## $\mathbf{D}_{\text {iese }}$ Peak

## Region

## Job Vacancy Survey

 May 2002


# Pikes Peak Region Job Vacancy Survey 

Conducted
February 5-25, 2002

State of Colorado
Bill Owens, Governor

# Colorado Department of Labor \& Employment 

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Funding Provided in Part by
The Colorado Workforce Development Council

May 2002
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The staff 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.
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## Introduction

The unemployment rate, along with the level and growth rate of employment, has been used as an indicator of labor market conditions for decades. While this indicator provides information about changes in the supply and 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. Employers have had an equally difficult time determining appropriate compensation levels due to a limited knowledge of what similar firms in their region are currently offering.

Job seekers and employers, as well as Workforce Centers and economic developers need more than a measure of demand for work-

Colorado Job Vacancy Survey Regions

ers at a specific point in time. They also need a measure of where in the economy that demand is located and what education and experience levels are most preferred. The Colorado Department of Labor and Employment (CDLE) developed the Job Vacancy Survey (JVS) to meet this need. The JVS is designed to provide a snapshot estimate of job vacancies along with detailed information and analysis on accompanying wages, skill requirements and work experience.

The CDLE's survey unit collects original data by conducting phone interviews with a representative
sample of employers in a given region. The department's economists analyze the raw data, estimate the number of vacancies in the area and publish the report within weeks of the original data collection, providing a timely portrait of the employment situation.

The survey is funded by a grant from the U.S. Department of Labor's Employment and Training Administration. The survey is produced by Labor Market Information's office of Workforce Research and Analysis for each region in Colorado.

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

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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) provides data on the local labor force supply, the Job Vacancy Survey complements this by providing information about the demand for labor and offers a more complete picture of local labor markets.

## Employers

TThe Job Vacancy Survey measures the area's current vacancies along with education and experience requirements. This report can serve as a strategic planning tool in the following areas:

## - Employee Recruitment-

If findings indicate that employers have had positions open for a significant period of time, and compensation is sufficient, one might deduce a shortage of applicants in the area. Therefore, recruitment efforts could be focused outside of the region in areas where the necessary skills are more likely to be found.

## - Employee Training-

A firm may also choose to increase investment in training for their current employees instead of expanding recruitment efforts.

## - Compensation and Benefits Planning-

The Job Vacancy Survey provides wages offered for surveyed job openings. Tables in this report also detail current wages by occupation from Occupational Employment Statistics data. Together these pieces of information can be used to develop wage guidelines for compensation practices.

## - New Site Selection-

Employers considering relocating or expanding to the area can study the survey and determine how easily the company's employment needs will be met by reviewing current vacancies. Companies need a sufficient, qualified labor pool to operate. High labor demand within a particular industry segment along with indications of difficulty filling these positions should caution a firm requiring a similar labor profile.

## Job Seekers

The Job Vacancy Survey provides job seekers with a broad view of which industries are hiring, which occupations are in demand along with currently offered salaries and benefits, and what education and experience levels are required. This report is a roadmap that can be used to determine where the best paying jobs are given an individual's skills and level of education. Job seekers can also use Labor Market

Information's occupational projections, which provide a long-term outlook of occupational demand, along with the survey, which illustrates the current level of demand in the local job market to determine how current employment opportunities can contribute to their long-term career goals. Career minded individuals can tailor education, training, and work-experience to fit future high-demand positions.

## Workforce Centers

The Job Vacancy Survey is designed to aid Colorado's Workforce Centers and other job placement organizations. As Workforce Centers serve job seekers and employers, the report acts as a handy reference for information on current vacancies, position requirements, wages and benefits offered, seasonal employment trends, and dominant regional industries. Workforce Center representatives can increase placement success by directing job seekers toward high demand occupations and industries.

Public officials, educational institutions, and government agencies can use this survey information
to effectively apply resources to education, training, and job placement programs.

While this report is a picture of the area's current employment needs and historical seasonal patterns, other Labor Market Information products provide projections of occupational growth and anticipated openings (www.coworkforce.com/lmi/oeo/oeo.htm). The projections highlight growing as well as declining occupations. 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.

## Economic Developers

Economic development professionals can use the Job Vacancy Survey to track the labor situation in key industries and evaluate the area's economic growth and development potential. The survey results 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 survey, and where the local market is trending using Labor Market Information's employment projections.

## Caveats

TThe Job Vacancy Survey statistics are indicators of the demand for workers in the region and should not be interpreted as actual values. We rely on information from surveyed companies to obtain a representative sample of institutions and the occupations that fuel them. Not all surveyed firms participate; however, the employers who do participate enable the production of statistically reliable results.

The study provides estimates of job openings for a point-in-time; they do not necessarily portray the distribution of job vacancies in the region. This report does not attempt to explain the cause of vacancies whether these current vacancies are due to actual growth or to job turnover in an occupation. Readers should also keep in mind that the authors are not attempting to project the level of vacancies into the future. Be aware that events having occurred since the time period analyzed such as plant closings or the migration of people in and out of the area might
significantly affect the vacancy status of some occupations. Job openings are very dynamic - current openings are being filled, new positions are being created, and some roles are being phased-out.

Occupational demand is subject to seasonal changes and affected by business cycles. For example, the reader would want to be aware that a decrease in vacancies for construction workers from April to November could represent seasonal variations, not necessarily a long-term decrease in the demand for such workers. When several years of survey data have been collected, we may be able to identify patterns that more accurately reflect changing labor market conditions. Regional surveys are timed to make these comparisons possible.

Given the caveats, appropriate application by the user is a key element in this report being a useful tool for job vacancy analysis.

## Executive Summary

TThe Winter Pikes Peak Job Vacancy Survey was conducted from February $5^{\text {th }}$ through $25^{\text {th }}$, 2002. 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 2,053 employers representing $30 \%$ of the region's employers in the sample universe responded to the survey. Out of these, 64 are large employers ( 250 or more employees), 1,916 are from the small to mid-size category (five to 249 employees), and 73 are government agencies. The major findings of the survey are as follows:

- It is estimated that a total of 2,700 jobs were open for hire in the Pikes Peak Region during the survey period.
- Thirteen percent of the employers responding to the survey report having at least one vacancy.
- Over two-thirds of the vacancies are in small to medium-size firms.
- Ninety-eight percent of the estimated jobs are permanent positions.
- Eighty-five percent of the vacancies are full-time positions.
- The overall average wage for all vacancies is $\$ 14.00$ per hour.
- Over $50 \%$ of all vacancies require post-secondary education.
- Ninety-seven percent of the reported vacancies are offered with medical insurance paid, at least in part, by the employer.
- Two-thirds of the vacancies are considered as being at least somewhat difficult to fill.
- Employers offer sign-on bonuses for $13 \%$ of the vacancies, many of these are in healthcare occupations.


## Pikes Peak Region

According to the U.S. Census Bureau, Census 2000, the Pikes Peak Region, which includes El Paso and Teller counties, is home to over 537,000 people. El Paso County has $96 \%$ of the population (nearly 517,000 residents) and grew $30.2 \%$ from 1990 to 2000 , just slightly less than Colorado's $30.6 \%$ increase over the same period. Although Teller County includes only 4\% of the region's population, the county experienced a percentage increase of $64.9 \%$, more than twice that of El Paso or the state. According to the Colorado Department of Local Affairs, the state demographer is projecting that increases in population will begin to slow in the future.


Figure 2: Unemployment Rates for February 2002
(Rates Not Seasonally Adjusted)

| Colorado | Pikes Peak |
| :---: | :---: |
| Statewide | Region |
| $5.8 \%$ | $6.5 \%$ |




Source: CDLE, January 2002

The Pikes Peak Region employed over 266,000 individuals from a labor force pool of about 285,000 people in February 2002, according to Colorado's Labor Market Information, Local Area Unemployment Statistics. Similar to the population proportion, El Paso County has $95 \%$ of the area's employment. In the period between February 2001 and February 2002, the labor force in El Paso County increased $5.9 \%$ while employment increased only $2.3 \%$ resulting in a 6.6\% unemployment rate in February 2002. Teller County's unemployment increased from $2.2 \%$ to $5.5 \%$ over the same period. Colorado's unemployment rate was 5.8\% in February 2002 (Figure 2).

Figure 3 shows the employment distribution for each of the major industry divisions according to Colorado Employment and Wages (ES-202) during the first quarter of 2001. This serves as a useful reference for the time period in which the survey was conducted. Shares of employment by industry in the Pikes Peak Region have remained fairly constant over the past six years. The Services division has the highest proportion of firms and the highest proportion of employment in the area, accounting for over $40 \%$ of the region's total employment. The Retail Trade division follows with an employment proportion of $19 \%$. The Construction industry has shown strong gains over the last few years, resulting in a higher share of
employment than in previous years. Employment shares of other industries range from $12.5 \%$ in Manufacturing to $0.2 \%$ in Mining.

Most of the region's industries follow a seasonal trend in employment, with the $3^{\text {rd }}$ quarter offering the highest employment level and low employment periods occurring during the $1^{\text {st }}$ quarter. The impact of seasonal change is most notable in the Services and Retail industries due to the number of people employed in these industries though seasonal influence is apparent in most other industries. With the exception of Mining, all industries have experienced overall increasing employment over the last six years.

Figure 3: Pikes Peak Region Employers \& Employees, 1st Quarter, 2001


Pikes Peak Region Job Vacancy Surveys are conducted semi-annually in the winter and summer months. The timing of the survey was developed with the intent of measuring demand for labor at intervals that provide the most useful information.

Historically, the level of employment in the Pikes Peak Region peaks in or around the month of August. The labor force follows a similar pattern, with the total
number of available workers consistently out-numbering those with jobs over time (Figure 4).
Unemployment rates have increased over the last year, following the state and national trend, although in general, the region has experienced declining unemployment through the better part of the decade. The unemployment rate tends to peak in the months of January and June. The remainder of each year employment and available workers are more closely balanced.

Figure 4: Employment \& Labor Force Trends for the Pikes Peak Region


Source: CDLE, Local Area Unemployment Statistics

By conducting the Job Vacancy Survey during the summer, results represent demand for labor at a time when employers are nearing peak employment, yet are still in the process of actively recruiting. During the height of the season, employers are competing for job seekers available in the labor market at a time when there are too few applicants available for the open positions. Vacancies found in the winter represent demand for labor at a time of year when employment is at its cyclical low. A study at this time indicates the types of occupations for which vacancies exist even when there are an adequate number of job seekers available and willing to work.

Difficulties in hiring at the two times of year may signal different issues. A study of any labor shortage during the winter may not indicate a general labor availability problem. Rather, it may indicate that labor for certain types of occupations is in short supply. On the other hand, a labor shortage during the summer may indicate specific occupation groups where shortages exist, but it may also indicate a generalized labor shortage. The two conditions have different implications for decision-makers, especially for those in government and job training positions.

## The Job Vacancy Survey Sample

TThe survey instrument, upon which the telephone questionnaire used for this study is based, was developed, tested, and enhanced to increase information available for analysis by the Workforce Research and Analysis office of the Colorado Department of Labor and Employment.

For the purpose of this report, all private and public employers with five or more employees are referred to as the "sample universe." The region is dominated by a large number of firms with fewer than five employees that account for $60 \%$ of the firms in the area. However, these firms represent only $10 \%$ of total employment in the area. The small to mid-size firms (five to 249 employees) account for about $39 \%$ of all firms in the region and $56 \%$ of the area's total employees. Large firms (with at least 250 employees) account for $0.5 \%$ of the regional firms and $24 \%$ of the total employees. Government establishments ( $0.5 \%$ of area firms) account for $10 \%$ of regional employment.

For the small to mid-size employers, the survey was categorized by major industry (Table 1). To achieve a solid representation of employment, 360 completed responses were required from each industry group. For those containing fewer than 360 employers, a response rate of at least $50 \%$ was required. Attempts were made to contact all employers in the "large employers" and "government" categories in the region.

Over the February $5^{\text {th }}$ through $25^{\text {th }}$ survey period, a total of 2,053 employers, approximately $30 \%$ of the Pikes Peak Region employers in the sample universe, responded to the survey. Of these, 64 were large employers, 1,916 were small to mid-size employers, and 73 were government establishments. Approximately thirteen percent of these employers reported having at least one vacancy.

| Table 1: Industry Categories |  |
| :--- | :--- |
| Government |  |
| Public Administration |  |
| Private |  |
| Goods Producing Industries | Service Producing Industries |
| Agriculture, Forestry, and Fishing (except | Transportation, Communications, and <br> Agricultural Services) <br> Mining |
| Construction Utilities |  |
| Manufacturing | Wholesale Trade |
|  | Retail Trade |
|  | Finance, Insurance, and Real Estate |
|  | Services (including Agricultural Services) |

## Data Collection

Data for the Job Vacancy Survey is collected using a Computer Assisted Telephone Interview (CATI) process. While this system of data collection has been in use in the public sector for several years, Colorado is the first state in the nation to pioneer the use of CATI data collection for the Job Vacancy Survey.

Professional interviewers, trained in economic data collection processes, gather the information from a call center located in the Colorado Department of Labor and Employment. This interview process results in increased control over the survey process, better accuracy, and dependable results.

Employers are asked if they have job vacancies or open positions which they are actively seeking to fill.

Those that are actively hiring are then asked to provide more detail about each position - compensation offered, levels of education and experience required, and the employer's perceived difficulty in filling the vacancy along with the number of days the position has been opened. Employers are also asked if sign-on bonuses and health insurance coverage are offered for the positions. These data are collected in addition to the minimum and maximum wages in order to describe more fully the compensation offered.

The survey interview is conducted so as to ensure the statistical integrity of this report. When necessary, employers are contacted a second time to clarify responses.

## Vacancies: Industry, Size and Status

During the survey period, an estimated 2,700 vacancies were open for immediate hire in firms with at least five employees in the Pikes Peak Region. Vacancy rates by industry group show where activity is occurring in the local labor market. A higher vacancy rate can indicate a more dynamic labor situation than in other industries. Both a rapidly growing industry and one experiencing high job turnover could have relatively high vacancy rates. Likewise, an industry with low total employment could have a relatively high vacancy rate because a small number of vacant jobs are a larger proportion of the low total employment.

Services, with a vacancy rate of $2.5 \%$, and Retail Trade, with a vacancy rate of $1.3 \%$, account for nearly three-fourths of the open jobs found in the Pikes Peak Region (Figure 5). These industry divisions also account for most of the areas total employment. They have experienced both growing and changing market conditions
due to population growth and increasing technology. The most common occupations with vacancies in the Services division include accountants, architects, mechanics, engineers, housekeepers, and a large variety throughout the healthcare field. In fact, $64 \%$ of vacancies within the Services division are healthcare positions, from nurses and physical therapists to surgical technicians and physicians. Occupations in the Retail Trade division include cashiers, automotive technicians, retail salespersons, and various positions throughout food and beverage establishments.

While the overall level of vacancies may appear low, the survey was conducted in the first quarter when employers need fewer workers. Persistent vacancies may be due to structural changes in the economy; vacancies open for long periods because the skills and aspirations of the labor force do not match those required for the available positions.

Figure 5: Estimated Vacancies by Industry Group


Since wages offered vary according to the individual applicant's qualifications, employers were asked to provide the range of wages offered for the vacancies (Figure 6). Wages reported for this study represent
wages offered by employers for current vacancies available over the survey period. The overall average hourly wage for this survey is $\$ 14.00$.

Figure 6: Average Wages by Industry Group



The highest concentration of vacancies in the Pikes Peak Region is found in the Healthcare Practitioners \& Technical Occupations, which are more likely to be found in larger firms. High levels of vacancies are also found in lower paid services occupations, such as Food Preparation and Office \& Administrative Support, more common in small to mid-size firms. Government agencies are offering a variety of positions in Management, Protective Service, Office \&

Administrative Support, Education Administration, and Engineering, among others.

According to the survey, small to mid-size firms offer substantially higher wages than large and government firms (Figure 8). While each size category had a variety of skilled and unskilled vacancies, the small to mid-size firms offer the most vacancies in the region with diverse occupations and wider pay ranges.

Figure 8: Average Wages by Size Class


For this winter survey, $85 \%$ of the reported vacancies are full-time permanent positions and $13 \%$ are part-time permanent positions. The remaining $2 \%$ are temporary positions (Figure 9). That the majority of vacancies are permanent may indicate the positions firms need to fill are more steady or secure in nature than positions available during a seasonal peak period. Once again, the survey was conducted within the first quarter at which time most of these industries are experiencing a low demand for labor. Open positions at this time are likely due to longer-term need rather than a result of shortterm demand.


Figure 10: Average Wages by Status


JVS Wage - Average Minimum / Average Maximum

In general, full-time permanent positions pay more than part-time and temporary positions. Results of this survey show that the higher average minimum and maximum wages offered are for full-time temporary jobs. While proportional differences in the number of vacancies can play a role in the wage ranges, higher wages paid to fill temporary positions could indicate that employers may be willing to increase pay scales depending on the importance of filling the position.

For example, in this survey, full-time temporary positions include occupations such as editors and project coordinators, among others. For these positions, employers prefer applicants with an average of a bachelor's degree and related work experience. Over half of these temporary positions have been open 60 or more days and are considered, at the least, somewhat difficult to fill. Thus, for this survey, employers are willing to offer higher wages in order to fill the vacancy.

# Vacancies: Education and Experience Requirements 

During periods of high unemployment, a typical assumption might be that there are too many qualified candidates and too few job openings. The reality is that even in recessions there are many employers who cannot find qualified candidates to fill open positions. Actually, a region's overall labor force consists of multiple smaller labor groups defined by skills, experience, and education; only a certain number of qualified candidates can compete for any given job. It is important, therefore, that job seekers have accurate information regarding what types of education and experience are in highest demand.

Employers were asked what level of education is required of an applicant in order to be considered for a particular vacancy. Over half of the positions
reported by employers in the Pikes Peak Region require post-secondary education. This is due, in part, to the high proportion of the region's vacancies that are for skilled occupations. In fact, nearly onefourth of the current vacancies require at least a bachelor's degree. An additional $30 \%$ require vocational training or certification (or other similar twoyear training), which shows the importance of trade-related positions available in the area as well. There are many opportunities for those with no postsecondary education, the survey showing $30 \%$ of all vacancies require only high school completion. Further surveys may help establish whether these characteristics are reflective of the condition of the overall economy (local, state and national), seasonal traits, or unique according to the structure of businesses within the local economy.

Figure 11: Proportion of Vacancies by Education


On average, employers pay higher wages when requiring higher levels of educational attainment (Figure 12). The highest average minimum wage rate difference ( $\$ 5.50$ per hour) was found between having a two-year degree and completing a bachelor's. Job vacancies requiring a bachelor's degree offer wages
twice as high as those requiring a high school diploma. Most positions requiring post-secondary education are preferred with a minimum of related work experience. Higher wages reported for positions requiring additional training indicate the positions available in the region are, for the most part, skilled occupations.

Figure 12: Average Wages by Education



As with increasing levels of education, employers are willing to pay higher wages for added skills. Vacancies requiring experience in a related field, the category most sought after by employers, offer an average minimum wage of $\$ 12.30$ per hour. Vacancies requiring experience in the occupation offer an average minimum of $\$ 14.70$.

Employers pay the least for applicants with no experience (Figure 14). In general, firms offer experienced candidates better compensation packages, in part because experience usually increases worker productivity.

Figure 14: Average Wages by Experience

| | JVS Wage - Average Minimum / Average Maximum

Survey results show that experience requirements for open jobs increase with education requirements (Table 2). Employers desiring any kind of formal training also prefer applicants with related experience. In fact, reported vacancies requiring a minimum of a

Bachelor's degree also require experience in a related field, with more preference to those with experience in the specific occupation. However, as Table 2 shows, there are still a significant proportion of vacancies that do not require high levels of education and experience.

## Table 2: Experience Requirements by Educational Level

|  | No Experience | General Work <br> Experience | Experience in a <br> Related Field | Experience in <br> This Occupation |
| :--- | :---: | :---: | :---: | :---: |
| No Diploma | $53 \%$ | $15 \%$ | $25 \%$ | $7 \%$ |
| High School Diploma/GED | $12 \%$ | $22 \%$ | $48 \%$ | $18 \%$ |
| Vocational Training/Certification | $8 \%$ | $2 \%$ | $25 \%$ | $65 \%$ |
| Two-Year Degree | $0 \%$ | $7 \%$ | $57 \%$ | $35 \%$ |
| Bachelor's Degree | $2 \%$ | $7 \%$ | $36 \%$ | $56 \%$ |
| Advanced Degree | $0 \%$ | $0 \%$ | $51 \%$ | $49 \%$ |
| Note: Percentages based on each educational category. |  |  |  |  |

Positions requiring an advanced degree are usually associated with a high concentration of vacancies at a level requiring specific experience in the occupation. These are career occupations usually achieved only through commitment to high levels of education in addition to gaining experience in the field through paid employment positions as well as from internships and apprenticeships. In the Pikes Peak Region, most employers are expecting new hires to have some level of experience regardless of educational requirements for the position.

In a tight labor market, employers may be willing to trade experience levels for educational attainment, and vice versa, according to the specifications of the position offered and the skills and training that the applicants possess. During an economic downturn though, employers can command higher levels of education and experience due to the increased number of job seekers available to work.The majority of positions requiring no diploma or only a high school education require lower levels of experience. These are occupations that can be easily learned through on-the-job training.

## Vacancies: Difficulty to Fill

 o measure the level of difficulty in filling vacancies, employer's perception of difficulty as well as data on how long each position had been open at the time of the survey were gathered. Most employers responding to the survey were willing to provide some kind of indication of difficulty to fill. Only $15 \%$ of the vacancies reported are classified as very difficult to fill. While one-third of the responding employers believed open positions were not difficult to fill, approximately half of the reported vacancies were considered somewhere in between (Figure 15).

Knowing how long a position has been open helps analyze the subjectivity of the response to the question about how difficult it is to fill a vacancy. While some employers may consider a vacancy to be difficult to fill when it has been open for 30 to 60 days, another employer may consider a similar vacancy not difficult to fill given the same time frame.

Results show that about two-thirds of the area's vacancies are reported as at least somewhat difficult to fill. While it could be that the job seeker's skills do not match those required for the desired position, the vacancy could
also be related to lower-than-expected wages or require a longer commute to work. The inconsistency of the perceptions of difficulty to fill adds to the challenge of interpreting hiring difficulty.

Figure 16: Average Wages by Difficulty to Fill


Positions considered easiest to fill offer lower wages, as would be expected, and positions employers report as difficult to fill offer the higher wages. Vacancies considered somewhat difficult fill offer average wages between $\$ 12.10$ and $\$ 15.60$ per hour - close to the overall average wage rate. These are vacancies in Food Preparation and Serving Related, Installation, Maintenance and Repair, and Healthcare Practitioners and Technical, most requiring Vocational Training/Certification and/or experience.

Positions considered difficult to fill, for this survey, tend toward occupational groups requiring more advanced levels of education and require experience in the occupation. A large proportion of these vacancies have been open for over 60 days. Average wages are $\$ 15.40$ to $\$ 21.00$ per hour for occupations in Healthcare Practitioners and Technical; Education, Training, and Library; Architecture and Engineering.


Figure 18: Average Wages by Time Open for Hire

| \$0 |  |  |  | \$5 |  |  | \$10 |  |  | \$15 |  |  | \$20 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 60 or More Days |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30 to 59 Days |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less Than 30 Days |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Always Hiring |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |
| \$0 |  |  | \$5 |  |  | \$10 |  |  | \$15 |  |  | \$20 |  |  |  | \$25 |  |  |
| \| | JVS Wage - Average Minimum / Average Maximum |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

For this survey, the highest wages offered are for positions that are open for 30 to 59 days, in which case the wage is representative of the skilled nature of the position. It appears that wage ranges fall into two overall ranges; wages more representative of the overall average, and higher wages offered to fill vacancies
requiring more education and thus, are more difficult to fill. For this survey, these are all full-time positions with at least two-thirds appearing in the healthcare industry. Once again, this may imply a shortage of skilled healthcare workers in the Pikes Peak Region.


## Vacancies: Medical Insurance

Almost all of the vacancies reported by employers include some form of medical insurance. Employers offer to pay the entire premium $13 \%$ of the time and a portion of the premium for $84 \%$ of the vacancies. Just over half of the vacancies associated with no monetary contribution toward the premium are part-time positions.

There is a clear correlation in the survey between higher paying jobs and greater contributions toward medical insurance premiums. As higher paying jobs require higher levels of education and experience, employers offer better medical insurance packages to attract qualified candidates.

Figure 20: Average Wages by Medical Insurance


Figure 19:
Employer's Contribution to Medical Insurance


## Sign-On Bonus



## Occupations

The distribution of vacancies varies among the 22 major occupational groups. For this survey, nearly $25 \%$ of all vacancies are in the Healthcare Practitioners \& Technical occupations with an additional 4\% in Healthcare Support occupations. Most of these require a minimum of two years of education. On average, these positions take longer to fill. Office \& Administrative Support and Sales \& Related
together make up another $23 \%$ of the region's vacancies. The majority of these positions do not require post-secondary education and the vacancies reported are open less than 30 days. According to the data compiled, there are continued openings for the higher paid positions in Computer \& Mathematical as well as in Education, Training, \& Library occupations among other popular occupation groups.

Figure 22: Proportion of Actual Vacancies by Major Occupational Group


Occupational groups with the highest level of wages are found in the Architecture \& Engineering; Computer \& Mathematical; Healthcare Practitioners and Technical; Community \& Social Services; Business \& Financial Operations; and Management groups. Wage ranges within these groups tend to vary according to the more specific characteristics of the job vacancy. On average, these occupations require higher levels of education and experience. For this survey, almost half of all vacancies are found within
these higher paid groups. Though vacancies found within Installation, Maintenance, \& Repair; Personal Care \& Service; and Production offer slightly lower wage rates, there are more opportunities available in these occupational groups. A moderate proportion of vacancies fall within the Food Preparation \& Serving Related as well as a high proportion in Office \& Administrative Support groups. While these occupations have the fewest education and experience restrictions, they also offer lower pay.

Figure 23: Average Wages by Major Occupational Group


[^0]Table 3: Job Vacancy Survey Occupations with OES Wages

|  |  |  |  | Occupational Employment Statistics Wage Data (2001) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Average Wages |  |  | Percentile Distribution |  |  |  |  |
| SOC Code | SOC Occupation Title | Vacancy Rank | Average JVS Wage | EntryLevel | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 11-0000 | Management Occupations |  |  | \$18.55 | \$33.32 | \$40.71 | \$15.99 | \$21.94 | \$30.42 | \$42.08 | \$59.11 |
| 11-1021 | General and Operations Managers | L | \$11.80 | \$18.51 | \$32.69 | \$39.78 | \$16.11 | \$21.44 | \$28.16 | \$40.34 | \$59.12 |
| 11-2021 | Marketing Managers | L | \$26.70 | \$20.96 | \$35.32 | \$42.51 | \$18.65 | \$24.16 | \$32.05 | \$45.00 | \$59.11 |
| 11-2022 | Sales Managers | L | \$0.00 | \$21.02 | \$41.19 | \$51.27 | \$19.40 | \$23.59 | \$35.68 | \$59.12 | \$71.93 |
| 11-2031 | Public Relations Managers | L | \$21.60 | \$15.30 | \$32.68 | \$41.38 | \$14.20 | \$16.74 | \$22.73 | \$59.11 | \$59.12 |
| 11-3011 | Administrative Services Managers | L | \$15.60 | \$14.36 | \$26.30 | \$32.27 | \$12.42 | \$16.75 | \$23.14 | \$33.72 | \$43.52 |
| 11-3021 | Computer and Information Systems Managers | L | \$36.10 | \$27.70 | \$40.93 | \$47.55 | \$25.43 | \$31.36 | \$39.58 | \$50.90 | \$62.11 |
| 11-3031 | Financial Managers | L | \$18.00 | \$19.93 | \$31.64 | \$37.48 | \$17.74 | \$22.61 | \$29.07 | \$39.38 | \$49.66 |
| 11-3051 | Industrial Production Managers | L | \$37.30 | \$18.69 | \$34.73 | \$42.75 | \$16.83 | \$21.27 | \$31.73 | \$47.29 | \$59.11 |
| 11-9032 | Education Administrators, Elementary and Secondary School | M | \$31.70 | + | $\dagger$ | + | $t$ | + | + | + | + |
| 11-9033 | Education Administrators, Postsecondary | L | \$28.40 | \$16.48 | \$30.09 | \$36.91 | \$15.25 | \$18.56 | \$24.29 | \$36.58 | \$62.03 |
| 11-9041 | Engineering Managers | L | \$57.50 | \$31.34 | \$45.13 | \$52.03 | \$27.82 | \$36.33 | \$44.46 | \$55.73 | \$64.85 |
| 11-9081 | Lodging Managers | L | \$14.40 | \$11.97 | \$17.17 | \$19.76 | \$11.89 | \$13.01 | \$16.41 | \$21.28 | \$25.49 |
| 11-9111 | Medical and Health Services Managers | M | \$13.30 | \$18.20 | \$25.69 | \$29.43 | \$17.72 | \$19.72 | \$23.56 | \$29.91 | \$38.93 |
| 11-9121 | Natural Sciences Managers | L | \$0.00 | \$21.65 | \$35.45 | \$42.34 | \$19.67 | \$24.33 | \$35.79 | \$44.04 | \$54.17 |
| 11-9141 | Property, Real Estate, and Community Association Managers | L | \$0.00 | \$9.65 | \$15.20 | \$17.97 | \$9.19 | \$10.50 | \$12.83 | \$18.20 | \$25.41 |
| 11-9199 | Managers, All Other | M | \$22.60 | \$22.23 | \$32.10 | \$37.03 | \$19.49 | \$26.41 | \$31.83 | \$37.79 | \$46.96 |
| 13-0000 | Business and Financial Operations Occupations |  |  | \$14.35 | \$21.99 | \$25.80 | \$13.23 | \$16.50 | \$20.75 | \$26.35 | \$33.05 |
| 13-1031 | Claims Adjusters, Examiners, and Investigators | L | \$0.00 | \$16.44 | \$22.67 | \$25.78 | \$14.88 | \$18.20 | \$22.02 | \$27.29 | \$32.52 |
| 13-1032 | Insurance Appraisers, Auto Damage | L | \$9.30 | \$18.04 | \$20.72 | \$22.06 | \$16.77 | \$18.80 | \$20.73 | \$22.93 | \$26.09 |
| 13-1071 | Employment, Recruitment, and Placement Specialists | L | \$0.00 | \$12.59 | \$17.57 | \$20.07 | \$11.54 | \$14.28 | \$16.76 | \$21.45 | \$25.86 |
| 13-1199 | Business Operations Specialists, All Other | L | \$21.40 | \$14.69 | \$23.66 | \$28.15 | \$13.80 | \$17.74 | \$23.43 | \$29.10 | \$34.96 |
| 13-2011 | Accountants and Auditors | M | \$10.80 | \$15.09 | \$22.21 | \$25.78 | \$13.88 | \$17.09 | \$20.99 | \$26.15 | \$33.36 |
| 13-2031 | Budget Analysts | L | \$33.70 | \$17.77 | \$22.94 | \$25.52 | \$16.31 | \$18.87 | \$22.03 | \$26.96 | \$32.20 |
| 13-2051 | Financial Analysts | L | \$24.80 | \$18.01 | \$27.48 | \$32.22 | \$16.49 | \$19.42 | \$25.53 | \$35.99 | \$41.99 |

[^1]$\ddagger \quad$ L - Lowest $25 \%$ of actual vacancies
M - Middle 50\% of actual vacancies
H - Highest $25 \%$ of actual vacancies

Table 3: Job Vacancy Survey Occupations with OES Wages - Page 2


[^2]$\ddagger$ L- Lowest $25 \%$ of actual vacancies M - Middle 50\% of actual vacancies H - Highest 25\% of actual vacancies

Table 3: Job Vacancy Survey Occupations with OES Wages - Page 3

|  |  |  |  | Occupational Employment Statistics Wage Data (2001) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Average Wages |  |  | Percentile Distribution |  |  |  |  |
| SOC Code | SOC Occupation Title | Vacancy Rank | $\begin{array}{\|c\|} \hline \text { Average } \\ \text { JVS } \\ \text { Wage } \\ \hline \end{array}$ | Entry- <br> Level | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 21-1011 | Substance Abuse and Behavioral Disorder Counselors | L | \$9.00 | \$12.30 | \$17.13 | \$19.55 | \$10.65 | \$14.10 | \$16.94 | \$20.73 | \$23.65 |
| 21-1021 | Child, Family, and School Social Workers | L | \$16.80 | \$13.04 | \$18.69 | \$21.50 | \$12.12 | \$14.08 | \$16.84 | \$21.58 | \$27.65 |
| 21-1092 | Probation Officers and Correctional Treatment Specialists | L | \$18.80 | \$17.39 | \$23.60 | \$26.71 | \$15.86 | \$19.50 | \$24.13 | \$27.55 | \$32.13 |
| 23-0000 | Legal Occupations |  |  | \$14.56 | \$32.50 | \$41.45 | \$13.88 | \$16.50 | \$36.05 | \$44.56 | \$53.88 |
| 23-2011 | Paralegals and Legal Assistants | L | \$19.90 | \$13.56 | \$15.82 | \$16.95 | \$12.41 | \$14.22 | \$15.61 | \$16.97 | \$19.31 |
| 25-0000 | Education, Training, and Library Occupations |  |  | \$10.22 | \$17.81 | \$21.60 | \$8.79 | \$12.12 | \$16.45 | \$21.99 | \$28.05 |
| 25-1021 | Computer Science Teachers, Postsecondary | L | \$0.00 | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |
| 25-1022 | Mathematical Science Teachers, Postsecondary | L | \$0.00 | $\dagger$ | $\dagger$ | $\dagger$ | + | + | + | $\dagger$ | + |
| 25-1071 | Health Specialties Teachers, Postsecondary | L | \$18.50 | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |
| 25-1072 | Nursing Instructors and Teachers, Postsecondary | L | \$0.00 | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |
| 25-1199 | Postsecondary Teachers, All Other | L | \$0.00 | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |
| 25-2011 | Preschool Teachers, Except Special Education | M | \$7.50 | \$7.43 | \$10.70 | \$12.34 | \$7.10 | \$7.96 | \$9.58 | \$11.01 | \$18.11 |
| 25-2021 | Elementary School Teachers, Except Special Education | L | \$13.50 | $\dagger$ | $\dagger$ | $\dagger$ | + | $\dagger$ | $\dagger$ | $\dagger$ | + |
| 25-2041 | Special Education Teachers, Preschool, Kindergarten, and Elementary School | L | \$8.70 | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |
| 25-3021 | Self-Enrichment Education Teachers | L | \$13.40 | \$9.57 | \$12.09 | \$13.36 | \$9.18 | \$9.94 | \$11.20 | \$13.06 | \$16.25 |
| 25-4021 | Librarians | L | \$14.00 | \$13.81 | \$19.31 | \$22.07 | \$12.97 | \$15.84 | \$19.36 | \$23.16 | \$26.65 |
| 25-4031 | Library Technicians | L | \$16.80 | \$9.72 | \$12.24 | \$13.50 | \$9.26 | \$10.16 | \$11.82 | \$13.71 | \$16.49 |
| 27-0000 | Arts, Design, Entertainment, Sports, and Media Occupations |  |  | \$9.53 | \$18.22 | \$22.56 | \$8.99 | \$10.72 | \$15.05 | \$22.00 | \$33.28 |
| 27-1025 | Interior Designers | L | \$12.00 | \$12.88 | \$25.39 | \$31.65 | \$12.17 | \$13.10 | \$28.20 | \$38.30 | \$43.52 |
| 27-2022 | Coaches and Scouts | L | \$11.20 | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |  | $\dagger$ |
| 27-3041 | Editors | L | \$25.30 | \$13.52 | \$19.15 | \$21.96 | \$12.32 | \$14.99 | \$17.80 | \$22.13 | \$27.55 |
| 27-3042 | Technical Writers | L | \$12.50 | \$16.23 | \$23.01 | \$26.41 | \$15.53 | \$17.32 | \$21.56 | \$27.35 | \$33.25 |

[^3]$\ddagger$ L - Lowest $25 \%$ of actual vacancies M - Middle 50\% of actual vacancies H - Highest $25 \%$ of actual vacancies

Table 3: Job Vacancy Survey Occupations with OES Wages - Page 4


* OES wages reported for Colorado statewide
$\dagger$ No wage data available
$\ddagger \quad$ L - Lowest $25 \%$ of actual vacancies
M - Middle 50\% of actual vacancies
H - Highest $25 \%$ of actual vacancies

Table 3: Job Vacancy Survey Occupations with OES Wages - Page 5


[^4]$\ddagger \quad \mathrm{L}$ - Lowest $25 \%$ of actual vacancies M - Middle $50 \%$ of actual vacancies H - Highest $25 \%$ of actual vacancies

Table 3: Job Vacancy Survey Occupations with OES Wages - Page 6

|  |  |  |  | Occupational Employment Statistics Wage Data (2001) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Average Wages |  |  | Percentile Distribution |  |  |  |  |
| $\begin{aligned} & \text { SOC } \\ & \text { Code } \end{aligned}$ | SOC Occupation Title | Vacancy Rank | $\begin{gathered} \hline \text { Average } \\ \text { JVS } \\ \text { Wage } \end{gathered}$ | EntryLevel | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 41-2031 | Retail Salespersons | H | \$8.80 | \$6.54 | \$10.15 | \$11.95 | \$6.03 | \$7.05 | \$8.20 | \$10.73 | \$17.28 |
| 41-3011 | Advertising Sales Agents | L | \$0.00 | \$11.47 | \$20.64 | \$25.23 | \$10.21 | \$13.13 | \$17.62 | \$23.02 | \$36.01 |
| 41-3021 | Insurance Sales Agents | L | \$0.00 | \$11.64 | \$20.29 | \$24.60 | \$10.82 | \$12.41 | \$14.76 | \$21.78 | \$39.16 |
| 41-3041 | Travel Agents | L | \$9.50 | \$9.34 | \$11.31 | \$12.29 | \$9.06 | \$9.72 | \$10.84 | \$12.92 | \$15.30 |
| 41-3099 | Sales Representatives, Services, All Other | L | \$8.30 | \$13.24 | \$23.14 | \$28.08 | \$12.18 | \$14.55 | \$18.07 | \$35.53 | \$41.12 |
| 41-4011 | Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products | L | \$15.60 | \$19.09 | \$32.35 | \$38.98 | \$16.49 | \$22.54 | \$30.69 | \$41.46 | \$53.24 |
| 41-9022 | Real Estate Sales Agents | L | \$8.00 | \$7.53 | \$13.71 | \$16.80 | \$7.14 | \$8.24 | \$10.70 | \$18.13 | \$21.69 |
| 41-9031 | Sales Engineers | L | \$0.00 | \$22.62 | \$30.52 | \$34.47 | \$22.69 | \$24.48 | \$27.47 | \$35.25 | \$47.16 |
| 41-9041 | Telemarketers | M | \$11.80 | \$6.06 | \$8.12 | \$9.15 | \$5.83 | \$6.42 | \$7.53 | \$8.93 | \$11.31 |
| 41-9099 | Sales and Related Workers, All Other | L | \$5.20 | \$7.84 | \$15.73 | \$19.68 | \$6.59 | \$9.38 | \$13.17 | \$19.73 | \$27.64 |
| 43-0000 | Office and Administrative Support Occupations |  |  | \$8.77 | \$13.05 | \$15.19 | \$8.01 | \$9.65 | \$11.99 | \$15.77 | \$19.79 |
| 43-1011 | First-Line Supervisors/Managers of Office and Administrative Support Workers | L | \$16.60 | \$11.95 | \$19.43 | \$23.17 | \$11.16 | \$13.37 | \$17.48 | \$22.73 | \$32.09 |
| 43-2011 | Switchboard Operators, Including Answering Service | L | \$7.50 | \$8.12 | \$9.96 | \$10.88 | \$7.65 | \$8.59 | \$9.83 | \$10.96 | \$12.79 |
| 43-3011 | Bill and Account Collectors | L | \$16.80 | \$9.75 | \$15.41 | \$18.23 | \$8.64 | \$11.40 | \$17.02 | \$19.82 | \$21.29 |
| 43-3031 | Bookkeeping, Accounting, and Auditing Clerks | L | \$9.30 | \$9.51 | \$12.53 | \$14.05 | \$9.21 | \$10.19 | \$11.94 | \$14.39 | \$17.08 |
| 43-3051 | Payroll and Timekeeping Clerks | L | \$0.00 | \$11.34 | \$13.80 | \$15.03 | \$10.55 | \$12.06 | \$13.61 | \$15.85 | \$17.57 |
| 43-3061 | Procurement Clerks | L | \$9.00 | \$11.00 | \$14.34 | \$16.02 | \$10.11 | \$11.83 | \$14.47 | \$16.54 | \$18.27 |
| 43-3071 | Tellers | L | \$9.80 | \$7.79 | \$9.16 | \$9.84 | \$7.42 | \$8.02 | \$8.98 | \$10.25 | \$11.12 |
| 43-4021 | Correspondence Clerks | L | \$10.50 | \$9.31 | \$11.49 | \$12.58 | \$9.01 | \$9.87 | \$11.14 | \$13.11 | \$15.86 |
| 43-4031 | Court, Municipal, and License Clerks | L | \$16.60 | \$11.36 | \$14.46 | \$16.03 | \$10.38 | \$11.96 | \$13.70 | \$16.91 | \$20.05 |
| 43-4051 | Customer Service Representatives | H | \$10.80 | \$8.66 | \$13.05 | \$15.24 | \$7.86 | \$9.68 | \$12.42 | \$15.79 | \$19.70 |
| 43-4071 | File Clerks | L | \$10.00 | \$8.40 | \$9.90 | \$10.66 | \$7.81 | \$8.96 | \$9.88 | \$10.81 | \$12.24 |
| 43-4081 | Hotel, Motel, and Resort Desk Clerks | L | \$7.50 | \$7.90 | \$8.37 | \$8.60 | \$7.29 | \$7.64 | \$8.23 | \$8.82 | \$10.14 |
| 43-4111 | Interviewers, Except Eligibility and Loan | L | \$10.00 | \$7.63 | \$9.85 | \$10.96 | \$6.36 | \$8.92 | \$10.07 | \$11.27 | \$12.98 |
| 43-4131 | Loan Interviewers and Clerks | L | \$15.60 | \$11.39 | \$14.13 | \$15.50 | \$10.39 | \$12.25 | \$14.10 | \$16.22 | \$17.61 |

* OES wages reported for Colorado statewide
$\dagger$ No wage data available
$\ddagger \quad$ L- Lowest $25 \%$ of actual vacancies
M - Middle 50\% of actual vacancies
H - Highest $25 \%$ of actual vacancies

Table 3: Job Vacancy Survey Occupations with OES Wages - Page 7

|  |  |  |  | Occupational Employment Statistics Wage Data (2001) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Average Wages |  |  | Percentile Distribution |  |  |  |  |
| $\begin{aligned} & \text { SOC } \\ & \text { Code } \end{aligned}$ | SOC Occupation Title | Vacancy Rank | $\begin{array}{\|c\|} \hline \text { Average } \\ \text { JVS } \\ \text { Wage } \\ \hline \end{array}$ | Entry- <br> Level | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 43-4141 | New Accounts Clerks | M | \$27.20 | \$8.91 | \$10.91 | \$11.90 | \$8.27 | \$9.27 | \$10.75 | \$12.68 | \$13.85 |
| 43-4151 | Order Clerks | M | \$11.00 | \$7.33 | \$10.29 | \$11.78 | \$6.81 | \$7.93 | \$9.58 | \$11.99 | \$15.04 |
| 43-4171 | Receptionists and Information Clerks | H | \$9.80 | \$7.74 | \$10.58 | \$12.01 | \$7.33 | \$8.59 | \$10.12 | \$12.05 | \$15.60 |
| 43-5021 | Couriers and Messengers | L | \$6.00 | \$7.60 | \$9.57 | \$10.56 | \$7.29 | \$8.18 | \$9.63 | \$10.69 | \$11.43 |
| 43-5031 | Police, Fire, and Ambulance Dispatchers | L | \$17.80 | \$12.50 | \$15.43 | \$16.89 | \$12.03 | \$13.71 | \$15.51 | \$17.15 | \$19.07 |
| 43-5032 | Dispatchers, Except Police, Fire, and Ambulance | L | \$7.50 | \$8.71 | \$12.19 | \$13.93 | \$7.93 | \$9.58 | \$12.36 | \$14.33 | \$16.59 |
| 43-5041 | Meter Readers, Utilities | L | \$11.80 | \$12.29 | \$13.65 | \$14.33 | \$11.45 | \$12.07 | \$13.12 | \$14.71 | \$17.24 |
| 43-5071 | Shipping, Receiving, and Traffic Clerks | L | \$8.00 | \$8.37 | \$11.05 | \$12.40 | \$7.82 | \$8.99 | \$10.61 | \$12.94 | \$15.51 |
| 43-5081 | Stock Clerks and Order Fillers | L | \$6.60 | \$7.63 | \$11.36 | \$13.23 | \$7.15 | \$8.49 | \$10.28 | \$13.88 | \$18.17 |
| 43-6011 | Executive Secretaries and Administrative Assistants | L | \$9.70 | \$12.05 | \$16.08 | \$18.09 | \$11.47 | \$13.21 | \$15.66 | \$18.27 | \$21.76 |
| 43-6013 | Medical Secretaries | M | \$12.40 | \$9.85 | \$11.99 | \$13.06 | \$9.35 | \$10.13 | \$11.42 | \$13.99 | \$16.08 |
| 43-6014 | Secretaries, Except Legal, Medical, and Executive | M | \$9.30 | \$9.10 | \$12.51 | \$14.22 | \$8.88 | \$10.12 | \$12.21 | \$14.90 | \$17.08 |
| 43-9011 | Computer Operators | L | \$0.00 | \$11.49 | \$16.41 | \$18.86 | \$10.92 | \$12.93 | \$16.13 | \$20.02 | \$22.14 |
| 43-9061 | Office Clerks, General | L | \$11.50 | \$8.63 | \$12.01 | \$13.70 | \$7.81 | \$9.44 | \$11.03 | \$13.84 | \$18.68 |
| 45-0000 | Farming, Fishing, and Forestry Occupations |  |  | \$7.59 | \$10.88 | \$12.53 | \$7.33 | \$8.48 | \$10.15 | \$12.37 | \$16.33 |
| 45-2093 | Farmworkers, Farm and Ranch Animals | L | \$8.00 | \$6.19 | \$10.16 | \$12.16 | \$5.98 | \$6.64 | \$9.40 | \$14.92 | \$16.93 |
| 47-0000 | Construction and Extraction Occupations |  |  | \$10.63 | \$16.38 | \$19.27 | \$9.63 | \$12.05 | \$15.85 | \$20.24 | \$24.55 |
| 47-1011 | First-Line Supervisors/Managers of Construction Trades and Extraction Workers | M | \$11.10 | \$15.56 | \$22.01 | \$25.24 | \$13.72 | \$17.95 | \$21.73 | \$26.55 | \$31.34 |
| 47-2031 | Carpenters | L | \$16.50 | \$10.02 | \$14.76 | \$17.14 | \$9.03 | \$11.41 | \$15.00 | \$18.16 | \$20.87 |
| 47-2051 | Cement Masons and Concrete Finishers | L | \$16.50 | \$11.40 | \$15.72 | \$17.88 | \$10.43 | \$13.01 | \$15.58 | \$18.26 | \$21.74 |
| 47-2061 | Construction Laborers | L | \$9.80 | \$8.96 | \$11.94 | \$13.42 | \$8.20 | \$9.66 | \$11.61 | \$13.79 | \$16.63 |
| 47-2073 | Operating Engineers and Other Construction Equipment Operators | L | \$13.00 | \$14.15 | \$17.94 | \$19.83 | \$13.06 | \$15.71 | \$18.44 | \$20.62 | \$21.93 |
| 47-2081 | Drywall and Ceiling Tile Installers | L | \$14.00 | \$8.72 | \$12.36 | \$14.18 | \$7.93 | \$9.15 | \$10.64 | \$15.98 | \$18.06 |
| 47-2121 | Glaziers | L | \$8.60 | \$9.52 | \$13.37 | \$15.31 | \$8.86 | \$10.66 | \$13.50 | \$15.85 | \$17.55 |
| 47-2141 | Painters, Construction and Maintenance | L | \$15.00 | \$11.77 | \$13.91 | \$14.99 | \$11.25 | \$12.24 | \$13.67 | \$15.81 | \$17.32 |

* OES wages reported for Colorado statewide
$\dagger$ No wage data available
$\ddagger$ L-Lowest $25 \%$ of actual vacancies
M - Middle 50\% of actual vacancies H - Highest $25 \%$ of actual vacancies

Table 3: Job Vacancy Survey Occupations with OES Wages - Page 8

|  |  |  |  | Occupational Employment Statistics Wage Data (2001) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Average Wages |  |  | Percentile Distribution |  |  |  |  |
| $\begin{aligned} & \text { SOC } \\ & \text { Code } \end{aligned}$ | SOC Occupation Title | Vacancy Rank | $\begin{gathered} \hline \text { Average } \\ \text { JVS } \\ \text { Wage } \end{gathered}$ | EntryLevel | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 47-2152 | Plumbers, Pipefitters, and Steamfitters | M | \$22.40 | \$13.38 | \$18.03 | \$20.36 | \$11.84 | \$15.04 | \$18.20 | \$21.22 | \$23.86 |
| 47-3014 | Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons | L | \$7.30 | \$6.16 | \$9.11 | \$10.58 | \$5.89 | \$6.47 | \$9.17 | \$11.06 | \$13.88 |
| 47-3015 | Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters | L | \$10.00 | \$9.52 | \$10.41 | \$10.87 | \$8.96 | \$9.60 | \$10.44 | \$11.29 | \$12.59 |
| 49-0000 | Installation, Maintenance, and Repair Occupations |  |  | \$10.65 | \$17.06 | \$20.26 | \$9.68 | \$12.18 | \$16.34 | \$21.14 | \$26.11 |
| 49-1011 | First-Line Supervisors/Managers of Mechanics, Installers, and Repairers | L | \$0.00 | \$17.12 | \$22.31 | \$24.91 | \$15.73 | \$18.18 | \$20.82 | \$25.79 | \$32.43 |
| 49-2096 | Electronic Equipment Installers and Repairers, Motor Vehicles | L | \$10.50 | \$8.18 | \$11.03 | \$12.44 | \$6.76 | \$9.16 | \$10.36 | \$12.78 | \$16.45 |
| 49-2098 | Security and Fire Alarm Systems Installers | L | \$12.50 | \$15.64 | \$19.04 | \$20.74 | \$12.77 | \$18.56 | \$20.08 | \$21.61 | \$22.53 |
| 49-3021 | Automotive Body and Related Repairers | L | \$0.00 | \$14.25 | \$19.66 | \$22.36 | \$12.73 | \$16.47 | \$19.60 | \$22.04 | \$27.86 |
| 49-3023 | Automotive Service Technicians and Mechanics | H | \$14.50 | \$10.24 | \$16.48 | \$19.60 | \$9.34 | \$11.40 | \$16.12 | \$20.50 | \$25.46 |
| 49-3031 | Bus and Truck Mechanics and Diesel Engine Specialists | L | \$15.50 | \$11.94 | \$15.51 | \$17.31 | \$11.26 | \$13.46 | \$15.58 | \$17.37 | \$20.38 |
| 49-3042 | Mobile Heavy Equipment Mechanics, Except Engines | L | \$9.00 | \$13.88 | \$16.71 | \$18.13 | \$12.75 | \$14.53 | \$16.25 | \$18.43 | \$21.69 |
| 49-9021 | Heating, Air Conditioning, and Refrigeration Mechanics and Installers | L | \$13.50 | \$10.79 | \$14.80 | \$16.80 | \$9.90 | \$11.61 | \$14.61 | \$16.77 | \$20.81 |
| 49-9031 | Home Appliance Repairers | L | \$0.00 | \$7.96 | \$10.83 | \$12.26 | \$7.59 | \$8.42 | \$10.71 | \$13.03 | \$14.46 |
| 49-9042 | Maintenance and Repair Workers, General | M | \$12.70 | \$9.00 | \$14.00 | \$16.50 | \$8.47 | \$10.28 | \$13.02 | \$17.22 | \$21.70 |
| 49-9051 | Electrical Power-Line Installers and Repairers | L | \$16.50 | \$18.34 | \$22.55 | \$24.66 | \$16.70 | \$20.15 | \$23.53 | \$25.93 | \$27.38 |
| 49-9052 | Telecommunications Line Installers and Repairers | M | \$0.00 | \$13.38 | \$23.29 | \$28.26 | \$11.85 | \$15.27 | \$20.01 | \$32.38 | \$42.30 |
| 49-9099 | Installation, Maintenance, and Repair Workers, All Other | L | \$9.80 | \$10.35 | \$16.31 | \$19.29 | \$8.98 | \$11.82 | \$15.61 | \$21.28 | \$25.20 |
| 51-0000 | Production Occupations |  |  | \$8.17 | \$12.23 | \$14.25 | \$7.57 | \$8.85 | \$10.86 | \$14.07 | \$19.17 |
| 51-1011 | First-Line Supervisors/Managers of Production and Operating Workers | L | \$14.90 | \$13.72 | \$20.92 | \$24.53 | \$12.59 | \$14.90 | \$19.81 | \$26.09 | \$31.99 |

[^5]$\ddagger \quad$ L - Lowest $25 \%$ of actual vacancies
M - Middle 50\% of actual vacancies
H - Highest 25\% of actual vacancies

Table 3: Job Vacancy Survey Occupations with OES Wages - Page 9

|  |  |  |  | Occupational Employment Statistics Wage Data (2001) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Average Wages |  |  | Percentile Distribution |  |  |  |  |
| SOC Code | SOC Occupation Title | Vacancy Rank | Average JVS Wage | EntryLevel | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 51-2022 | Electrical and Electronic Equipment Assemblers | L | \$10.10 | \$7.67 | \$9.97 | \$11.13 | \$7.33 | \$8.11 | \$9.52 | \$11.17 | \$13.72 |
| 51-4041 | Machinists | M | \$11.30 | \$8.98 | \$12.47 | \$14.22 | \$8.18 | \$9.52 | \$11.31 | \$15.39 | \$18.22 |
| 51-4111 | Tool and Die Makers | L | \$0.00 | \$15.68 | \$18.96 | \$20.60 | \$14.79 | \$17.20 | \$19.33 | \$21.17 | \$22.37 |
| 51-5011 | Bindery Workers | L | \$10.00 | \$6.34 | \$9.13 | \$10.52 | \$5.98 | \$6.87 | \$8.04 | \$10.57 | \$14.74 |
| 51-6011 | Laundry and Dry-Cleaning Workers | L | \$9.30 | \$6.07 | \$7.58 | \$8.33 | \$5.87 | \$6.59 | \$7.61 | \$8.51 | \$9.61 |
| 51-7011 | Cabinetmakers and Bench Carpenters | L | \$12.50 | \$8.23 | \$11.81 | \$13.60 | \$7.76 | \$8.70 | \$10.03 | \$12.86 | \$20.56 |
| 51-8099 | Plant and System Operators, All Other | L | \$0.00 | \$9.93 | \$15.72 | \$18.62 | \$7.48 | \$12.63 | \$16.03 | \$19.40 | \$21.78 |
| 51-9122 | Painters, Transportation Equipment | L | \$7.00 | \$13.90 | \$15.38 | \$16.12 | \$13.98 | \$14.58 | \$15.59 | \$16.60 | \$17.21 |
| 51-9131 | Photographic Process Workers | L | \$9.10 | \$9.82 | \$12.35 | \$13.62 | \$9.36 | \$10.22 | \$11.84 | \$13.86 | \$17.35 |
| 51-9199 | Production Workers, All Other | L | \$10.60 | \$7.63 | \$10.20 | \$11.48 | \$6.53 | \$8.83 | \$9.99 | \$11.11 | \$13.85 |
| 53-0000 | Transportation and Material Moving Occupations |  |  | \$7.23 | \$11.44 | \$13.56 | \$6.54 | \$8.19 | \$10.41 | \$13.53 | \$17.44 |
| 53-1031 | First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle | L | \$13.90 | \$13.49 | \$21.48 | \$25.48 | \$10.92 | \$16.15 | \$21.04 | \$25.64 | \$29.31 |
| 53-3022 | Bus Drivers, School | L | \$8.00 | \$9.37 | \$11.63 | \$12.76 | \$9.15 | \$10.00 | \$11.39 | \$13.22 | \$15.31 |
| 53-3031 | Driver/Sales Workers | L | \$19.50 | \$6.02 | \$9.15 | \$10.72 | \$5.66 | \$6.15 | \$7.29 | \$12.04 | \$13.76 |
| 53-3032 | Truck Drivers, Heavy and Tractor-Trailer | M | \$12.00 | \$11.33 | \$15.01 | \$16.84 | \$10.49 | \$12.08 | \$14.00 | \$17.22 | \$21.41 |
| 53-3033 | Truck Drivers, Light or Delivery Services | M | \$10.70 | \$8.46 | \$12.56 | \$14.61 | \$7.73 | \$9.22 | \$10.80 | \$14.23 | \$23.02 |
| 53-3041 | Taxi Drivers and Chauffeurs | M | \$16.40 | \$6.06 | \$7.19 | \$7.75 | \$5.67 | \$6.07 | \$6.74 | \$8.13 | \$10.09 |
| 53-7032 | Excavating and Loading Machine and Dragline Operators | L | \$13.60 | \$13.44 | \$15.69 | \$16.80 | \$12.44 | \$14.30 | \$15.76 | \$17.22 | \$19.73 |
| 53-7062 | Laborers and Freight, Stock, and Material Movers, Hand | M | \$8.60 | \$7.37 | \$9.89 | \$11.15 | \$6.85 | \$8.25 | \$9.79 | \$10.94 | \$13.58 |
| 53-7064 | Packers and Packagers, Hand | L | \$10.60 | \$6.07 | \$8.39 | \$9.54 | \$5.76 | \$6.30 | \$7.24 | \$9.39 | \$14.52 |
| 53-7199 | Material Moving Workers, All Other | L | \$10.50 | \$7.77 | \$10.71 | \$12.18 | \$7.50 | \$8.49 | \$10.22 | \$12.77 | \$15.34 |

[^6]$\ddagger$ L-Lowest 25\% of actual vacancies
M - Middle 50\% of actual vacancies H - Highest $25 \%$ of actual vacancies

## Methodology

Many challenges exist in collecting and analyzing the data for the Job Vacancy Survey. Because methods selected to carry out a survey impact the final results, great effort is put into
making this survey statistically viable and, most importantly, accurate. Methods used in this survey will continue to be reviewed and, where statistical viability and accuracy can be improved, modified.

## Computer Assisted Telephone Interview

O
ur professional survey unit developed the
Computer Assisted Telephone Interview (CATI) to maximize accuracy and usefulness, while minimizing length and survey bias. In accordance with
recognized survey research standards, the following selection of questions are taken directly from the phone interview script.

## In General

1. How many employees do you have working within the region?
2. Do you have any job vacancies for which your firm is actively recruiting?
3. How many job vacancies is your firm recruiting to fill?

## For Each Vacancy

1. What is the job title?
2. Briefly, what are the job duties?
3. Which of the following best describes this vacancy?

- Full-time/Permanent
- Full-time/Temporary
- Part-time/Permanent
- Part-time/Temporary

4. What is the maximum wage offered for this vacancy?
5. What is the minimum wage offered for this vacancy?
6. Is a sign-on bonus offered? If yes, how much?
7. Is medical insurance offered?
8. If yes, does your firm pay the total cost of the premium, partial cost of the premium or do you make no contribution at all to the premium?
9. Which of the following best describes the education level required to fill this vacancy?

- No diploma required
- High School or GED diploma
- Two-year degree
- Bachelor's degree
- Advanced degree

10. What best describes the type of experience required to qualify for this vacancy?

- No experience is required
- General work experience
- Experience in a related field
- Experience in this occupation

11. How long has this vacancy been open?

- Less than 30 days
- 30 to 59 days
- 60 or more days
- Always hiring for this position

12. How difficult is this vacancy to fill?

- Not difficult
- Somewhat difficult
- Very difficult to fill


## Survey Sample Methodology

This survey is designed to estimate the number of vacancies in the region and to provide detailed vacancy characteristics. Employers with at least five employees are placed into either government or private industry categories. Firms with fewer than five employees make up a very large portion of all employers in the region, but a small proportion of total employment. The possibility of employing statistical methods to estimate vacancies for this group is currently being explored.

Private firms are grouped by employment level into either large or small to mid-size categories. Attempts are made to contact each large private employer and government agency in the region. Small to mid-size firms are further divided by major industry and randomly sampled until a representative response is obtained for each category.

The original list of private industry firms used for the survey, along with their contact information, staff size and industry classification is obtained from the America's Labor Market Information System (ALMIS) database. Government contact information is provided by the Colorado Department of Labor and Employment's ES-202 employer database.

## Data Editing

Once data collection is complete, measures are taken to prepare the data for analysis. To ensure accuracy, follow-up phone calls are made when employer responses need clarification.

## Occupational Coding

TThe job title and duties reported by employers are used to code vacancies in accordance with the latest release of the Standard Occupational Classification system. For more information on this occupational classification system, please refer to the definitions section.

## Wage Conversion

S tandard conversions are used to translate salaries into hourly wages: 2,080 hours for annual, 173.3 hours for monthly.

All wages reported below the Federal minimum wage are adjusted to that amount. Currently, the Federal minimum wage is $\$ 5.15$ per hour.

## Definitions

These definitions are meant to clarify data gathered for the Job Vacancy Survey. For other data sources referenced in the document, please see that source for a complete definition.

## 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.

## Average Minimum and Average Maximum Wage

When surveyed employers report wages offered for current vacancies, both a minimum and a maximum wage are recorded. All minimum wages are averaged to determine the reported average minimum wage. The same is true for the reported average maximum wage.

## Employer

A person or establishment that pays one or more people a wage or salary.

## Employment

Includes people who did any work for pay or profit in the reference period, worked 15 hours or more without pay in a family business or farm, or were temporarily absent from their jobs.

## Full-time and Part-time Employment

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

## Industry Classification

Employers are grouped into industries on the basis of their principal product or activity in accordance with the 1987 Standard Industrial Classification Manual.

## Job Seekers

People actively looking for employment or researching career options.

## Job Vacancy

A specific position of employment at an establishment with the condition that there is work available for the position and the employer is actively recruiting for the position. The definition does not include positions that are anticipated, but not yet created.

## Job Vacancy Rate

The number of openings in a specific industry or category expressed as a share of the total employment in that same industry.

## Labor Force

Consists of all employed or unemployed civilians who are eligible to work, plus members of the Armed Forces stationed in the United States.

## Level of Education

Refers to completed education programs - high school diplomas, associate, professional, vocational, bachelors, and graduate degrees all are examples of completed programs.

## Medical Insurance Premium

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

## Permanent and Temporary Employment

A vacancy is classified as permanent if it will be filled for more than six months. Temporary employment refers to those positions that will be filled for six months or less.

## Sign-on Bonus

An additional financial incentive offered by a firm to a new employee to influence his/her decision to agree to employment with that firm. The bonus, for purposes of this survey, is a monetary lump sum.

## SOC

The Standard Occupational Classification is a system for classifying all occupations in the economy, including private, public, and military occupations. This classification system replaces all occupational
classification systems previously used by Federal statistical agencies. It will be used by all Federal statistical agencies and programs collecting occupational data, providing a means to compare occupational data across agencies. It is designed to cover all occupations in which work is performed for pay or profit, reflecting the current occupational structure in the United States.

## Survey Sample Universe

All private industry and government employers with five or more employees in the region. Government entities are drawn from ES-202 while private companies come from the ALMIS database.

## Unemployment

Includes people 16 years of age and over who had no employment during the reference period, were
available for work (except for temporary illness), and have made specific efforts to find employment. People who did not look for work because they were on temporary layoff or waiting to start new jobs within the next thirty days are also counted among the unemployed.

## Unemployment rate

The unemployment rate represents the number unemployed as a percent of the labor force.

## Wage

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


[^0]:    | JVS Wage - Average Minimum / Average Maximum

[^1]:    * OES wages reported for Colorado statewide
    $\dagger$ No wage data available

[^2]:    * OES wages reported for Colorado statewide
    $\dagger$ No wage data available

[^3]:    * OES wages reported for Colorado statewide
    $\dagger$ No wage data available

[^4]:    * OES wages reported for Colorado statewide
    $\dagger$ No wage data available

[^5]:    * OES wages reported for Colorado statewide
    $\dagger$ No wage data available

[^6]:    * OES wages reported for Colorado statewide
    $\dagger$ No wage data available

