Average Reported Wage by Education


Figure 9: Estimated Vacancies by Experience


Figure 10: Average Reported Wage by Experience



## Difficulty to Fill

Because the response to the question, "Is this position difficult to fill?" is subjective, employers were queried as to how long each position had been open at the time of the survey. Knowing how long a position has been open allows further analysis into the subjectivity of the response to the first question. This information may help gain deeper understanding of the challenges employers face in filling vacancies.

Survey results show that employers were fairly evenly split between those that perceived difficulties in filling the vacant positions and those that perceived no difficulty. Alternatively, the majority of vacancies were open for a period less than 30 days and only $4 \%$ open for more than 60 days.


Figure 11: Estimated Vacancies by Difficulty to Fill


Wage information reported by employers highlights two important facts.

1. Positions for which higher wages are offered tend to be more difficult and take longer to fill ( 30 days or more). This could be due to the specialized skills or requirements needed to fill these vacancies.
2. Jobs for which lower wages are offered tend to be filled quickly and easily.

Figure 13: Average Reported Wage by Difficulty to Fill/Time Open for Hire


## Additional Compensation

Approximately two-thirds of the vacancies reported by employers include some form of medical insurance. Of those, over $90 \%$ offer to pay at least some portion of the insurance premium and $36 \%$ the entire premium. Survey results reveal a positive relationship
between wage and medical insurance coverage offered. 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

Figure 14: Estimated Vacancies and Medical Insurance
 wage of $\$ 17.20$ per hour for the advertised vacancy. At the other end of the spectrum, positions where no monetary contribution is offered towards the insurance premium pay an average wage of $\$ 7.20$ per hour.

Employers were asked whether or not a sign-on bonus was used as a tool to help fill vacancies. Responses to this question were insufficient to reliably convey any information on the subject. Future surveys may prove otherwise.

## Occupations

## Characteristics of Major SOC Occupational Groups

In order to facilitate comparisons between the results of this survey and other sources of employment statistics, all job titles reported were assigned a Standard Occupational Classification (SOC) code. Summary results from the survey are reported for the major occupational groups as defined in the Standard

Occupational Classification Manual, 2000. Not surprisingly, the most frequent occurrence of job vacancies fall into occupational groups most often associated with the largest industries in the region: Services, and Retail Trade.

Figure 15: Estimated Vacancies by Major Occupational Groups


Figure 16: Average Reported Wage by Major Occupational Groups


Average Reported Minimum [ | Average Reported Maximum

The results of the survey show that the most frequently occurring job vacancies are not necessarily offered the highest wages. This indicates that compensation for the most frequently demanded workers can be explained by the investigation of other vacancy characteristics such as education and/or experience requirements.

For example, vacancies in the Food Preparation and Serving Related occupations are the most frequent occurring, but are not offered the highest wages. Figures 17 and 18 show that vacancies in this occupation category require the least education and the least experience of the major occupational groups.

Figure 17: Required Education by Major Occupational Groups


Figure 18: Required Experience by Major Occupational Groups


Table 1: Occupations and Wages

| SOC Code | SOC Occupation Title | $\begin{array}{\|l} \text { Estimated } \\ \text { Number } \\ \text { of } \\ \text { Vacancies } \end{array}$ | Average Wage Offered (nearest dime) | Occupational Employment Statistics Wage Data (2001) <br> Average Wages <br> Percentile Distribution |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | EntryLevel | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 31-1012 | Nursing Aides, Orderlies, and Attendants | 86 | \$7.50 | \$7.48 | \$9.12 | \$9.95 | \$7.18 | \$8.02 | \$9.16 | \$10.19 | \$11.07 |
| 41-2031 | Retail Salespersons | 59 | \$7.10 | \$5.92 | \$8.64 | \$9.99 | \$5.66 | \$6.22 | \$7.36 | \$9.82 | \$13.40 |
| 35-3021 | Combined Food Preparation and Serving Workers, Including Fast Food | 53 | \$5.30 | \$5.90 | \$6.98 | \$7.52 | \$5.53 | \$5.94 | \$6.62 | \$7.91 | \$9.57 |
| 29-1111 | Registered Nurses | 48 | \$20.90 | \$17.38 | \$21.20 | \$23.10 | \$16.00 | \$18.23 | \$21.04 | \$24.50 | \$26.80 |
| *** $41-2010$ | Cashiers | 43 | \$6.30 | \$6.40 | \$8.72 | \$9.89 | \$5.92 | \$6.89 | \$7.96 | \$9.82 | \$13.95 |
| 35-3031 | Waiters and Waitresses | 42 | \$5.20 | \$5.87 | \$7.14 | \$7.77 | \$5.48 | \$5.88 | \$6.54 | \$8.23 | \$10.26 |
| 13-2072 | Loan Officers | 21 |  | \$13.76 | \$21.44 | \$25.29 | \$12.51 | \$15.45 | \$19.42 | \$25.41 | \$35.17 |
| 33-3012 | Correctional Officers and Jailers | 19 | \$18.40 | \$15.81 | \$18.61 | \$20.01 | \$14.82 | \$16.69 | \$18.70 | \$20.58 | \$22.51 |
| 35-9021 | Dishwashers | 19 | \$5.70 | \$5.86 | \$6.48 | \$6.79 | \$5.44 | \$5.79 | \$6.36 | \$7.07 | \$8.09 |
| 29-2053 | Psychiatric Technicians | 16 | \$13.30 | \$11.52 | \$14.38 | \$15.80 | \$10.38 | \$12.87 | \$14.87 | \$16.27 | \$17.21 |
| 47-2061 | Construction Laborers | 16 | \$9.60 | \$7.08 | \$10.05 | \$11.53 | \$6.63 | \$7.90 | \$9.67 | \$11.83 | \$13.80 |
| 53-3031 | Driver/Sales Workers | 16 | \$5.20 | \$8.50 | \$11.77 | \$13.40 | \$7.59 | \$9.74 | \$11.53 | \$13.25 | \$16.89 |
| 43-3071 | Tellers | 15 |  | \$7.46 | \$9.27 | \$10.18 | \$7.17 | \$7.88 | \$9.04 | \$10.42 | \$11.84 |
| 25-3099 | Teachers and Instructors, All Other | 14 | \$13.60 |  | -------- |  |  |  |  |  |  |
| 41-9041 | Telemarketers | 14 | \$12.70 | \$5.97 | \$6.89 | \$7.35 | \$5.61 | \$6.00 | \$6.66 | \$7.69 | \$8.54 |
| 29-1031 | Dietitians and Nutritionists | 13 | \$20.10 | \$9.63 | \$17.07 | \$20.79 | \$6.37 | \$12.91 | \$16.86 | \$23.41 | \$26.09 |
| 33-9032 | Security Guards | 13 | \$8.90 | \$7.53 | \$11.02 | \$12.76 | \$7.21 | \$7.89 | \$11.39 | \$13.78 | \$15.80 |
| * 51-2041 | Structural Metal Fabricators and Fitters | 13 | \$9.10 | \$8.91 | \$14.13 | \$16.74 | \$8.62 | \$10.13 | \$13.52 | \$16.90 | \$22.04 |
| ** 35-3020 | Fast Food and Counter Workers | 12 | \$5.30 | \$5.90 | \$6.88 | \$7.37 | \$5.52 | \$5.92 | \$6.57 | \$7.75 | \$9.28 |
| 35-3041 | Food Servers, Nonrestaurant | 12 | \$6.10 | \$5.88 | \$7.24 | \$7.93 | \$5.52 | \$5.96 | \$6.68 | \$8.13 | \$9.93 |
| 49-3021 | Automotive Body and Related Repairers | 11 |  | \$11.65 | \$17.45 | \$20.35 | \$11.09 | \$11.94 | \$13.36 | \$24.13 | \$26.00 |
| 53-3033 | Truck Drivers, Light or Delivery Services | 11 | \$10.70 | \$7.95 | \$14.00 | \$17.02 | \$7.04 | \$9.18 | \$12.88 | \$16.73 | \$25.06 |
| 35-2021 | Food Preparation Workers | 10 | \$5.20 | \$5.91 | \$7.67 | \$8.55 | \$5.69 | \$6.32 | \$7.37 | \$8.58 | \$10.61 |
| 43-4171 | Receptionists and Information Clerks | 10 |  | \$7.20 | \$8.84 | \$9.66 | \$6.86 | \$7.55 | \$8.68 | \$10.13 | \$11.17 |
| 43-9061 | Office Clerks, General | 10 | \$6.90 | \$6.12 | \$8.83 | \$10.18 | \$5.77 | \$6.61 | \$8.71 | \$10.41 | \$12.52 |
| ** 49-3020 | Automotive Technicians and Repairers | 10 | \$9.80 | \$8.50 | \$14.66 | \$17.75 | \$7.58 | \$9.45 | \$12.91 | \$19.24 | \$22.39 |
| 29-1071 | Physician Assistants | 9 | \$27.10 | \$13.89 | \$22.34 | \$26.57 | \$12.09 | \$15.01 | \$24.43 | \$27.37 | \$31.19 |
| 29-2061 | Licensed Practical and Licensed Vocational Nurses | 9 |  | \$10.76 | \$13.17 | \$14.37 | \$9.75 | \$11.64 | \$13.43 | \$15.21 | \$16.42 |
| 39-9011 | Child Care Workers | 9 | \$6.00 | \$5.87 | \$7.02 | \$7.59 | \$5.49 | \$5.90 | \$6.58 | \$8.04 | \$9.91 |
| 53-7051 | Industrial Truck and Tractor Operators | 9 | \$7.90 | \$8.42 | \$10.73 | \$11.89 | \$7.64 | \$8.90 | \$10.10 | \$12.91 | \$15.41 |
| 47-2031 | Carpenters | 8 | \$10.40 | \$10.50 | \$12.71 | \$13.81 | \$9.44 | \$11.33 | \$12.75 | \$14.63 | \$16.19 |
| 21-1011 | Counselors | 7 | \$10.00 | \$9.54 | \$11.67 | \$12.74 | \$9.02 | \$9.67 | \$10.75 | \$13.56 | \$16.37 |
| 35-2014 | Cooks, Restaurant | 7 | -------- | \$6.07 | \$7.95 | \$8.89 | \$5.84 | \$6.61 | \$7.72 | \$9.35 | \$10.66 |
| 43-4131 | Loan Interviewers and Clerks | 7 | ------- | \$9.81 | \$12.80 | \$14.30 | \$9.27 | \$10.02 | \$11.54 | \$15.47 | \$18.53 |
| 53-7062 | Laborers and Freight, Stock, and Material Movers, Hand | 7 | \$7.90 | \$6.56 | \$9.46 | \$10.91 | \$6.09 | \$7.10 | \$8.62 | \$11.09 | \$14.83 |

Table 1: Occupations and Wages - Page 2


* OES wages reported for Colorado statewide
** OES wages for general occupations are reported as the weighted average of more specific occupations
*** Weighted averages for more specific occupations, Colorado statewide
**** Weighted averages for Colorado statewide reported annually for some educational occupations
---- No wage data available

Table 2: Occupations and Wages (Fewer than 5 Vacancies)

| SOC Code | SOC Occupation Title | Occupational Employment Statistics Wage Data (2001) <br> rage Wages <br> Percentile Distribution |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Level | Overall | Experienced | 10th | 25th | 50th | 75th |
| 35-9031 | Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop | \$5.87 | \$6.63 | \$7.00 | \$5.49 | \$5.88 | \$6.53 | \$7.50 |
| 37-1011 | First-Line Supervisors/Managers of Housekeeping and Janitorial Workers | \$11.01 | \$14.17 | \$15.75 | \$10.40 | \$11.54 | \$12.98 | \$16.14 |
| 37-2012 | Maids and Housekeeping Cleaners | \$5.89 | \$6.73 | \$7.16 | \$5.49 | \$5.85 | \$6.44 | \$7.38 |
| 37-3011 | Landscaping and Groundskeeping Workers | \$6.71 | \$9.74 | \$11.26 | \$6.15 | \$7.47 | \$9.75 | \$11.73 |
| 39-5012 | Hairdressers, Hairstylists, and Cosmetologists | \$7.02 | \$9.47 | \$10.69 | \$6.45 | \$7.60 | \$8.77 | \$11.21 |
| ** 41-1010 | First-Line Supervisors/Managers, Sales Workers | \$8.58 | \$13.72 | \$16.29 | \$7.78 | \$9.67 | \$12.53 | \$16.06 |
| 47-4099 | Construction and Related Workers, All Other | -------- | -------- | -------- | -------- | -------- | -------- | -------- |
| * 51-2031 | Engine and Other Machine Assemblers | \$6.97 | \$9.92 | \$11.40 | \$6.42 | \$7.56 | \$9.05 | \$11.15 |
| 11-2031 | Public Relations Managers | \$13.34 | \$22.36 | \$26.87 | \$12.22 | \$15.85 | \$23.71 | \$28.85 |
| ** 11-9030 | Education Administrators | \$12.33 | \$19.28 | \$22.76 | \$11.57 | \$13.25 | \$18.40 | \$21.68 |
| 11-9051 | Food Service Managers | \$9.94 | \$14.44 | \$16.69 | \$9.52 | \$10.65 | \$13.57 | \$17.06 |
| 11-9199 | Managers, All Other | \$15.78 | \$29.82 | \$36.84 | \$12.44 | \$19.79 | \$31.74 | \$39.79 |
| 21-1029 | Social Workers, All Other | -------- | -------- |  | -------- | -------- | -------- |  |
| 27-4021 | Photographers | \$8.07 | \$11.91 | \$13.82 | \$7.23 | \$8.87 | \$10.20 | \$14.93 |
| ** 29-1060 | Physicians and Surgeons | \$32.22 | \$51.36 | \$60.93 | \$27.93 | \$36.86 | \$57.13 |  |
| 29-1129 | Therapists, All Other |  |  |  |  | -------- |  |  |
| 35-9011 | Dining Room and Cafeteria Attendants and Bartender Helpers | \$5.84 | \$5.98 | \$6.05 | \$5.35 | \$5.61 | \$6.05 | \$6.48 |
| 39-2021 | Nonfarm Animal Caretakers | \$5.97 | \$7.45 | \$8.19 | \$5.72 | \$6.29 | \$7.13 | \$8.22 |
| 41-2011 | Cashiers | \$5.86 | \$8.01 | \$9.09 | \$5.59 | \$6.16 | \$7.25 | \$8.92 |
| ** 41-2020 | Counter and Rental Clerks and Parts Salespersons | \$6.13 | \$8.43 | \$9.59 | \$5.85 | \$6.47 | \$7.62 | \$9.44 |
| 41-4012 | Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products | \$10.12 | \$16.06 | \$19.03 | \$9.18 | \$11.53 | \$15.52 | \$19.66 |
| 43-4071 | File Clerks | \$5.97 | \$7.66 | \$8.51 | \$5.76 | \$6.42 | \$7.55 | \$8.89 |
| 43-6012 | Legal Secretaries | \$10.17 | \$16.24 | \$19.28 | \$9.17 | \$10.80 | \$17.43 | \$20.22 |
| 49-9042 | Maintenance and Repair Workers, General | \$7.61 | \$11.22 | \$13.03 | \$6.66 | \$8.66 | \$10.35 | \$14.04 |
| 51-3011 | Bakers | \$5.95 | \$10.43 | \$12.67 | \$5.77 | \$6.46 | \$8.81 | \$14.91 |
| *** 51-3090 | Miscellaneous Food Processing Workers | \$6.68 | \$9.92 | \$11.54 | \$6.20 | \$7.25 | \$9.21 | \$12.50 |
| * 51-4199 | Metal Workers and Plastic Workers, All Other | \$9.28 | \$12.23 | \$13.71 | \$8.89 | \$9.88 | \$11.92 | \$14.76 |
| 51-9199 | Production Workers, All Other | \$5.86 | \$8.31 | \$9.53 | \$5.59 | \$6.18 | \$8.71 | \$10.02 |
| ** 53-7060 | Laborers and Material Movers, Hand | \$6.27 | \$8.46 | \$9.57 | \$5.88 | \$6.68 | \$7.90 | \$9.71 |
| 11-9033 | Education Administrators, Postsecondary | \$12.80 | \$19.10 | \$22.26 | \$12.05 | \$13.76 | \$18.97 | \$21.15 |
| 11-9111 | Medical and Health Services Managers | \$20.75 | \$29.65 | \$34.10 | \$17.41 | \$24.33 | \$30.39 | \$35.70 |
| 17-2051 | Civil Engineers | \$21.10 | \$29.94 | \$34.36 | \$18.52 | \$24.33 | \$30.90 | \$36.33 |
| * 17-2072 | Electronics Engineers, Except Computer | \$22.49 | \$31.74 | \$36.37 | \$21.74 | \$25.23 | \$31.02 | \$38.18 |
| ** 21-1010 | Counselors | \$10.34 | \$15.00 | \$17.34 | \$9.57 | \$11.33 | \$14.27 | \$18.16 |
| 25-9099 | Education, Training, and Library Workers, All Other | ----- | ------- |  |  | ----- | ------ | ------ |
| **** 27-2020 | Athletes, Coaches, Umpires, and Related Workers | \$17,032 | \$28,090 | \$33,624 | \$14,802 | \$19,220 | \$24,198 | \$34,493 |
| 29-1051 | Pharmacists | \$22.62 | \$30.84 | \$34.95 | \$19.44 | \$27.24 | \$30.94 | \$34.32 |
| 29-1126 | Respiratory Therapists | \$13.85 | \$17.07 | \$18.68 | \$12.71 | \$14.54 | \$16.80 | \$19.68 |
| 29-1131 | Veterinarians | \$19.43 | \$21.23 | \$22.13 | \$17.96 | \$18.91 | \$20.48 | \$22.31 |
| 29-2052 | Pharmacy Technicians | \$8.47 | \$13.62 | \$16.20 | \$7.68 | \$9.17 | \$11.15 | \$13.74 |
| * 29-2056 | Veterinary Technologists and Technicians | \$9.23 | \$12.11 | \$13.55 | \$8.87 | \$9.88 | \$11.67 | \$13.59 |
| 35-1011 | Chefs and Head Cooks | \$9.84 | \$12.96 | \$14.51 | \$7.85 | \$11.20 | \$12.58 | \$15.00 |
| 35-3011 | Bartenders | \$5.83 | \$6.75 | \$7.22 | \$5.42 | \$5.80 | \$6.44 | \$7.63 |
| 35-3022 | Counter Attendants, Cafeteria, Food Concession, and Coffee Shop | \$5.93 | \$6.23 | \$6.38 | \$5.49 | \$5.77 | \$6.24 | \$6.71 |
| 37-3019 | Grounds Maintenance Workers, All Other | -------- | ---- | - | -------- | -------- |  |  |
| * 39-2011 | Animal Trainers | \$9.03 | \$11.46 | \$12.67 | \$8.60 | \$9.36 | \$10.65 | \$13.27 |
| 41-2021 | Counter and Rental Clerks | \$6.68 | \$9.66 | \$11.15 | \$6.18 | \$7.28 | \$9.02 | \$10.72 |

Table 2: Occupations and Wages (Fewer than 5 Vacancies) - Page 2

| 41-2022 | Parts Salespersons | \$8.69 | \$12.15 | \$13.89 | \$8.52 | \$9.31 | \$10.57 | \$14.20 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ** 41-9090 | Miscellaneous Sales and Related Workers | \$7.25 | \$12.60 | \$15.27 | \$6.60 | \$8.23 | \$10.88 | \$15.70 |
| 41-9099 | Sales and Related Workers, All Other | \$7.25 | \$12.60 | \$15.27 | \$6.60 | \$8.23 | \$10.88 | \$15.70 |
| 43-5071 | Shipping, Receiving, and Traffic Clerks | \$7.32 | \$9.93 | \$11.24 | \$7.08 | \$7.82 | \$9.19 | \$11.87 |
| 47-1011 | First-Line Supervisors/Managers of Construction Trades and Extraction Workers | \$15.80 | \$20.97 | \$23.56 | \$14.79 | \$17.13 | \$20.89 | \$24.62 |
| * 47-3016 | Helpers--Roofers | \$7.08 | \$9.28 | \$10.39 | \$6.52 | \$8.03 | \$9.53 | \$10.65 |
| * 47-3019 | Helpers, Construction Trades, All Other | \$8.39 | \$12.31 | \$14.27 | \$7.68 | \$9.11 | \$10.93 | \$15.65 |
| * 47-4011 | Construction and Building Inspectors | \$12.77 | \$17.53 | \$19.91 | \$11.43 | \$14.16 | \$16.76 | \$20.83 |
| * 49-3041 | Farm Equipment Mechanics | \$8.74 | \$12.84 | \$14.89 | \$8.02 | \$9.81 | \$12.36 | \$15.60 |
| ** 49-9090 | Miscellaneous Installation, Maintenance, and Repair Workers | \$7.80 | \$10.06 | \$11.18 | \$6.88 | \$8.44 | \$9.86 | \$11.89 |
| 49-9099 | Installation, Maintenance, and Repair Workers, All Other | \$7.38 | \$11.51 | \$13.58 | \$7.03 | \$7.79 | \$10.46 | \$15.00 |
| 51-3021 | Butchers and Meat Cutters | \$9.32 | \$13.39 | \$15.43 | \$8.18 | \$10.60 | \$14.72 | \$16.02 |
| 51-6011 | Laundry and Dry-Cleaning Workers | \$6.29 | \$7.67 | \$8.35 | \$5.88 | \$6.80 | \$7.53 | \$8.23 |
| * 51-8013 | Power Plant Operators | \$17.56 | \$22.09 | \$24.36 | \$15.82 | \$19.90 | \$23.34 | \$25.51 |
| * 51-9131 | Photographic Process Workers | \$7.29 | \$10.45 | \$12.04 | \$7.04 | \$7.91 | \$9.59 | \$12.39 |
| * 51-9198 | Helpers--Production Workers | \$5.96 | \$8.74 | \$10.13 | \$5.76 | \$6.41 | \$8.19 | \$10.40 |
| 53-3041 | Taxi Drivers and Chauffeurs | \$5.82 | \$7.49 | \$8.33 | \$5.40 | \$5.78 | \$6.42 | \$9.34 |
| 53-7199 | Material Moving Workers, All Other | \$9.81 | \$13.23 | \$14.93 | \$9.06 | \$10.94 | \$13.23 | \$15.60 |
| 11-1011 | Chief Executives | \$20.33 | \$38.18 | \$47.10 | \$19.03 | \$23.20 | \$34.00 | \$51.41 |
| ** 17-1010 | Architects, Except Naval | \$13.46 | \$24.45 | \$29.95 | \$12.19 | \$13.66 | \$21.84 | \$26.07 |
| 17-3023 | Electrical and Electronic Engineering Technicians | \$16.80 | \$19.99 | \$21.59 | \$15.77 | \$17.70 | \$19.43 | \$21.16 |
| 21-1019 | Counselors, All Other |  |  |  |  |  |  |  |
| * 21-2021 | Directors, Religious Activities and Education | \$11.89 | \$15.25 | \$16.94 | \$10.00 | \$13.81 | \$15.13 | \$16.47 |
| **** 25-2040 | Special Education Teachers | \$29,486 | \$42,289 | \$48,690 | \$27,484 | \$32,464 | \$41,109 | \$51,640 |
| * 27-1011 | Art Directors | \$12.41 | \$21.26 | \$25.68 | \$11.65 | \$13.42 | \$18.89 | \$25.58 |
| * 27-1024 | Graphic Designers | \$10.83 | \$16.20 | \$18.89 | \$9.83 | \$11.97 | \$15.61 | \$19.31 |
| * 27-1025 | Interior Designers | \$18.11 | \$26.58 | \$30.81 | \$16.15 | \$21.00 | \$29.07 | \$32.01 |
| 29-1062 | Family and General Practitioners | \$41.81 | \$49.74 | \$53.70 | \$35.26 | \$45.54 | \$49.77 | \$54.00 |
| * 29-1124 | Radiation Therapists | \$20.87 | \$24.37 | \$26.11 | \$18.80 | \$22.19 | \$24.52 | \$26.85 |
| 29-2081 | Opticians, Dispensing | \$9.21 | \$14.33 | \$16.89 | \$8.98 | \$10.53 | \$13.09 | \$16.55 |
| 31-9091 | Dental Assistants | \$6.24 | \$9.47 | \$11.08 | \$5.69 | \$6.50 | \$9.62 | \$11.11 |
| 33-9092 | Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers |  |  |  |  |  |  |  |
| * 39-4021 | Funeral Attendants | \$7.48 | \$9.81 | \$10.98 | \$7.14 | \$7.77 | \$9.35 | \$11.94 |
| 43-2011 | Switchboard Operators, Including Answering Service | \$7.22 | \$9.23 | \$10.24 | \$6.87 | \$7.48 | \$8.49 | \$10.53 |
| * 43-2021 | Telephone Operators | \$6.67 | \$10.55 | \$12.49 | \$6.16 | \$7.48 | \$11.32 | \$13.22 |
| 43-6013 | Medical Secretaries | \$9.21 | \$11.45 | \$12.56 | \$8.73 | \$9.95 | \$11.68 | \$13.07 |
| *** 47-5010 | Derrick, Rotary Drill, and Service Unit Operators, Oil, Gas, and Mining | \$12.25 | \$14.50 | \$15.63 | \$11.33 | \$12.52 | \$13.93 | \$16.15 |
| 49-1011 | First-Line Supervisors/Managers of Mechanics, Installers, and Repairers | \$11.63 | \$19.67 | \$23.68 | \$9.48 | \$14.18 | \$18.70 | \$24.77 |
| ** 49-2090 | Miscellaneous Electrical and Electronic Equipment Mechanics, Installers, and Repairers | \$7.40 | \$8.27 | \$8.71 | \$6.90 | \$7.26 | \$7.88 | \$8.50 |
| ** 49-3040 | Heavy Vehicle and Mobile Equipment Service Technicians and Mechanics | \$14.04 | \$17.04 | \$18.54 | \$13.06 | \$14.50 | \$16.34 | \$19.60 |
| 51-6031 | Sewing Machine Operators | \$7.38 | \$8.79 | \$9.50 | \$7.01 | \$7.54 | \$8.42 | \$9.91 |

* OES wages reported for Colorado statewide
** OES wages for general occupations are reported as the weighted average of more specific occupations
*** Weighted averages for more specific occupations, Colorado statewide
**** Weighted averages for Colorado statewide reported annually for some educational occupations
---- No wage data available


## Methodology

## Survey Instrument and Redesign

TThe 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. 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 Parttime 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 Pueblo County 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 ES202 (unemployment insurance) database.

The survey was conducted by telephone. Copies of the survey form were faxed to employers upon request.

## Stratifications

Attempts were made to contact all government employers regardless of size. Large private employers, those with at least 200 employees, were also censused. They account for about $20 \%$ of the employment in the sample universe. Private firms employing between 4 and 200 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 bellow 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, 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.

## 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.

## $\underline{\text { Sign-on Bonus }}$

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).


[^0]:    Source: CDLE, Local Area Unemployment Statistics

