## Dikes Deak Region

## Job Vacancy Survey

Winter 2003


## Pikes Peak Job Vacancy

## Survey

## Conducted

February 18 - March 5, 2003

## State of Colorado

Bill Owens, Governor

## Colorado Department of Labor \& Employment

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Executive Director

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Figure 1：Colorado Job Vacancy Survey Regions


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 indica－ tor provides information about changes in the supply and demand for labor，it reveals nothing

## Introduction

## to the Colorado Job Vacancy Survey

 about the skills most sought after by employ－ ers．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 equal－ ly 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 meas－ ure of demand for workers 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 lev－ els 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 con－ ducting 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 origi－ nal 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 for each region in Colorado by Labor Market Information＇s office of Workforce Research and Analysis．

## Executive Summary

The winter Pikes Peak Job Vacancy Survey was conducted from February $18^{\text {th }}$ through March $5^{\text {th }}$, 2003. The goal of the survey is to provide current information on the demand for workers so that employers, job seekers, economic developers, educators, and workforce centers can make informed decisions in the Pikes Peak Region.

Over the survey period Government and large employers, as well as randomly selected small to mid-size employers with at least five employees, were contacted in the region. Employers are asked if they are actively hiring
at the time of the survey, and a variety of questions about positions they are seeking to fill.

A total of 1,888 employers representing $41 \%$ of the region's employment responded to the survey. Out of these, 64 are large employers ( 250 or more employees), 89 are Government employers, and 1,735 are from the small to mid-size category (five to 249 employees). The survey has a $73 \%$ response rate and a cooperation rate of $99 \%$. The margin of sampling error for the overall vacancy estimate is plus or minus $8 \%$, meaning that the true number of vacancies is between 1,245 and 1,461 . The major findings of the survey follow:

- It is estimated that a total of 1,353 jobs were open for hire in the Pikes Peak Region during the survey period. Down from 2,734 a year ago

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- Eight percent of the employers responding to the survey report having at least one vacancy
.Page 7
- Twenty-six percent of all vacancies are in Health Care and Social Assistance, 18\% are in Leisure and Hospitality, and $16 \%$ are in Trade, Transportation, and Utilities. The remaining $40 \%$ of the vacancies are in all other industries Page 7
- The average wage for all vacancies is $\$ 14.80$ per hour .Page 8
- Fifty-seven percent of vacancies are in small to mid-size firms and another $34 \%$ are in large firms. Only $9 \%$ of the region's vacancies are in Government agencies. These are similar to last year's reporting of vacancies
.Page 9
- Seventy-three percent of estimated vacancies are full-time permanent positions and an additional $21 \%$ are part-time permanent
.Page 10
- Sixty percent of all vacancies require post-secondary education, 30\% require high school or GED completion, and $10 \%$ have no educational requirements. This report shows that $28 \%$ of all vacancies require a bachelor's degree

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- Fifty-one percent of vacancies are considered as being not difficult to fill while this time last year $51 \%$ were considered at least somewhat difficult to fill

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- Forty-two percent of reported vacancies are open for less than 30 days, slightly less than last year's report. An additional $41 \%$ of vacancies are open 30 to 59 days, more than double from a year ago when only $16 \%$ of vacancies were open for this length of time

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## Pikes Peak Region

According to the U.S. Census Bureau, Census updates of 2001, the Pikes Peak Region, which includes El Paso and Teller counties, is home to over 550,000 people. Similar to statewide figures, El Paso County experienced a $30 \%$ increase in population growth from 1990 to 2000. Teller County population grew by $65 \%$ in the same period. Teller County also experienced a higher population growth (4.2\%) compared to El Paso (3.2\%) over the 2000-2001 period.

Employment proportions are comparable to the area's population with El Paso County recording $95 \%$ of the area's employed individuals. Teller County makes up about $5 \%$ of the area's population and employment. Many of these individuals commute to and from the Denver Metro area. Teller County residents spend 30 minutes, on
average, to commute to work while workers in El Paso County spend only about 20 minutes in the commute. El Paso County shows a 1999 median household income in the upper $\$ 40,000$ s. Teller County, however, shows a median household income just over $\$ 50,000$.

In the summer of 2001, the Colorado Department of Labor and Employment began collecting data on job vacancies in the Pikes Peak Region. On average, the summer season shows more employment opportunities than in the winter due to a strong volume of seasonal businesses. However, job vacancies in general have steadily decreased mostly due to the decrease in economic activity seen not just in the state of Colorado, but nationwide (Figure 2).

Figure 2: Historical Vacancies - Pikes Peak Region JVS


Although the availability of job opportunities has declined over the last four surveys, employment per season has increased. For example, not only did employment increase from the summer of 2001 to the summer of 2002, employment also increased from the winter of 2002 to the winter of 2003. Furthermore, unemployment levels


Source: CDLE,
Local Area Unemployment Statistics, January 2003
decreased over the last two winter reports. With the winter reports the Pikes Peak Region's unemployment rate shows a similar pattern, meaning the seasonal labor force level has remained relatively in check with the fluctuations in employment levels.

Pikes Peak Region Job Vacancy Surveys are conducted twice a year, once in winter and once in summer.
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 found at the time when demand for workers is at its lowest. When the Job Vacancy Survey is conducted 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.

Historically, the level of employment in the Pikes Peak Region peaks in or around the months of July and August. The labor force follows a similar pattern (Figure 3). Unemployment levels have increased over the last two years, following the state and national trends, although in general, the region has experienced declining unemployment through the better part of the last ten years. Unemployment vary from month to month, however it tends to peak in the month of June of each year.

Figure 3: Employment \& Labor Force Trends for the Pikes Peak Region (Not Seasonally Adjusted)


Source: CDLE, Local Area Unemployment Statistics, March 2003

While this trend has been apparent for years, changes in the employment and labor force have been notable over the past year. The total number of employed decreased more than usual since mid-2001, reflecting the effects of a slowing economy in addition to seasonal decline. Yet, rather than following seasonal trend, the total labor force
decreased at a much slower rate as individuals remained in or reentered the labor market. This caused the actual number of unemployed individuals to climb over the last half of 2001 and throughout most of 2002, as seen by the widening gap between the two series.

Figure 4: Pikes Peak Region Unemployment Rate Trend

After steadily decreasing throughout the late 90 s, the region's unemployment rate followed the state and national trends of persistent increases since late-2000 (Figure 4). After reaching a high of $7.0 \%$ in January 2002, the local economy showed promising signs of increasing employment. Unemployment levels increased and remained somewhat elevated possibly due to the increased numbers of people staying in or reentering the labor force. Unemployment in the region is comparable to that in other metropolitan statistical areas.
(Not Seasonally Adjusted)


Source: CDLE, Local Area Unemployment Statistics, March 2003

Figure 5 shows the most current unemployment statistics for the individual counties of the Pikes Peak Region. Both counties show unemployment rates lower than the reported rates of this time last year.

While El Paso County cannot claim title to highest mountain peak, it can lay claim to Pikes Peak - towering at 14,110 feet.

Figure 5: Unemployment Rates for January 2003 (Not Seasonally Adjusted)


Source: CDLE, Local Area Unemployment Statistics, March 2003

Discovered in 1806 by Lt. Zebulon Pike, Pikes Peak is called "America's Mountain" for inspiring the words for America the Beautiful, written by Katharine Lee Bates in the late 1800s. Fortunately, the summer 2002 Hayman Fire did not affect Pikes Peak. While mountain biking, mountain climbing and other outdoor activities are just as popular here as on neighboring mountains, Pikes Peak also hosts the second oldest auto race in the nation. Race to the Clouds (the Pikes Peak Hill Climb), includes top racecar drivers climbing to the summit at speeds of over 100 miles per hour. Those looking for adventure at lower elevations can visit the Air Force Academy or the Garden of the Gods, among other sites, or head out to eastern El Paso County to the Calhan Paint Mines.

Teller County extends the region's activities westward. The cities of Woodland Park, Cripple Creek and Victor offer historical museums, gold mining discovery escapades, and year-round outdoor recreation activities. Whether it's fishing at Skagway Reservoir near Victor, limited-stakes gambling in Cripple Creek, or a round of golf at Woodland Park's 18-hole championship golf course, Teller County increases the region's attractions.

The U.S. Census Bureau shows both counties in the Pikes Peak Region to have a higher high school graduation rate than the state and nation. Teller County has a $94 \%$ graduation rate and El Paso County's is $91 \%$ while the state average is $87 \%$ and national even lower at $80 \%$. The region's percentage of individuals with bachelor's degrees is only slightly lower than the state percentage of $33 \%$. In both counties, $32 \%$ of people 25 or older hold a bachelor's degree.

Since conducting the first Job Vacancy Survey in the Pikes Peak Region, Healthcare Practitioners and Technical occupations as well as Office and Administrative Support positions have been in the highest demand. Figure 6 shows the employment breakdown for each of the JVS sectors during the first quarter of 2002. This serves as a useful reference for the time period in which the Pikes Peak Job Vacancy Survey was conducted.

Shares of employment by industry in the Pikes Peak Region have remained fairly constant over prior years; however, classification of industries has recently changed. The 60-year-old SIC (Standard Industrial Classification) system has been replaced with NAICS (North American Industry Classification System). While some industries have remained in a similar classification category, others have largely changed. This is mostly due to the classification of establishments into detailed categories based on the production process they use. This reclassification has considerably changed the locations of many businesses in the classification structure.

NAICS recognizes hundreds of new businesses in the economy, especially those in the rapidly growing service sector. These are businesses that are indicative of the "new economy" such as Information, Financial Activities, and Professional and Business Services. Health Care and Social Assistance and Educational Services are also separate from other service industries can now be reviewed at a greater level of detail than previously available.

The Government sector represent a very small percentage of area employers but the largest percentage (16.9\%) of the area's employees. The Trade, Transportation, and Utilities industry has $15.9 \%$ of the area's employers and Professional and Business Services has 13.9\%. These three sectors combined contain almost half (46.7\%) of the Pikes Peak Region's employees. The Financial Activities and Construction sectors also hold a good share of the region's employers while Leisure \& Hospitality and Manufacturing have a strong portion of the area's employees.

Figure 6: Pikes Peak Employers \& Employees, 1st Quarter, 2002


Source: CDLE, Colorado Employment and Wages, (ES-202)

## Estimated Vacancies

## JVS Sectors and Employer Size

During the survey period, an estimated 1,353 vacancies were open for immediate hire in firms with at least five employees in the Pikes Peak Region. The region's estimated vacancy rate is $0.67 \%$, meaning there are approximately seven vacancies in the survey for every 1,000 positions. The overall vacancy rate is calculated by dividing the estimated number of vacancies by total employment plus the estimated number of vacancies. The demand for labor is composed of people currently employed plus all of the open positions that employers want to fill. The results of this survey suggest current employment numbers and the demand for workers has decreased.

Figure 7: Estimated Vacancies and Average Wages by JVS Sectors


Only $8 \%$ of employers responding to the survey report having at least one vacancy, down from $13 \%$ a year ago. The survey also reports very few vacancies in Natural Resources and Mining. Openings in Natural Resources \& Mining and in Construction are usually more prevalent during the warmer, summer season. There are also a very small percentage of vacancies reported in the Educational Services sector which includes teaching positions in private schools. Most teaching positions are a part of Government. The highest
concentration of vacancies is found in Health Care and Social Assistance where $75 \%$ are health care related. Opportunities in health services range from certified nurses' assistants and other aides to registered nurses, therapists and medical technicians. Leisure and Hospitality also shows continued demand for specialized cooks and chefs and bartenders and servers. While some post-secondary education and experience are required for some positions, most are available to applicants regardless of education completed or experience acquired.

Since wages offered vary according to the individual applicant's qualifications, employers are asked to provide the range of wages offered for the vacancies (Figure 8). Wages reported for this study represent those offered by employers for current vacancies over the survey period. This survey shows wide wage ranges for Health Care and Social Assistance, Information, and Manufacturing. On average, sectors with a wider wage range usually have a variety of vacancies that include lower education and experience requirements. For example, in the Health Care and Social Assistance sector, many vacancies at the higher wage range include registered nurses and pharmacists. Both occupations typically require at least a bachelor's degree. Vacancies at the lower end of the wage range include positions requiring less education and experience such as clerks, food service workers and various aides. These positions usually require only high school comple-
tion and general work experience. Many positions in the middle of the wage range like licensed practical nurses and therapists require at least two years of post-secondary education or vocational training/certification.

The overall average wage for all vacancies is $\$ 14.80$ per hour. The highest average wages offered for this survey are in the Government and Manufacturing sectors. In Government, $34 \%$ of the vacancies are in the educational arena including teachers, principals and deans with a majority of the positions requiring an advanced degree. While only a few job vacancies in the Manufacturing sector require an advanced degree, $65 \%$ of them require at least a bachelor's degree. These are positions as scientists, physicists, and a wide variety of engineers. All of these vacancies associated with higher pay also require a minimum of experience in a related field.

Figure 8: Reported Average Wage Ranges by JVS Sectors

| Government |  |  |  |  |  |  |  |  | - |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Leisure and Hospitality | E |  |  |  |  |  |  |  |  |  |  |
| Health Care and Social Assistance |  |  |  |  |  |  |  |  |  |  |  |
| Educational Services |  |  | - |  |  |  |  |  |  |  |  |
| Professional and Business Services |  |  |  | - |  |  |  |  |  |  |  |
| Financial Activities |  | - |  |  |  |  |  |  |  |  |  |
| Information |  |  |  | - | , |  |  |  |  |  |  |
| Other Services | - |  |  |  |  |  |  |  |  |  |  |
| Trade, Transportation, and Utilities | \| |  |  |  |  |  |  |  |  |  |  |
| Manufacturing |  |  |  |  |  |  |  | - | - |  |  |
| Construction |  |  |  |  |  |  |  |  |  |  |  |
| Natural Resources and Mining |  |  |  |  |  | - |  |  |  |  |  |
|  |  |  | \$10 |  | \$15 |  |  | \$20 |  |  |  |

Small to mid-size firms account for $57 \%$ of total vacancies (Figure 9) in the Pikes Peak Region. Large companies are reporting $34 \%$ and Government agencies have only $9 \%$ of all vacancies. The highest concentration of vacancies within the large company category is found among health care occupations. High levels of vacancies are also found in computer manufacturing firms and throughout the school systems.

According to the survey, Government is offering $\$ 6.60$ per hour more, on average, than the average wage offered by large firms. Furthermore, average wages offered by the Government are nearly twice those offered by the small to mid-size companies. Most of these higher paid positions require a bachelor's degree although some require vocational training/certification.

Figure 9: Estimated Vacancies and Average Wages by Employer Size


Figure 10: Reported Average Wage Ranges by Employer Size


Wage ranges in each employer size class reflect characteristics of the vacancies in each category. While many vacancies within large firms are highly specialized (software engineers and registered nurses), there are many vacancies among large firms that do not require postsecondary training or related experience, allowing a mixture of applicants to find positions in large firms. This is not the case, however, with the varying positions among the small to midsize firms, which have vacancies ranging from entry level to specialized positions. The wage range is well above the legal minimum wage ( $\$ 5.15$ per hour) but the tighter wage range may imply that a majority of the vacancies are either lower-skilled positions or the small to mid-size firms are not demanding (or paying for) higher education and experience levels.

## Vacancies

## Employment Status, Education \& Experience Requirements

TThe remainder of this report provides descriptive statistics of the vacancies reported in and unique to this survey; this is supplemental data of interest to the reader. The survey design does not allow for application of this detail to the region as a whole, but it can be used to understand characteristics of those job vacancies and occupations reported.

For this winter survey, $73 \%$ of the reported vacancies are for full-time permanent positions (Figure 11) while $21 \%$ of the positions are reported to be part-time permanent. Last year at this time $85 \%$ of the reported vacancies were full-time permanent. The decrease in full-time permanent employment may be another indication that actual openings at this time are harder to find. All Pikes Peak Region Job Vacancy Surveys, summer and winter, have consistently shown a high percentage of permanent positions. This is the first time there has been a decline in fulltime opportunities and an increase in part-time opportunities. Job seekers who prefer to work less than full-time, opportunities do exist. Full-time positions include occupations in all industries while most part-time positions are in restaurants, schools, and hospitals.

Figure 11: Vacancies by Employment Status


Figure 12: Reported Average Wage Ranges by Employment Status


In general, full-time positions pay more than part-time and temporary positions. Part-time permanent vacancies offer wages higher than both fulltime permanent vacancies and the overall average of $\$ 14.80$ (Figure 12). Many of these part-time permanent vacancies include highly specialized positions in the Health Care and Social Assistance sector like registered nurses. Last year at this time, part-time permanent positions were offering the lowest wages. This may have been a result of the nature of the positions open at the time.

Employers were asked about education requirements for open positions. Sixty percent of the positions reported by employers in the Pikes Peak Region require post-secondary education (Figure 13). This is due, in part, to the fact that a high proportion of the region's vacancies are for skilled occupations, particularly in health care and engineering positions. Furthermore, due to economic conditions, employers are in a position to insist that applicants have completed a specified level of training. Last year at this time, employers reported that $54 \%$ of the vacancies required the applicant to be educated beyond high school.

While the nature of the open position plays a significant role in the education and experience demanded, the availability of workers also has an effect on employers' demands. Most of the area's vacancies are occupations requiring a bachelor's degree or at a minimum, vocational training/certification (or a similar two-year degree). While most of the nursing positions require the applicants to have bachelor's degrees, many establishments in the health arena will offer the position providing the applicant has a twoyear degree or vocational training/certification and adequate experience in the occupation. Engineers, educational principals and deans, and college professors require advanced degrees. Other vacancies requiring formal education equivalent to two-year degrees include correctional officers, childcare workers, and other trade positions such as barbers and electricians.

Figure 13: Vacancies by Education


Forty percent of all vacancies require no more than a high school diploma. While these are mostly jobs at lower skill levels, the positions can lead to more fruitful positions within the company or industry. These include positions in retail, security, and construction in addition to restaurants and hotels.

Last year at this time, $16 \%$ of job vacancies did not require a high school diploma. That number is down to $10 \%$ this survey period. Similar patterns occur with four-year degree requirements. Currently $28 \%$ of reported vacancies require a bachelor's degree. Last year that number was $19 \%$.

Figure 14: Reported Average Wage Ranges by Education


For this survey, the highest wages are found for positions requiring a bachelor's or an advanced degree (Figure 14). These wages are, on average, at least $\$ 10$ an hour more than positions requiring a two-year degree. Wages for two-year and vocational training/certification are predictably lower, and wages for vacancies associated with no post-secondary education are lowest. Wage offers for those without high school completion are still above the minimum wage of $\$ 5.15$ per hour and increase by at least $\$ 3$ per hour if high school is finished.

Having valid work experience is essential for many positions. During an economic downturn, employers can command higher levels of education and experience due to the increased number of job seekers available to work.

Employers are requiring the applicant to have experience in a related field or in the occupation more this year than last. In fact, $46 \%$ of all vacancies required experience in a related field whereas this time last year, only $38 \%$ of all vacancies required the same level of experience. This is primarily due to the high concentration of vacancies in engineering and college instruction, which require higher education and experience. As a result, many of these positions are open at least 30 to 59 days and are considered somewhat difficult to

Figure 16: Reported Average Wage Ranges by Experience


As with increasing levels of education, employers are willing to pay higher wages when requiring higher levels of experience. Vacancies requiring experience in the occupation offer an average minimum wage of nearly $\$ 20.00$ per hour to start. This wage far exceeds the minimum average wages offered for other experience levels especially those requiring low levels of experience. Most of the vacancies requiring experience in the occupation also require post-secondary education. This is comparable to last year's wages offered to those with high levels of experience. Wages offered are significantly higher for those who have related or specific experience than for those who only have general work experience.

## Difficulty to Fill and Time Open for Hire

In addition to asking employers about their perceived difficulty in filling vacant positions, the Job Vacancy Survey also measures the amount of time an employer has been actively recruiting for the position. This additional information allows readers to make better judgments regarding the difficulty employers are experiencing than if the survey relied wholly on employers' opinions. Of the employers responding to these questions, only $6 \%$ of the vacancies reported are classified as very difficult to fill. This is down nine percentage points from last year. Logically, with more individuals available for work, employers should find it a little easier to fill vacancies. While $51 \%$ of the vacancies reported are considered not difficult to fill, $49 \%$ are associated with some sort of hiring difficulty.

Last year at this time, positions that were considered difficult to fill tended to be in the health care related occupations.

Figure 17: Vacancies by Difficulty to Fill


In this report, positions considered very difficult to fill and those considered not difficult to fill are comprised of occupations in all industries at all education levels.

Figure 18: Vacancies by Time Open for Hire

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. There is a significantly higher percentage of vacancies that take 30 to 59 days to fill this year, and fewer vacancies that are open less than 30 days (Figure 18).


Forty-two percent of all vacancies were open for less than 30 days with an additional $41 \%$ open for 30 to 59 days. As with occupations in the difficulty to fill category, these vacancies are not concentrated in any particular group. They are vacancies of all occupational types, within all educational categories and are found throughout all sectors. Once again, the slower economy has created an abundance of workers who are willing to fill vacancies when the employment conditions are matched with the individuals' preferences and skills. In this report, vacancies reported as always hiring are predictably
entry-level positions requiring little or no previous experience or education.

Positions considered not difficult to fill generally offer lower wages (as would be expected), while positions considered difficult to fill offer higher wages. For this survey, vacancies considered not difficult to fill are compensated with wage offers close to the region's overall average of $\$ 14.80$ per hour. In past surveys, positions considered difficult to fill offered higher wages. Such wages do not exist for the current survey.

Figure 19: Reported Average Wage Ranges by Time Open for Hire


Traditionally the longer it takes to fill a vacancy the higher the wage offered to start. Current survey results have departed from tradition. For example, this survey shows wages are highest for vacancies open 60 or more days, but similar wage ranges exist for both vacancies open less than 30 days and vacancies open 30-59 days. The vacancies in these two categories are the majority (about $80 \%$ ) of all vacancies reported in this survey and include occupations with varying levels of education and experience requirements.

# Additional Compensation Medical Insurance \& Sign-On Bonus 

## Medical Insurance

Employers frequently offer compensation related benefits to recruit qualified candidates. Some of these perks are paid time off, transportation or parking vouchers and subsidized childcare. One of the most important benefits offered to employees is medical insurance via an employer group plan. Employers may pay all, part of or none of the monthly premium. How can an employer offer medical insurance and not pay for it? While this scenario is uncommon, employers can and do offer employees the opportunity to participate in their group medical insurance plans even though they do not contribute to the premium.

For the current survey, $88 \%$ of the vacancies include some form of medical insurance. Twelve percent of the surveyed firms reported that a medical insurance plan is not available. Compared to last year at this time, more employers are paying partial cost of the insurance premium while fewer are paying the total premium. For the winter 2002 report, only $70 \%$ of the employers paid the partial cost of the premium, while in this report $83 \%$ pay a portion. Furthermore, 7\% fewer employers pay the total cost this year.

As expected, the vacancies with more requirements offer not only higher pay but also more complete medical

Figure 20: Employer's Contribution to Medical Insurance

coverage. In particular, the employer pays a partial cost of the premium for most of the vacancies among health care related occupations, engineers, college instructors, and managers. Vacancies offering to pay the total cost of a medical premium are for positions offering higher wages like senior software engineers and registered nurses. But, vacancies offering lower wages like surgical technologists and specialized cooks also have the total cost of the insurance premium covered.

## Sign-On Bonus

There are no sign-on bonuses reported for this survey. This type of compensation is usually used during
times when employers are having difficulty attracting potential applicants.

## Occupations

## Major Occupational Groups

TThe information reported in the Job Vacancy Survey is intended to provide job seekers and employers with useful and current information to help them make informed labor market decisions. Estimating the number of overall vacancies in a region and breaking those numbers down by sector and size provides a useful overview of the vacancy market, but when it comes down to filling a particular opening, the more detailed the information the better. Reporting vacancies at the individual occupational level is the most detailed information the survey can provide without breaking confidentiality with those employers who participated in the survey.

In order to help make comparisons between the results of this survey and other sources of employment statistics easier, all jobs reported are assigned an occupation code based on the 2000 Standard Occupational Classification Manual published by the Executive Office of the President, Office of Management and Budget. The SOC system contains 821 detailed occupation titles that fall into 23 major occupation groups.

Vacancies found in this survey were coded into 21 of the 23 major occupation groups. The most frequently occurring job vacancies fall into the Food Preparation and Serving Related occupations. Vacancies most in demand
in the past three surveys were in the Healthcare Practitioners and Technical Occupations. Food Preparation and Serving Related occupations reached the top of the chart for the Winter 2003 survey, relegating Healthcare Practitioners and Technical occupations to the category with the second highest demand.

Personal Care and Service, Computer and Mathematical, and Sales and Related are among the top five occupational groups in demand. The ranking of vacancies in these occupational groups vary form survey to survey. Occupations least in demand are in Farming, Fishing, and Forestry. For this survey, there are no vacancies in Legal occupations.

Survey results show that the major occupation groups with the most vacancies are not necessarily the groups offering the highest wages. This indicates that vacancy characteristics other than the level of unfulfilled employer demand influence wages. In addition, low vacancies at this time of the year, plus the soft economy, can produce little or no wage data. For this report, two occupational groups had insufficient wage data to report. The occupational groups offering the highest wages in this survey typically require higher levels of education and experience: Healthcare Practitioners and Technical; Computer and Mathematical; Management; and Architecture and Engineering.
 - JVS Wage - Average Minimum / Average Maximum
Figure 22: Vacancies and Reported Average Wage Ranges by Major Occupational Groups

## Occupational Estimates

Table 1 contains a list of all the detailed SOC job titles that were assigned to vacancies reported in this survey. Because a census of large employers and Government agencies is conducted, the list contains titles for nearly all of the vacancies available at the time of the survey for those employers. Approximately one-third of all small to mid-size employers were contacted for the random sample, so the list also includes occupations reported by those employers. Given the large size of the random sample collected the list of occupations should be fairly comprehensive, however, it is not exhaustive.

## Estimated Vacancies

Because nearly all large employers and government agencies are contacted, the number of vacancies by occupation for those groups is not estimated; it is an actual accounting of the vacancies. Those vacancies reported by small to mid-size employers are then added to the others as well as additional estimated vacancies. The additional estimated vacancies are based on the assumption that the vacancies by occupation in the region are distributed exactly like the filled positions in the region at the major occupational group level. Estimated vacancies by major occupational group are then distributed among the specific occupations reported in the survey.

## Vacancies Found

The number of vacancies by occupation found in the survey.

## Average JVS Wage

The average wages found in the survey are also reported for each occupation. The reported averages are based on information provided by employers and do not reflect information not gathered in the survey or wages paid to currently filled positions. Wage information in this survey was provided for only $36 \%$ of reported vacancies.

## Occupational Employment Statistics (OES) Wage Data

Occupational Employment Statistics (OES) wage data are also provided for each occupation. OES data are based on a national survey of employers and refers to filled positions, not vacancies. The data provided here are reported for El Paso and Teller counties when available and Statewide otherwise. It was collected in 2001 and aged to 2002 using the Employment Cost Index (ECI). Complete descriptions of the OES survey and the ECI are available on the Internet at: http://www.bls.gov/.

While the Job Vacancy Survey average wages reflect what is being offered to fill vacancies at the time of the survey, OES wage data reflect what is being paid for filled positions. Together, these data provide employers and job seekers with a good indication of the compensation offered in the current job market.
 * OES wages reported for Colorado statewide

* OES wages reported for Colorado statewide
$\dagger$ Insufficient Wage Data Available
Table 1: Occupations with 10 or More Estimated Vacancies Page 2

| SOC Code | SOC Occupational Title | Vacancies Estimated | Vacancies Found | $\begin{gathered} \text { Average } \\ \text { JVS } \\ \text { Wage } \end{gathered}$ | Occupational Employment Statistics Wage Data (2002) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Average Wages |  |  | Percentile Distribution |  |  |  |  |
|  |  |  |  |  | Entry-Level | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 37-2012 | Maids and Housekeeping Cleaners | 20 | 11 | \$7.80 | \$6.82 | \$7.89 | \$8.42 | \$6.35 | \$7.18 | \$7.86 | \$8.54 | \$9.44 |
| 47-2081 | Drywall and Ceiling Tile Installers | 18 | 3 | $\dagger$ | \$8.91 | \$12.49 | \$14.28 | \$8.11 | \$9.33 | \$10.78 | \$16.16 | \$18.56 |
| 35-2011 | Cooks, Fast Food | 17 | 17 | $\dagger$ | \$6.18 | \$8.04 | \$8.97 | \$5.88 | \$6.44 | \$7.49 | \$9.46 | \$11.32 |
| 53-3033 | Truck Drivers, Light or Delivery Services | 17 | 7 | \$12.90 | \$8.61 | \$12.49 | \$14.43 | \$7.84 | \$9.39 | \$10.98 | \$14.27 | \$20.22 |
| 31-1012 | Nursing Aides, Orderlies, and Attendants | 16 | 9 | \$6.60 | \$8.44 | \$10.11 | \$10.93 | \$7.95 | \$8.97 | \$10.06 | \$11.17 | \$12.76 |
| 33-9032 | Security Guards | 15 | 7 | \$12.30 | \$7.48 | \$9.49 | \$10.50 | \$7.11 | \$7.91 | \$9.06 | \$10.66 | \$12.62 |
| 41-3011 | Advertising Sales Agents | 15 | 3 | $\dagger$ | \$11.64 | \$21.37 | \$26.22 | \$11.17 | \$13.14 | \$17.64 | \$25.00 | \$38.05 |
| 11-3031 | Financial Managers | 15 | 2 | $\dagger$ | \$21.96 | \$35.48 | \$42.24 | \$19.73 | \$24.98 | \$32.29 | \$44.16 | \$59.13 |
| 37-2011 | Janitors and Cleaners, Except Maids and Housekeeping Cleaners | 14 | 8 | \$8.90 | \$6.83 | \$8.83 | \$9.83 | \$6.28 | \$7.31 | \$8.34 | \$10.10 | \$12.35 |
| 49-9021 | Heating, Air Conditioning, and Refrigeration Mechanics and Installers | 12 | 3 | \$14.00 | \$11.11 | \$15.10 | \$17.09 | \$10.24 | \$11.88 | \$14.79 | \$17.24 | \$21.06 |
| 35-1011 | Chefs and Head Cooks | 10 | 10 | $\dagger$ | \$8.88 | \$11.71 | \$13.13 | \$8.23 | \$9.11 | \$10.29 | \$12.77 | \$17.16 |
| 35-1012 | First-Line <br> Supervisors/Managers of Food Preparation and Serving Workers | 10 | 10 | $\dagger$ | \$7.41 | \$12.21 | \$14.60 | \$6.09 | \$9.26 | \$11.95 | \$13.83 | \$19.20 |
| 41-2022 | Parts Salespersons | 10 | 2 | $\dagger$ | \$8.50 | \$13.60 | \$16.15 | \$7.87 | \$9.21 | \$11.77 | \$16.88 | \$23.11 |


| SOC Code | SOC Occupational Title | Occupational Employment Statistics Wage Data (2002) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Average Wages |  |  | Percentile Distribution |  |  |  |  |
|  |  | Entry-Level | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 13-2011 | Accountants and Auditors | \$15.70 | \$23.14 | \$26.86 | \$14.82 | \$17.29 | \$21.62 | \$27.17 | \$34.64 |
| 11-2011 | Advertising and Promotions Managers | \$16.91 | \$26.51 | \$31.32 | \$15.63 | \$18.60 | \$22.39 | \$32.02 | \$45.20 |
| 29-1121 | Audiologists | \$17.41 | \$22.96 | \$25.74 | \$15.13 | \$21.89 | \$24.28 | \$26.61 | \$28.93 |
| 49-3023 | Automotive Service Technicians and Mechanics | \$10.37 | \$16.48 | \$19.53 | \$9.54 | \$11.96 | \$15.86 | \$20.16 | \$25.72 |
| 39-6011 | Baggage Porters and Bellhops | \$6.21 | \$6.67 | \$6.90 | \$5.75 | \$6.06 | \$6.59 | \$7.13 | \$8.40 |
| 51-3011 | Bakers | \$7.29 | \$11.30 | \$13.31 | \$6.51 | \$8.35 | \$11.12 | \$14.31 | \$16.67 |
| 39-5011 | Barbers | \$6.32 | \$9.92 | \$11.73 | \$6.06 | \$6.68 | \$8.41 | \$13.60 | \$16.55 |
| 35-3011 | Bartenders | \$6.17 | \$8.27 | \$9.31 | \$5.88 | \$6.47 | \$7.66 | \$9.91 | \$11.54 |
| * 25-1042 | Biological Science Teachers, Postsecondary | \$35,629 | \$65,283 | \$80,111 | \$32,541 | \$42,039 | \$57,737 | \$84,162 | \$114,888 |
| 43-3031 | Bookkeeping, Accounting, and Auditing Clerks | \$9.85 | \$14.03 | \$16.12 | \$9.44 | \$10.92 | \$13.34 | \$17.57 | \$20.35 |
| 13-2031 | Budget Analysts | \$18.90 | \$26.11 | \$29.71 | \$18.03 | \$20.24 | \$24.43 | \$30.98 | \$35.72 |
| * 37-2019 | Building Cleaning Workers, All Other | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |
| 53-3022 | Bus Drivers, School | \$9.02 | \$11.25 | \$12.37 | \$8.50 | \$9.73 | \$11.06 | \$12.92 | \$14.47 |
| 13-1199 | Business Operations Specialists, All Other | \$12.86 | \$22.38 | \$27.13 | \$12.05 | \$13.84 | \$21.98 | \$28.21 | \$34.86 |
| 51-3021 | Butchers and Meat Cutters | \$11.74 | \$15.09 | \$16.76 | \$10.88 | \$13.03 | \$15.51 | \$17.25 | \$19.01 |
| * 25-1052 | Chemistry Teachers, Postsecondary | \$38,338 | \$58,785 | \$69,008 | \$35,619 | \$43,356 | \$54,499 | \$70,991 | \$90,671 |
| 39-9011 | Child Care Workers | \$6.19 | \$7.39 | \$7.99 | \$5.92 | \$6.55 | \$7.46 | \$8.29 | \$8.81 |
| 13-1031 | Claims Adjusters, Examiners, and Investigators | \$17.84 | \$23.89 | \$26.91 | \$16.41 | \$19.42 | \$23.18 | \$27.81 | \$33.82 |
| 21-2011 | Clergy | \$12.39 | \$23.84 | \$29.56 | \$10.63 | \$14.54 | \$18.88 | \$23.23 | $\dagger$ |
| 19-3031 | Clinical, Counseling, and School Psychologists | \$18.42 | \$25.83 | \$29.53 | \$16.87 | \$20.46 | \$25.35 | \$30.93 | \$34.99 |
| 27-2022 | Coaches and Scouts | \$31,854 | \$53,048 | \$63,645 | \$23,503 | \$41,714 | \$60,454 | \$66,752 | \$70,637 |
| * 11-3041 | Compensation and Benefits Managers | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |
| 11-3021 | Computer and Information Systems Managers | \$29.84 | \$43.47 | \$50.28 | \$28.13 | \$33.73 | \$41.88 | \$53.52 | \$66.69 |
| 15-1021 | Computer Programmers | \$22.30 | \$30.37 | \$34.41 | \$20.65 | \$24.47 | \$29.20 | \$36.53 | \$43.04 |
| 15-1031 | Computer Software Engineers, Applications | \$24.43 | \$34.40 | \$39.39 | \$22.23 | \$27.65 | \$33.60 | \$41.03 | \$48.85 |
| 15-1099 | Computer Specialists, All Other | \$17.78 | \$30.21 | \$36.42 | \$14.85 | \$21.68 | \$29.90 | \$37.61 | \$47.35 |
| 15-1041 | Computer Support Specialists | \$14.07 | \$18.42 | \$20.59 | \$13.03 | \$15.07 | \$17.91 | \$20.77 | \$24.79 |
| 15-1051 | Computer Systems Analysts | \$22.08 | \$34.27 | \$40.37 | \$20.20 | \$25.60 | \$32.99 | \$41.57 | \$52.59 |
| * 39-6012 | Concierges | \$8.84 | \$11.20 | \$12.38 | \$8.07 | \$9.37 | \$10.65 | \$12.77 | \$15.47 |
| 35-2012 | Cooks, Institution and Cafeteria | \$7.21 | \$9.99 | \$11.39 | \$6.55 | \$8.04 | \$9.84 | \$11.82 | \$13.71 |
| 35-2014 | Cooks, Restaurant | \$7.24 | \$9.49 | \$10.63 | \$6.54 | \$7.92 | \$9.40 | \$11.03 | \$12.95 |
| 35-2015 | Cooks, Short Order | \$7.47 | \$8.35 | \$8.79 | \$7.05 | \$7.49 | \$8.17 | \$9.04 | \$10.53 |

[^0]Table 2: Occupations with Fewer than 10 Estimated Vacancies Page 2

| SOC Code | SOC Occupational Title | Occupational Employment Statistics Wage Data (2002) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Average Wages |  |  | Percentile Distribution |  |  |  |  |
|  |  | Entry-Level | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 13-1051 | Cost Estimators | \$17.14 | \$25.02 | \$28.96 | \$15.39 | \$19.01 | \$23.05 | \$28.49 | \$34.85 |
| 41-2021 | Counter and Rental Clerks | \$6.68 | \$9.90 | \$11.52 | \$6.16 | \$7.23 | \$8.47 | \$10.74 | \$17.07 |
| 35-3022 | Counter Attendants, Cafeteria, Food Concession, and Coffee Shop | \$6.13 | \$7.74 | \$8.54 | \$5.78 | \$6.27 | \$7.14 | \$8.55 | \$11.03 |
| 13-2041 | Credit Analysts | \$12.82 | \$22.01 | \$26.61 | \$11.77 | \$14.15 | \$17.34 | \$25.02 | \$32.85 |
| 43-4041 | Credit Authorizers, Checkers, and Clerks | \$11.99 | \$14.72 | \$16.09 | \$11.35 | \$12.20 | \$13.63 | \$16.55 | \$19.53 |
| 33-9091 | Crossing Guards | \$10.07 | \$11.10 | \$11.61 | \$9.55 | \$10.04 | \$10.82 | \$11.58 | \$14.36 |
| 43-9021 | Data Entry Keyers | \$8.06 | \$10.27 | \$11.39 | \$7.65 | \$8.39 | \$9.73 | \$11.36 | \$14.01 |
| 15-1061 | Database Administrators | \$15.01 | \$26.05 | \$31.57 | \$12.93 | \$17.47 | \$24.61 | \$33.08 | \$42.88 |
| 43-9031 | Desktop Publishers | \$13.21 | \$16.48 | \$18.11 | \$12.60 | \$14.33 | \$16.45 | \$18.48 | \$21.27 |
| 33-3021 | Detectives and Criminal Investigators | \$17.09 | \$25.59 | \$29.84 | \$15.96 | \$18.10 | \$23.24 | \$33.15 | \$39.97 |
| 29-2032 | Diagnostic Medical Sonographers | \$22.18 | \$28.26 | \$31.29 | \$20.34 | \$22.95 | \$25.05 | \$27.14 | \$35.55 |
| 35-9011 | Dining Room and Cafeteria Attendants and Bartender Helpers | \$6.21 | \$6.83 | \$7.14 | \$5.76 | \$6.12 | \$6.71 | \$7.46 | \$8.62 |
| 27-3041 | Editors | \$13.03 | \$19.40 | \$22.59 | \$11.63 | \$14.85 | \$18.45 | \$23.18 | \$28.47 |
| * 11-9039 | Education Administrators, All Other | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |
| 11-9032 | Education Administrators, Elementary and Secondary School | \$54,674 | \$68,676 | \$75,676 | \$50,922 | \$60,780 | \$69,334 | \$78,680 | \$90,652 |
| 11-9033 | Education Administrators, Postsecondary | \$16.35 | \$25.99 | \$30.82 | \$15.35 | \$17.66 | \$20.89 | \$29.95 | \$44.95 |
| 17-3023 | Electrical and Electronic Engineering Technicians | \$13.79 | \$19.65 | \$22.58 | \$12.40 | \$15.63 | \$19.45 | \$23.57 | \$26.97 |
| 17-2071 | Electrical Engineers | \$22.89 | \$31.65 | \$36.03 | \$20.94 | \$25.53 | \$31.27 | \$37.12 | \$43.65 |
| 47-2111 | Electricians | \$12.98 | \$20.51 | \$24.28 | \$11.40 | \$14.80 | \$19.08 | \$23.94 | \$27.78 |
| 17-2072 | Electronics Engineers, Except Computer | \$25.34 | \$34.04 | \$38.40 | \$23.72 | \$28.12 | \$33.03 | \$40.34 | \$47.47 |
| 25-2021 | Elementary School Teachers, Except Special Education | \$27,129 | \$38,123 | \$43,620 | \$25,263 | \$29,492 | \$34,916 | \$44,559 | \$55,757 |
| 13-1071 | Employment, Recruitment, and Placement Specialists | \$14.02 | \$20.77 | \$24.15 | \$12.76 | \$15.49 | \$18.19 | \$24.71 | \$35.47 |
| 11-9041 | Engineering Managers | \$32.83 | \$46.32 | \$53.06 | \$29.15 | \$37.95 | \$45.89 | \$56.98 | \$68.05 |
| * 17-3029 | Engineering Technicians, Except Drafters, All Other | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |
| 25-1123 | English Language and Literature Teachers, Postsecondary | \$31,427 | \$54,404 | \$65,893 | \$27,204 | \$36,472 | \$50,021 | \$69,187 | \$89,001 |
| * 25-1053 | Environmental Science Teachers, Postsecondary | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |
| 43-6011 | Executive Secretaries and Administrative Assistants | \$12.81 | \$16.90 | \$18.94 | \$12.01 | \$14.01 | \$16.51 | \$19.56 | \$22.56 |

[^1]| SOC Code | SOC Occupational Title | Occupational Employment Statistics Wage Data (2002) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Average Wages |  |  | Percentile Distribution |  |  |  |  |
|  |  | Entry-Level | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 45-2092 | Farmworkers and Laborers, Crop, Nursery, and Greenhouse | \$8.47 | \$11.26 | \$12.65 | \$8.12 | \$9.04 | \$10.52 | \$12.07 | \$15.65 |
| 45-2093 | Farmworkers, Farm and Ranch Animals | \$7.31 | \$9.54 | \$10.65 | \$6.84 | \$8.10 | \$9.51 | \$10.48 | \$11.30 |
| 13-2051 | Financial Analysts | \$20.56 | \$32.04 | \$37.77 | \$18.50 | \$23.15 | \$32.88 | \$40.73 | \$45.22 |
| 37-1011 | First-Line Supervisors/Managers of Housekeeping and Janitorial Workers | \$9.07 | \$14.50 | \$17.21 | \$8.56 | \$10.05 | \$13.16 | \$17.68 | \$24.04 |
| 37-1012 | First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers | \$12.24 | \$17.15 | \$19.60 | \$10.80 | \$14.29 | \$16.69 | \$19.93 | \$25.06 |
| 43-1011 | First-Line Supervisors/Managers of Office and Administrative Support Workers | \$12.72 | \$20.11 | \$23.80 | \$11.64 | \$14.26 | \$18.31 | \$23.57 | \$32.31 |
| 39-1021 | First-Line Supervisors/Managers of Personal Service Workers | \$9.36 | \$13.18 | \$15.09 | \$8.85 | \$9.71 | \$11.06 | \$14.62 | \$21.10 |
| 33-1012 | First-Line Supervisors/Managers of Police and Detectives | \$24.97 | \$29.20 | \$31.31 | \$23.92 | \$25.78 | \$28.81 | \$33.31 | \$36.79 |
| 51-1011 | First-Line Supervisors/Managers of Production and Operating Workers | \$14.49 | \$21.99 | \$25.75 | \$13.39 | \$16.16 | \$21.27 | \$26.76 | \$32.50 |
| 41-1011 | First-Line Supervisors/Managers of Retail Sales Workers | \$10.02 | \$16.88 | \$20.31 | \$9.29 | \$11.16 | \$14.54 | \$18.51 | \$28.53 |
| 39-9031 | Fitness Trainers and Aerobics Instructors | \$9.03 | \$12.91 | \$14.84 | \$8.55 | \$9.34 | \$10.74 | \$15.99 | \$19.39 |
| 35-2021 | Food Preparation Workers | \$7.52 | \$8.49 | \$8.97 | \$7.08 | \$7.51 | \$8.17 | \$9.00 | \$10.78 |
| 35-3041 | Food Servers, Nonrestaurant | \$6.19 | \$7.27 | \$7.81 | \$5.75 | \$6.15 | \$6.81 | \$8.18 | \$10.01 |
| 11-9051 | Food Service Managers | \$12.96 | \$20.33 | \$24.01 | \$12.15 | \$14.75 | \$17.86 | \$25.88 | \$33.52 |
| * 39-3012 | Gaming and Sports Book Writers and Runners | \$7.34 | \$8.46 | \$9.02 | \$6.96 | \$7.43 | \$8.18 | \$9.37 | \$10.80 |
| 11-1021 | General and Operations Managers | \$19.90 | \$36.47 | \$44.74 | \$17.27 | \$23.12 | \$31.17 | \$46.64 | $\dagger$ |
| 21-1091 | Health Educators | \$12.95 | \$17.01 | \$19.04 | \$12.16 | \$14.01 | \$15.78 | \$21.15 | \$25.25 |
| 25-1071 | Health Specialties Teachers, Postsecondary | \$29,426 | \$51,008 | \$61,799 | \$27,113 | \$31,455 | \$38,048 | \$60,083 | \$100,629 |
| 47-3013 | Helpers--Electricians | \$10.09 | \$16.12 | \$19.13 | \$9.50 | \$10.69 | \$13.44 | \$21.78 | \$25.93 |
| 31-1011 | Home Health Aides | \$7.77 | \$9.47 | \$10.32 | \$7.46 | \$8.10 | \$9.12 | \$10.45 | \$11.61 |
| 35-9031 | Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop | \$6.23 | \$7.85 | \$8.65 | \$5.99 | \$6.70 | \$7.89 | \$8.95 | \$10.08 |
| 43-4081 | Hotel, Motel, and Resort Desk Clerks | \$7.74 | \$8.62 | \$9.06 | \$7.32 | \$7.82 | \$8.57 | \$9.51 | \$10.54 |

[^2]Insufficient Wage Data Available


* OES wages reported for Colorado statewide
$\dagger$ Insufficient Wage Data Available

| SOC Code | SOC Occupational Title | Occupational Employment Statistics Wage Data (2002) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Average Wages |  |  | Percentile Distribution |  |  |  |  |
|  |  | Entry-Level | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 49-3042 | Mobile Heavy Equipment Mechanics, Except Engines | \$14.53 | \$16.97 | \$18.19 | \$13.84 | \$14.97 | \$16.62 | \$18.93 | \$21.30 |
| * 51-4081 | Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic | \$9.40 | \$13.87 | \$16.12 | \$8.98 | \$10.36 | \$13.26 | \$16.93 | \$20.51 |
| 39-2021 | Nonfarm Animal Caretakers | \$7.13 | \$9.62 | \$10.86 | \$6.51 | \$7.76 | \$9.14 | \$10.93 | \$12.97 |
| 29-2033 | Nuclear Medicine Technologists | \$19.94 | \$22.68 | \$24.05 | \$18.73 | \$20.09 | \$22.27 | \$25.50 | \$27.64 |
| 25-1072 | Nursing Instructors and Teachers, Postsecondary | \$37,210 | \$50,201 | \$56,696 | \$35,248 | \$42,131 | \$50,654 | \$57,768 | \$68,649 |
| 29-1122 | Occupational Therapists | \$18.72 | \$24.15 | \$26.86 | \$18.03 | \$20.14 | \$23.86 | \$27.54 | \$32.73 |
| 43-9061 | Office Clerks, General | \$8.51 | \$11.93 | \$13.63 | \$7.59 | \$9.57 | \$11.37 | \$14.10 | \$17.01 |
| 53-7064 | Packers and Packagers, Hand | \$6.25 | \$8.71 | \$9.93 | \$5.99 | \$6.66 | \$7.85 | \$9.96 | \$13.93 |
| 53-6021 | Parking Lot Attendants | \$6.36 | \$7.76 | \$8.46 | \$6.05 | \$6.75 | \$7.54 | \$8.48 | \$10.08 |
| 39-9099 | Personal Care and Service Workers, All Other | \$6.89 | \$9.26 | \$10.44 | \$6.42 | \$7.42 | \$8.51 | \$10.42 | \$13.54 |
| 37-2021 | Pest Control Workers | \$8.08 | \$12.20 | \$14.26 | \$7.34 | \$8.99 | \$11.35 | \$15.48 | \$18.04 |
| 29-1051 | Pharmacists | \$31.61 | \$35.37 | \$37.25 | \$29.99 | \$32.03 | \$35.39 | \$39.58 | \$43.49 |
| 19-2099 | Physical Scientists, All Other | \$21.42 | \$33.10 | \$38.94 | \$19.12 | \$25.38 | \$33.38 | \$40.75 | \$47.82 |
| 29-1123 | Physical Therapists | \$19.09 | \$25.18 | \$28.22 | \$18.31 | \$21.05 | \$25.08 | \$28.61 | \$33.72 |
| * 19-2012 | Physicists | \$32.13 | \$43.11 | \$48.59 | \$29.18 | \$36.37 | \$42.29 | \$51.62 | \$62.22 |
| 47-2152 | Plumbers, Pipefitters, and Steamfitters | \$13.21 | \$17.87 | \$20.20 | \$12.13 | \$14.63 | \$18.21 | \$21.25 | \$23.22 |
| * 33-3051 | Police and Sheriff's Patrol Officers | \$16.34 | \$22.34 | \$25.34 | \$15.17 | \$18.18 | \$22.45 | \$26.77 | \$30.32 |
| 43-5031 | Police, Fire, and Ambulance Dispatchers | \$12.58 | \$15.75 | \$17.34 | \$12.14 | \$13.37 | \$15.70 | \$17.76 | \$20.15 |
| * 25-1199 | Postsecondary Teachers, All Other | \$25,796 | \$42,641 | \$51,063 | \$22,501 | \$30,089 | \$36,574 | \$51,670 | \$70,199 |
| * 51-8012 | Power Distributors and Dispatchers | \$24.46 | \$27.45 | \$28.96 | \$23.35 | \$24.85 | \$27.12 | \$29.71 | \$34.86 |
| 25-2011 | Preschool Teachers, Except Special Education | \$7.42 | \$10.25 | \$11.66 | \$7.09 | \$7.73 | \$8.92 | \$10.98 | \$15.15 |
| 11-2031 | Public Relations Managers | \$16.65 | \$37.08 | \$47.29 | \$14.91 | \$18.57 | \$28.79 | \$64.66 | $\dagger$ |
| * 21-2099 | Religious Workers, All Other | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | † | $\dagger$ |
| 43-4181 | Reservation and Transportation Ticket Agents and Travel Clerks | \$8.02 | \$11.66 | \$13.47 | \$7.56 | \$8.77 | \$10.78 | \$13.65 | \$17.07 |
| 39-9041 | Residential Advisors | \$8.46 | \$10.42 | \$11.40 | \$7.11 | \$9.34 | \$10.35 | \$11.72 | \$13.92 |
| * 29-1126 | Respiratory Therapists | \$14.88 | \$18.36 | \$20.10 | \$14.15 | \$15.89 | \$18.52 | \$20.99 | \$22.61 |
| 41-9031 | Sales Engineers | \$23.75 | \$31.43 | \$35.27 | \$23.59 | \$25.57 | \$28.89 | \$36.30 | \$45.36 |
| 11-2022 | Sales Managers | \$22.35 | \$42.22 | \$52.17 | \$20.30 | \$25.57 | \$38.39 | \$61.40 | $\dagger$ |
| 41-3099 | Sales Representatives, Services, All Other | \$12.28 | \$22.49 | \$27.60 | \$11.46 | \$14.37 | \$17.31 | \$28.06 | \$42.89 |

[^3]| SOC Code | SOC Occupational Title | Occupational Employment Statistics Wage Data (2002) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Average Wages |  |  | Percentile Distribution |  |  |  |  |
|  |  | Entry-Level | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 41-4011 | Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products | \$19.56 | \$32.48 | \$38.95 | \$17.35 | \$22.79 | \$31.26 | \$40.03 | \$53.21 |
| 25-2031 | Secondary School Teachers, Except Special and Vocational Education | \$28,265 | \$42,901 | \$50,218 | \$25,959 | \$31,150 | \$39,683 | \$53,254 | \$66,917 |
| 41-3031 | Securities, Commodities, and Financial Services Sales Agents | \$13.19 | \$26.06 | \$32.50 | \$12.15 | \$14.28 | \$17.26 | \$26.77 | \$69.47 |
| * 39-5093 | Shampooers | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |
| 43-5071 | Shipping, Receiving, and Traffic Clerks | \$8.88 | \$11.65 | \$13.04 | \$8.24 | \$9.48 | \$11.27 | \$13.52 | \$16.14 |
| 25-2042 | Special Education Teachers, Middle School | \$30,193 | \$38,216 | \$42,226 | \$28,085 | \$31,913 | \$37,386 | \$43,796 | \$51,312 |
| 25-2043 | Special Education Teachers, Secondary School | \$31,906 | \$43,242 | \$48,909 | \$29,425 | \$35,392 | \$43,217 | \$52,015 | \$57,783 |
| 29-1127 | Speech-Language Pathologists | \$20.16 | \$25.66 | \$28.41 | \$18.48 | \$22.54 | \$25.27 | \$27.96 | \$36.84 |
| 29-2055 | Surgical Technologists | \$12.23 | \$14.67 | \$15.89 | \$11.57 | \$12.48 | \$13.97 | \$16.34 | \$18.45 |
| 13-2081 | Tax Examiners, Collectors, and Revenue Agents | \$14.82 | \$22.78 | \$26.77 | \$13.17 | \$16.74 | \$23.12 | \$27.63 | \$33.52 |
| * 25-3099 | Teachers and Instructors, All Other | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |
| 27-3042 | Technical Writers | \$16.12 | \$23.58 | \$27.32 | \$15.28 | \$17.23 | \$22.73 | \$28.31 | \$33.78 |
| 49-9052 | Telecommunications Line Installers and Repairers | \$11.65 | \$18.36 | \$21.72 | \$11.13 | \$12.87 | \$15.93 | \$20.23 | \$34.71 |
| 41-9041 | Telemarketers | \$6.26 | \$8.71 | \$9.93 | \$6.05 | \$6.71 | \$8.09 | \$9.96 | \$12.41 |
| 43-3071 | Tellers | \$8.29 | \$9.60 | \$10.24 | \$7.83 | \$8.71 | \$9.53 | \$10.57 | \$11.40 |
| 13-1073 | Training and Development Specialists | \$12.89 | \$20.42 | \$24.18 | \$11.31 | \$14.54 | \$18.01 | \$25.71 | \$32.79 |
| 53-3032 | Truck Drivers, Heavy and Tractor-Trailer | \$11.32 | \$14.87 | \$16.64 | \$10.47 | \$12.18 | \$14.08 | \$16.85 | \$20.99 |
| 29-2056 | Veterinary Technologists and Technicians | \$10.70 | \$11.92 | \$12.53 | \$9.93 | \$11.23 | \$12.21 | \$13.13 | \$13.70 |
| 25-1194 | Vocational Education Teachers, Postsecondary | \$13.46 | \$21.72 | \$25.85 | \$12.33 | \$14.91 | \$21.01 | \$28.01 | \$33.82 |
| 13-1022 | Wholesale and Retail Buyers, Except Farm Products | \$9.97 | \$15.45 | \$18.18 | \$8.83 | \$11.56 | \$15.18 | \$18.89 | \$22.25 |

[^4]
## Health Care and Social Assistance

While the Health Care and Social Assistance sector ranks sixth in the Pikes Peak Region in terms of employment representation, it accounts for some of the highest demanded occupations by local employers. Some individuals have already chosen this career path and are on their way with education and experience to fulfill the requirements, though many more are needed as it appears there is a persistent shortage of health care workers.

In the first quarter of 2001, about 19,250 people, were employed in Health Care and Social Assistance. This sector includes four subsectors: Ambulatory Health Care Services, Hospitals, Nursing and Residential Care Facilities, and Social Assistance. About 45\% of all health care-related occupations are in the Ambulatory Health Care Services subsector in the Pikes Peak Region. These are positions in all physicians' and dentists' offices, including (but not limited to) offices of chiropractors, optometrists, and other outpatient care center, medical and diagnostic laboratories, ambulance services, and blood and organ banks.

Opportunities exist at nearly every level in this NAICS sector. While fewer highly specialized occupations exist (surgical technologists, respiratory therapists, etc.) for this winter report, there is still need at the upper end on occasion. The largest health care occupation, with over two million jobs nationwide, is registered nurses, which is also the most demanded occupation in this survey. Wages are usually above regional average, especially for advanced nurses with higher levels of education and experience. From the Occupational Table in this report, the top 25\% of all registered nurses earn at least $\$ 24.66$ per hour. For this survey, the average JVS wage offered of $\$ 24.70$ per hour is about the same, which means new hires are being offered a wage very competitive to those near the high end of wages for RNs currently working in the field. Varying levels of medical personnel are always in demand in the region, ranging from registered nurses, radiation and respiratory technicians and other health diagnosing and treating practitioners to lower-skilled entry positions in health care support such as home health aides, nursing aides, orderlies and other assistants.

Entering into health care occupations offers almost immediate employment in addition to allowing the trained
individual to find employment anywhere in the state. The Pikes Peak Region has a multitude of emergency medical facilities and family practice clinics offering varying levels of opportunities. In fact, there are over 15 hospitals and clinics and more than 550 offices of physicians and surgeons servicing the region. In addition to traditional medical office work, there are highly specialized RN positions staffing Flight For Life medical teams, with one of three base locations at Penrose Hospital in Colorado Springs. While Flight For Life RNs have approximately 10 years of extensive critical care medical training, many other positions, including entry level, are available in the Pikes Peak Region.

The region has over 40 major schools, colleges and universities to prepare individuals for entering into these various levels of nursing positions. University of Colorado at Colorado Springs (UCCS) recently acquired Beth-El College of Nursing and Health Sciences and offers both undergraduate and graduate degrees in nursing. UCCS also offers certificate programs for non-degree seeking students as well as for extended studies and continuing education. Regis University and University of Phoenix also offer extensive nursing programs through the graduate level.

Two-year colleges such as Pikes Peak Community College and Blair Junior College offer associate degrees and certificates, allowing nursing candidates to enter the medical labor market even sooner. Pikes Peak Community College (PPCC) offers an accredited nursing program along two tracks. The first is for students not yet licensed but who want to pursue an associate of applied science degree. The second is for individuals who are already licensed practical nurses and are pursuing an associate degree in nursing. PPCC also offers certificate programs including certification for nursing assistants, licensed practical nursing, psychiatric technicians and pharmacy technicians. Blair College offers associate of applied science degrees in medical assisting, preparing students for entry level positions in a variety of medical environments including clinics, medical offices, and ambulatory settings.

With the analysis of labor market conditions, many questions regarding labor demand and supply, as well as labor skills requirements, often arise...
-How many job openings are there?
-What industries are hiring?
-What skills are employer's seeking?

- Are employers having difficulty filling positions?
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.

## 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

TThe 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. The Workforce Research and Analysis survey unit cooperates with regional Workforce Centers to list reported vacancies given the approval of the reporting businesses.

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. These can be accessed at
www.coworkforce.com/lmi/oeo/oeo.htm. Projections highlight growing as well as declining occupations. Public officials, educational institutions, and Government agencies can use this survey information to effectively apply resources to education, training, and job placement programs. 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 labor needs. The survey results help determine where bottle-
necks may occur should current vacancies persist. Economic developers can also generate a comprehensive picture of the region by determining where labor demand stands today, as identified by the survey, and
where the local market is trending using Labor Market Information's employment projections.

TThe Job Vacancy Survey uses sampling methods to estimate over-all job vacancies for regions. As such, readers should be mindful of sampling issues.

Sampling error results from the Job Vacancy Survey producing estimates from one particular sample, rather than examining the entire population. Different samples will likely result in different estimates for the population, thus we report the overall estimate with a confidence interval; i.e. the range of values within which the actual sample derived vacancy estimate is likely to fall $95 \%$ of the time.

Nonsampling error occurs primarily from reporting, translating data to standard terms, and incorrect information about firms in our sample frame. Some examples include placing reported vacancies in the wrong occupational codes, inadequate data collection in an industry due to non-response, and estimating errors. The majority of non-sampling errors are corrected in the Job Vacancy Survey's extensive review and validation process that takes place before estimates are published.The
study provides estimates of job openings for a point-in-time and does not attempt to project the level of vacancies into the future. Readers should 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 is 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, patterns that more accurately reflect changing labor market conditions may be identified. Regional surveys are timed to make these comparisons possible.

The occupational detail provided is supplemental data believed to be of interest to the reader. The survey design does not allow for application of this detail to the region as a whole, but it can be used to understand characteristics of those job vacancies reported. These vacancy characteristics are not estimated and therefore do contain significant bias.Approximately two thirds of the non-estimated information comes from large employers and government agencies, but they represent approximately $40 \%$ of the employment in the region. The vacancy characteristics therefore are heavily influenced by what is being demanded by large employers and government agencies.This information is still useful and important, but the user of this data needs to keep in mind its inherit bias.

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

## Methodology

The Job Vacancy Survey (JVS) conducted by the Colorado Department of Labor and Employment involves the collection, processing, and dissemination of regional job vacancies and their characteristics. The survey design allows for estimation of a job vacancy rate and the total job vacancies within a region by
industry and size of firm. Additional data related to these vacancies is informative of the occupations for which they are reported, but is not indicative of overall vacancy characteristics in the regional universe.

The number of vacancies-used to calculate the job vacancy rate-is an impor-
tact more employers than would be necessary if the survey only estimated the total number of vacancies. For this reason all of the large employers and government agencies are contacted in the region. These employers provide the most cost effective means of obtaining large amounts of vacancy information. Approximately $40 \%$ of the employment in the region is found in large and government employers that make up only $1 \%-2 \%$ of the total number of firms. Censusing these entities allows us to cover a large portion of the region's employment while contacting relatively few entities.
tant measure of the unmet demand for labor. With this statistic, it is possible to paint a more complete picture of the regional labor market than by looking solely at the unemployment rate, a measure of the excess supply of labor.

## Survey Design

TThe Job Vacancy Survey was designed to accurately estimate the number of job vacancies for firms employing 5 or more people. The secondary purpose of the survey is to obtain and report significant vacancy characteristics.

The survey estimates vacancies based on the ratio of vacancies to employment size in each stratification.It attempts to determine how many positions in a region are filled and unfilled. A filled position is an employee and an unfilled position is a job vacancy. Because positions are not independent of one another or evenly dispersed, we collect this information in naturally occurring clusters, i.e., firms. Firms are
asked how many employees they have and how many positions they are actively recruiting for. In each size and industry stratification a ratio of vacancies to employment is calculated based on the sampled firms. That ratio is then applied to the total number of employees in that stratification to obtain the estimated number of vacancies in that stratification. The total number of vacancies for a region is the sum of each stratification's estimated vacancies.

Stratifications containing small and medium sized private employers are randomly sampled. In order to report vacancy characteristics such as education and experience requirements demanded, the survey must con-

## Survey Sample

The Pikes Peak survey was conducted from February 18 through March 5. For the purpose of this report, all government and private employers with five or more employees are referred to as the sample frame. Firms with fewer than five employees make up a very large portion of all employers in the region, but a small proportion of the total employment. Employment in the sample frame accounts for $89 \%$ of the region's total employment.

## The Job Vacancy Survey separates

 employers into either government or private industry. Private firms are then split into large and small to mid-size categories. Firms with at least 250 employees are considered large employers. Attempts are made to contact all government agencies and large firms in the sample frame. The remaining small to mid-size firms are split into JVS sectors. The number of firms surveyed in each sector varies according to the number of employees and employers in the sector. In most JVS sectors half of all employers are contacted up to 200 employers. In JVS sectors with less than 1,000 employees, efforts are made to capture at least 500 employees in the sample. If less than 500 employees work in a sector then all employers are contacted. This sampling method insures that all the vacancy estimates are based on a sufficiently large sample size

Government makes up $21 \%$ of the employment in the sample frame, while private industry employers make up the remaining $79 \%$. Large firms account for $61 \%$ of private industry employment in the sample frame. Firms employing from five to 249 individuals are considered small to mid-size
employers, and account for the remaining $39 \%$ of private industry employment.

The margin of error for the overall vacancy estimate is plus or minus $8 \%$ or 108 vacancies at a .95 certainty level. In other words, in 95 out of 100 samples taken, the actual number of vacancies for the region will be between 1,245 and 1,461 in the survey period. Labor Market Information is confident that the estimates in this survey are accurate and that the survey was conducted according to recognized survey research standards.

The survey response rate is $73 \%$. This measures the quality of the survey database, or the success experienced in contacting eligible employers. The cooperation rate is $99 \%$ and measures the success in obtaining data once an employer is contacted.

## JVS Sectors

The new North American Industry Classification System increases the number of major industry groups to 20 from the Standard Industrial Classification System. The new coding system better reflects today's service based economy and allows comparison of industries in the United States, Mexico and Canada.

In the Pikes Peak Region, the 20 NAICS sectors have been combined into 12 JVS Sectors. These groupings are based on the NAICS sectors, but are somewhat unique to the Job Vacancy Survey. The new groupings allow the Job Vacancy Survey to study local Colorado labor markets in a more relevant and meaningful way.

For more information on the North American Industry Classification System see Page 31.

## Data Collection

Data for the Job Vacancy Survey are 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

| Pikes Peak Region JVS Sectors | $\rightarrow$ NAICS Sectors |
| :---: | :---: |
| Natural Resources \& Mining | Agriculture, Forestry, Fishing, \& Hunting Mining |
| Construction | Construction |
| Manufacturing | Manufacturing |
| Trade, Transportation, \& Utilities | Utilities <br> Wholesale Trade <br> Retail Trade <br> Transportation \& Warehousing |
| Other Services (except Public Administration) | Other Services (except Public Administration) |
| Information | Information |
| Financial Activities | Finance \& Insurance <br> Real Estate \& Rental \& Leasing |
| Professional \& Business Services | Professional, Scientific, \& Technical Services Management of Companies \& Enterprises Administrative \& Support \& Waste Management \& Remediation Services |
| Educational Services | Educational Services |
| Health Care \& Social Assistance | Health Care \& Social Assistance |
| Leisure \& Hospitality | Accommodation \& Food Services Arts, Entertainment, \& Recreation |
| Government | Public Administration |

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 open. Employers are also asked if sign-on bonuses and health insurance coverage are offered for these positions. These data are collected in addition to the minimum and maximum wages in order to describe more fully the compensation offered.

## Wage Conversion

Standard 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 are adjusted to that amount. Currently, the federal minimum wage is $\$ 5.15$ per hour. Where only a single wage figure is reported, that wage is used as both the minimum and maximum wage for that job vacancy.

## 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.

The job title, duties, education and experience requirements reported by employers are used to code vacancies in accordance with the latest release of the Standard Occupational Classification system.

> North American Industry Classification System (NAICS)

The Office of Management and Budget (OMB) in cooperation with agencies from Mexico and Canada has developed an industry classification system called the North American Industry Classification System (NAICS pronounced nakes) that replaced the Standard Industrial Classification (SIC) system. While work has been underway since 1993, OMB formally adopted NAICS on January 16, 2001.

## History of Process

The Office of Management and Budget established the Economic Classification Policy Committee in 1992 to pursue a fresh slate examination of economic classifications for statistical purposes ${ }^{1}$. Since 1939 the U.S. has been using the Standard Industrial Classification (SIC) system. While SIC had undergone periodic revisions, the last one in 1987, rapid changes in the U.S. and world economies brought SIC under increased scrutiny. In response to the need for a classification system that better reflected the dynamic nature of economies, OMB established the Economic Classification Policy Committee ${ }^{2}$. Government agencies from the United States, Mexico and Canada ${ }^{3}$ were tasked with the development of a system that accounted for rapid changes in the U.S and world economies.

## Industrial Classification vs. <br> Occupational Classification

NAICS is a system concerned with classifying organizations into different industries; as opposed to classification at the occupational level. The newly revised Standard Occupational Classification (SOC) system classifies occupations by job duties. Occupations specific to certain industries may be found in a different industry category because of the shift to NAICS, yet the Standard Occupational Classification Code remains the same. Systems like O*NET and other classification
systems based on SOC are not subject to changes because of the shift to NAICS. Professionals who use information at the occupational level will not notice changes in job categories as a result of the shift to NAICS, unless they are looking at occupations by industry.

## Benefits

Comparable-NAICS is organized in such a way so as to allow direct comparison of economic data with our NAFTA trading partners Canada and Mexico.

Relevant-NAICS recognizes hundreds of new businesses in the economy with 20 broad industry sectors, up from SIC's 10 . Some new industry categories include an Information Sector and a Health Care and Social Assistance Sector formerly lumped into Services under SIC.

Consistent-NAICS classifies an organization based on how it produces something, not simply what it produces. Businesses that use identical or similar technologies and processes to produce something will be grouped together. For example, software creation falls under the new Information sector, while software duplication falls under Manufacturing. Under SIC both enterprises were grouped under the same major industry sector, because both were engaged in production of software.

Adaptable-Regular updates, which are scheduled in 5 year intervals account for emerging industries not currently known.

## Things to Consider

The shift to NAICS means a break in historical time series. SIC and NAICS industry groupings are not directly comparable since the code changes for NAICS have split some SIC groups.

## New Industries Reflected in NAICS

- NAICS heralds the creation of a new information sector that pulls businesses from communications, publishing, motion picture and sound recording and online services to recognize an informa-tion-based economy.
- Formerly, under SIC corporate headquarters were not distinguished from the industry category of the product or service they produced. Now corporate headquarters are recognized in the new Management Sector.
- Manufacturing is restructured to account for high-tech industries.
- An increase in the amount of detail overall accompanies the shift to NAICS including a further breakdown of SIC's services sector into nine new sectors.
- Eating and drinking places move out of Retail Trade into a new category called Accommodation and Food Services.
- The difference between Retail and Wholesale is now based on how each store conducts business. For example, many computer stores are reclassified from Wholesale to Retail.

Executive Office of the President Office of Management and Budget. North American Industry Classification System. White Plains, MD: Bernan and U.S. Department of Commerce, 2002
${ }^{2}$ ECPC is chaired by the Bureau of Economic Analysis, U.S. Department of Commerce, with representatives from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor
${ }^{3}$ Specifically, Mexico's Instituto Nacional de Estadística, Geografía e Informàtica (INEGI) and Statistics Canada

## Comparison of NAICS and SIC Major Industry Groups

| SIC <br> Standard Industrial Classification | NAICS <br> North American Industy Classification System |
| :---: | :---: |
| Agriculture, Forestry, \& Fishing | Agriculture, Forestry, Fishing, \& Hunting |
| Mining | Mining |
| Construction | Construction |
| Manufacturing | Manufacturing |
| Transportation, Communications \& Public Utilities | Utilities <br> Transportation \& Warehousing |
| Wholesale Trade | Wholesale Trade |
| Retail Trade | Retail Trade Accommodation \& Food Services |
| Finance, Insurance, \& Real Estate | Finance \& Insurance <br> Real Estate \& Rental \& Leasing |
| Services | Information <br> Professional, Scientific, \& Technical Services <br>  <br> Remediation Services <br> Educational Services <br> Health Care \& Social Assistance <br> Arts, Entertainment, \& Recreation <br> Other Services (except Public Administration) |
| Public Administration | Public Administration |
| (parts of all divisions) | Management of Companies \& Enterprises |

U.S. Bureau of the Census, U.S. Department of Commerce

## Glossary

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 Maximum Wage

An average maximum wage is calculated by summing the maximum wages offered for all vacancies in a given category and then dividing by the number of vacancies in that category.

## Average Minimum Wage

An average minimum wage is calculated by summing the minimum wages offered for all vacancies in a given category and then dividing by the number of vacancies in that category.

## Computer Assisted Telephone Interviewing (CATI)

A structured system of data collection by telephone that speeds up the collection and editing of such data.

## Cooperation Rate

The number of completed interviews divided by the number of all units surveyed that are eligible. Measures the effectiveness of surveyors in gaining information once an eligible employer is contacted.

## Educational Attainment

The highest diploma or degree, or level of work towards a diploma or degree, an individual has completed. In this survey, an individual recorded in the Bachelor's degree category has completed the degree.

## Effective Response Rate

The number of completed interviews divided by the sum of all units surveyed that are eligible as well as those with unknown eligibility. This is a measure of how well the survey obtains completed interviews from employers in the sample.

## Employed Persons (Employment)

Persons 16 years and over in the civilian non-institutional population who, during the reference period
a) did any work at all (at least 1 hour) as paid employees, worked in their own business, profession, or on their own farm, or worked 15 hours or more as unpaid workers in an enterprise operated by a member of the family, and
b) all those who were not working but who had jobs or businesses from which they were temporarily absent because of vacation, illness, bad weather, childcare problems, maternity or paternity leave, labor-management dispute, job training, or other family or personal reasons, whether or not they were paid for the time off or were seeking other jobs.

## Employer

A person or establishment that employs one or more people for wages or salary.

## Full-time Employee

Employees who usually work 35 hours per week or more.

## Goods Producing Industries (NAICS)

Includes manufacturing, construction, mining, and agriculture, forestry, fishing and hunting.

## Industry

A group of establishments that use similar processes and technologies to produce goods and services. The North American Industry Classification System (NAICS) groups establishments using closely similar technologies into industries.

## Job Seeker

A person 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.

## Job Vacancy Rate

The estimated number of vacancies divided by the sum of current employment and estimated vacancies.

## Labor Force

The labor force includes all persons classified as employed or unemployed in accordance with the definitions contained in this glossary.

## Medical Insurance

Refers to any insurance plan that includes coverage for medical and related care.

## Medical Insurance Premium

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

## North American Industry Classification System (NAICS)

The successor to the Standard Industrial Classification (SIC) system; this system of classifying business establishments is used by the United States, Canada, and Mexico. See full description within Appendix.

## Not Seasonally Adjusted

This term is used to describe data series not subject to the seasonal adjustment process. In other words, the effects of regular, or seasonal, patterns have not been removed from these series.

## Occupation

Represents a set of activities and skills for which an employee is paid to perform. Employees that perform essentially the same tasks are grouped into the same occupation whether or not they are in the same industry. Some occupations are concentrated in a few particular industries, other occupations are found in most or all industries.

## Part-time Employee

An employee who usually works between 1 and 34 hours per week.

## Percentile Wage Estimate

Shows what percentage of workers in an occupation earn less than a given wage and what percentage earn more. For example, a 25 th percentile wage of $\$ 15.00$ indicates that $25 \%$ of workers (in a given occupation in a given area) earn at or less than $\$ 15.00$; therefore $75 \%$ of workers earn at or more than $\$ 15.00$.

## Permanent Employment

A vacancy is classified as a permanent position if the employee is hired to be employed for more than six months.

## Sample

A subset of the population selected for interview as a representative subset of the sample frame.

## Sample Frame

A listing of all units in a population. For this report the sample frame includes employers with 5 or more employees; government entities are drawn from ES-202 while private companies come from the ALMIS (America's Labor Market Information System) database.

## Seasonally Adjusted

Seasonal adjustment removes the effects of events that follow a more or less regular pattern each year. These adjustments make it easier to observe the cyclical and other non-seasonal movements in a data series.

## Service Producing Industries (NAICS)

Includes utilities; wholesale trade; retail trade; transportation and warehousing; information; finance and insurance; real estate and rental and leasing; professional, scientific, and technical services; management of companies and enterprises; administrative and support and waste management and remediation services; educational services; health care and social assistance; arts, entertainment, and recreation; accommodation and food services; other services (except public administration); public administration.

## Sign-on Bonus

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

## Standard Occupational Classification (SOC) System

This system is used by all Federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data. All workers are classified into one of over 820 occupations according to their occupational definition. To facilitate classification, occupations are combined to form 23 major groups, 96 minor groups, and 449 broad occupations. Each broad occupation includes detailed occupations requiring similar job duties, skills, education, or experience.

## Temporary Employment

A vacancy is classified as a temporary position if the employee is hired to be employed for six months or less.

## Unemployed Persons

Persons 16 years of age and over who had no employment during the reference week, were available for work, except for temporary illness, and had made specific efforts to find employment sometime during the 4 -week period ending with the reference week. Persons who were waiting to be recalled to a job from which they had been laid off need not have been looking for work to be classified as unemployed.

## Unemployment Rate

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

## Wages

Hourly straight-time wage rate or, for workers not paid on an hourly basis, straight-time earnings divided by the corresponding hours. Straight-time wage and salary rates are total earnings before payroll deductions, excluding premium pay for overtime and for work on weekends and holidays, shift differentials, and non-production bonuses such as lump-sum payments provided in lieu of wage increases.


We urge you to


State parks to explore
in the region

## Mueller

Colorado State Parks

http://parks.state.co.us/home

Photo-Courtesy of Colorado State Parks

# Pikes Peak Region 

## Workforce Centers

Aspen Mine Center - Cripple Creek, CO<br>Pikes Peak Workforce Center 166 East Bennett Ave.<br>P.O Box 129<br>Cripple Creek, CO 80813-0129<br>Phone: (719) 689-3584, ext. 13<br>Fax: (719) 689-5711<br>Lorraine Community Center - Fountain, CO<br>301 East lowa Street<br>Fountain, CO 80817<br>Phone: (719) 667-3885<br>Fax: (719) 322-0739

For a listing of all Colorado Workforce Centers: www.coworkforce.com/EMP/WFCs.asp

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

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


[^0]:    * OES wages reported for Colorado statewide
    $\dagger$ Insufficient Wage Data Available

[^1]:    OES wages reported for Colorado statewide
    Insufficient Wage Data Available

[^2]:    * OES wages reported for Colorado statewide

[^3]:    OES wages reported for Colorado statewide
    $\dagger$ Insufficient Wage Data Available

[^4]:    * OES wages reported for Colorado statewide
    + Insufficient Wage Data Available

