## $\mathbf{N}_{\substack{\text { rurthwest Resort }}}^{\&} \mathbf{R}_{\text {egion }}$

## Job Vacancy Survey




# Northwest \& Rural Resort Region Job Vacancy Survey 

Conducted
January 28 - February 4, 2002

## State of Colorado

Bill Owens, Governor

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

Funding Provided in Part by The Colorado Workforce Development Council

April 2002

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


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## Introduction

The unemployment rate, along with the level and growth rate of employment, has been used as an indicator of labor market conditions for decades. While this indicator provides information about changes in the supply and demand for labor, it reveals nothing about the skills most sought after by employers. As such, individuals preparing themselves for the job market have done so with limited knowledge of what skills are necessary to successfully compete in the contemporary labor market. Employers have had an equally difficult time determining appropriate compensation levels due to a limited knowledge of what similar firms in their region are currently offering.

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

Colorado Job Vacancy Survey Regions

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

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

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

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

## Senior Economist: Economists:

## Statistical Analyst: <br> Program Assistant: <br> Graphic Artists:

Analyst for this report:

Alexandra E. Hall Yasir Ahmed Sonya Guram Steven Krichbaum Paul Paez Michael Patton Wande Reweta, Ph.D. Leora Starr Joseph Winter Dionne M. Frey Martha Cooper Vicki Netherland

Sonya Guram

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

Workforce Research \& Analysis Labor Market Information
Colorado Department of Labor \& Employment
Two Park Central, Suite 300
1515 Arapahoe Street,
Denver, CO 80202-2117
Email: Imi@state.co.us
(303) 318-8890
www.coworkforce.com/lmi/wra/home.htm

## How to Use This Report

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

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

The answers to these and similar questions are important in the decision-making processes of employers, employees, job seekers, trainers, and planning officials. While Labor Market Information (LMI) 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

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

## - Employee Recruitment-

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

## - Employee Training-

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

## - Compensation and Benefits Planning-

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

## - New Site Selection-

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


## Job Seekers

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

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

## Workforce Centers

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

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

While this report is a picture of the area's current employment needs and historical seasonal patterns, other Labor Market Information products provide projections of occupational growth and anticipated openings (www.coworkforce.com/lmi/oeo/oeo.htm). The projections highlight growing as well as declining occupations. Investments in the workforce can be directed toward occupations or industries that continuously contribute to the local economy or to those where there is a constant need for workers.

## Economic Developers

Economic development professionals can use the Job Vacancy Survey to track the labor situation in key industries and evaluate the area's economic growth and development potential. The survey results help determine where bottlenecks may occur should current vacancies persist. Economic developers can
also generate a comprehensive picture of the region by determining where current labor demand stands today, as identified by the survey, and where the local market is trending using Labor Market Information's employment projections.

## Caveats

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

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

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

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


## Executive Summary

The second Northwest \& Rural Resort Job Vacancy Survey (JVS) was conducted between January 28th and February 4th, 2002. The goal of the survey is to obtain knowledge about current job market conditions in this Colorado region. A random sample of small to mid-size private employers with at least five employees is contacted over the survey period. The survey unit also attempts to interview all large
employers and government agencies in the region. Employers are asked about current hiring activity.

A total of 730 employers, representing approximately one-quarter of the region's total employment, responded to the survey. Of these, 88 were government agencies, 56 were large employers and 586 were small to midsized employers. The survey had a $64 \%$ effective response rate. The major findings of the survey follow:

- An estimated 940 jobs were available for hire during the survey period, coinciding with a $0.8 \%$ vacancy rate.
- Thirteen percent of the surveyed employers reported job vacancies.
- Small to mid-size employers account for $74 \%$ of the estimated vacancies.
- Eighty-five percent of the openings are permanent, full-time positions.
- The average wage for all reported vacancies is $\$ 15.30$ per hour. The average wage offered for government openings is higher than that for private sector jobs.
- Forty-three percent of the openings require more than a high-school education.
- Over $60 \%$ of the vacancies require experience either in or related to the vacant occupation.
- According to employer responses, $25 \%$ of the vacancies are considered very difficult to fill.
- One-third of surveyed firms offered medical premium coverage with their open positions.


## Northwest \& Rural Resort Region

The Northwest \& Rural Resort (NW\&RR) region encompasses a large geographic area. The economic drivers and concerns vary from county to county and even within counties. The region is generally characterized by its mountainous terrain, and wealth of natural resources - from minerals to grazing lands to recreational opportunities. Much of the land area is publicly owned.

Many northwest counties have seen mining and ranching jobs fade as higher levels of productivity have reduced the need for worker-hours, mineral reserves have been depleted, environmental concerns have curbed land use, and the economic base has diversified to other industries. Currently, only $3 \%$ of the region's workers are employed in the agriculture and mining sectors. Some areas have been adversely affected by these changes while others have capitalized on the wealth of natural resources as a magnet for tourism and recreation. The NW\&RR region is home to the state's largest ski resort complexes, accounting for a vast majority of the state's skier days.

Twelve counties compose this region. Tourism is a significant force behind the economies of Clear Creek, Eagle, Grand, Pitkin, Summit, and Lake counties. Garfield, Moffat, Routt, and Jackson benefit from mining, ranching, and farming along with tourism. Gilpin has emerged as a gaming center and bedroom community-about $80 \%$ of the working residents commute out of the county to work. A significant majority of Rio Blanco's residents are employed in services.

The Northwest \& Rural Resort Region has welcomed many new residents over the past decade.

The 2000 census tallied the area's population at 198,640, a $47 \%$ increase since 1990. Colorado's population grew $31 \%$ over the same period. The region's population is concentrated in Garfield, Eagle, and Summit counties along the I-70 corridor. Over the ten-year census period, Eagle county's population grew $90 \%$ while Summit county's expanded by more than $80 \%$. Grand and Gilpin counties' growth exceeded $50 \%$ over the decade. Rio Blanco and Jackson, already lightly populated, both experienced a slight decline in population.

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


Source: CDLE, Local Area Unemployment Statistics

The region's labor force is estimated at 115,277 for February of 2002. Of these 110,425 were employed in the Northwest \& Rural Resort area. The region's
unemployment rate of $4.2 \%$ is lower than both that of the state and the U.S rate of $5.5 \%$ reported by the Bureau of Labor Statistics for February of 2002.

Area establishments have been categorized into the ten major Standard Industrial Classifications (SIC) to provide a better picture of the industries that drive the Northwest \& Rural Resort economy. First quarter 2001 statistics reveal that $44 \%$ of the wage and salary employment in the region is in the Services sector. Retail trade accounts for another $24 \%$ of jobs.

Looking at Major Group Industries within the SIC classification, amusement and recreation businesses employ the most people in the services sector followed by hotels and lodging establishments. Almost $50 \%$ of the people working in retail trades are employed in eating and drinking establishments. Each of these industries is bolstered by area tourism.

The number of employers in the Services sector is actually dominated by Business Service organizations and Engineering, Accounting, Research, and

Management firms. These businesses are often soleproprietorships or employ only a few professionals.

Like the rest of Colorado, Services and Retail Trade are major economic drivers. The Northwest \& Rural Resort region's economy is in fact more dependent on Services, Retail Trade, and Construction than the rest of the state. Combined, these industries make up 74\% of the region's employers and $79 \%$ of the employment. The strength of the construction industry is reflective of the area's population growth.

Wholesale Trade and Manufacturing play a smaller role in the NW\&RR economy than they do in the state as a whole. FIRE is the abbreviation for the Finance, Insurance, and Real Estate industries; TCPU represents the Transportation, Communications, Electric, Gas, and Sanitary Service industries. Both hold a similar position in the regional economy as they do in the state.

Figure 3: Northwest \& Rural Resort Region Employers \& Employees, 1st Quarter, 2001



The chart below illustrates the historical progression of both the region's labor force and employment levels. The upward trends of the lines demonstrate the growth in both the labor force and employment since 1995. Employment has grown $14.0 \%$ in the region and $13.9 \%$ in the state from February 1995 to February 2002.

The graph also provides a visual representation of unemployment. Unemployment is represented by the gap between the labor force and the employment lines; the larger the distance between the two lines, the greater the number of unemployed. Unemployment tends to peak in May each year; it hit a high for this time-span of $7.8 \%$ in May 1995. The lowest unemployment rate in this timeframe was observed in August 2000 at $2.2 \%$.

Figure 4 also reveals a seasonal trend in the region's labor market. Both the labor force and the employment level peak in the 1st and 3rd quarters each year. The labor force surges as people migrate to the area for the prime recreation months. The ski industry boosts population and employment in the 1st quarter while myriad summer recreation options bring people to the Northwest \& Rural Resort region in the 3rd quarter of the year. Employment expands at a slower rate while the newcomers who have augmented the labor force numbers look for work. The Job Vacancy Survey is conducted semi-annually in winter and summer in order to measure the demand for labor at peak periods.

Figure 4: Employment \& Labor Force Trends for the Northwest \& Rural Resort Region


Source: CDLE, Local Area Unemployment Statistics

## The Job Vacancy Survey Sample

TThe second Northwest \& Rural Resort regional survey was conducted from January 28th through February 4th, 2002. For the purpose of this report, employers with five or more employees ( 5,259 in the region) are referred to as the "sample universe." Although firms with less than five employees account for about $60 \%$ of the region's employers, they only represent $15 \%$ of the total employment. The possibility of employing statistical methods to estimate vacancies for this group is currently being explored.

The Job Vacancy Survey first separates employers from this sample universe into government or private industry classifications. Next, private firms are split into large (more than 150 employees) and small to mid-size (from 5 to 149 employees) categories. The remaining small to mid-size firms are split into goods and service producing industries, and a random sample of each category is contacted. The survey unit attempts to contact all government and large employers in the region.

Eleven percent of the sample universe employment is represented by government entities, including public schools. Large private employers represent $17 \%$ while small to mid-size firms account for $72 \%$ of the employment. The survey included responses from 730 employers representing $14 \%$ of all those with five or more employees in the Northwest \& Rural Resort region; those surveyed provide employment for $23 \%$ of employed people in the region. Of these respondents, 88 were government, 56 were large employers and 586 were from the small to mid-sized category.

As there are not a sufficient number of regional firms in each of the Standard Industrial Classification categories to support job vacancy estimates at this detailed level, the industrial classifications are grouped into broader Goods and Service Producing segments. Goods producing firms represent $13 \%$ of the sample universe; 233 of these were contacted during the survey period. Service businesses comprise $84 \%$ of the sample universe; 409 provided information for the Job Vacancy Survey. The survey also included 88 government entities.



## Data Collection

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

Professional interviewers, trained in economic data collection processes, gather information from a call center located in the Colorado Department of Labor and Employment. This interview process results in increased control over the survey process, better accuracy, and dependable results.
Employers are asked if they have job vacancies or open positions which they are actively seeking to fill.

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

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

## Vacancies: Industry, Size and Status

During the survey period, an estimated 940 vacancies were open for immediate hire in firms with at least five employees in the Northwest \& Rural Resort Region. The overall region employment is estimated at approximately 112,000 resulting in an estimated vacancy rate of $0.8 \%$.

This survey was conducted during a peak period in the labor force trend with a demand for jobs to support the winter ski industry. Just as the majority of the region's employers and employees are in the service producing industries, so are the current job vacancies. The service producing industries represent $84 \%$ of the
region's firms, account for $79 \%$ of the employment and $82 \%$ of the vacancies.

Goods producing industries account for $13 \%$ of regional businesses, $10 \%$ of the jobs and $8 \%$ of the vacancies. Fewer vacancies in goods producing industries may be explained by weak growth in the area's manufacturing, agriculture, and mining jobs, along with lower job turnover rates.

Three percent of employers, $11 \%$ of employment and $10 \%$ of open positions fall into the government sector.

Figure 5: Estimated Vacancies by Industry Group



Wages reflect labor force supply and demand along with the skill and experience requirements for occupations. Seventy-six percent of employers surveyed provided minimum and maximum wages offered for the vacancies they reported. The overall mid-point wage for vacancies in this survey is $\$ 15.30$.

Vacancies reported in the government category offered higher wages than in either the service or goods producing industries.

Figure 6: Average Wages by Industry Group


The survey labels employers as government, large, or small to mid-size based on ownership and the number of people they employ. Notice how the estimated vacancies are skewed to the small to mid-size employer group. The job vacancy rate for both the government and large employer groups is close to $0.8 \%$. Job seekers will likely find more employment opportunities with small to mid-size firms where the vacancy rate is about $1.7 \%$, and where there are more employers and more current employment.

Of those employers with more than five employees small to mid-size firms represent $96 \%$ of the firms, $72 \%$ of the employment, and $74 \%$ of the estimated vacancies. Large employers (represented by the 1st bar in Figure 7) account for only 1\% of the firms, but provide $17 \%$ of the existing jobs and offer $16 \%$ of the vacancies. Government represents $3 \%$ of the employers, $11 \%$ of employment and $10 \%$ of the job openings.

Figure 7: Estimated Vacancies by Size Class


This chart displays wages offered for surveyed job vacancies. Again, government organizations offer the highest wages, followed by large employers, then
small to mid-size. Keep in mind that each of these employer size categories represents a range of industries and occupations offered.

Figure 8: Average Wages by Size Class


JVS Wage - Average Minimum / Average Maximum


For a great majority of the surveyed vacancies, Fulltime/Permanent status is offered. Permanent employment does not seem to fit with the highly seasonal employment trend noted in Figure 4, but sometimes employers offer positions knowing that turn-over in certain occupations is high.

The American Staffing Association reported a dramatic increase in temporary employment in the U.S. over the decade, 1990 to 2000; daily temporary employment grew $157 \%$. Temporary workers provide a cost effective and productive solution to certain staffing needs, but most vacancies are still filled permanently. Nine percent of reported vacancies were for temporary positions that may be seasonal or contract in nature.


Figure 10: Average Wages by Status


## Vacancies: Education and Experience Requirements

Figure 11: Proportion of Vacancies by Education


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

The majority of vacancies reported in the region require lower levels of education. Vacancies requiring either no diploma or a high-school diploma/GED comprise $57 \%$ of the job openings. Many technical jobs require vocational training or certification and are in relatively high demand in the Northwest \& Rural

Resort region. Seventeen percent of reported job openings required either a bachelors or advanced degree.

Looking at the occupations that coincide with the required education levels provides a better understanding of the vacancies. For this kind of analysis, reported job vacancies are assigned an occupational code from the 2000 Standard Occupational Classification Manual which groups jobs into one of 22 major categories as shown in Figure 22 on page 22.

The Job Vacancy Survey found Sales and Related, Office and Administrative Support, and Food Preparation and Serving occupations represented the greatest number of job openings for candidates with a high school diploma, GED, or no diploma. The surveyed openings most frequently reported requiring vocational training are: Healthcare Practitioner and Technical; Installation, Maintenance, and Repair; and Protective Service occupations.


Generally, the more education required for a position, the higher the wages offered. Job vacancies requiring a bachelors degree offer wages twice as high as those requiring a high-school diploma. The highest wages for reported openings were most often found in management occupations. Vocations requiring specific
training and experience may offer a relatively high wage due to their technical nature. As a high school diploma or GED was most demanded for reported job vacancies, this places a significant portion of the vacancies in the $\$ 12$ to $\$ 15$ range.

Figure 12: Average Wages by Education



Positions demanding higher levels of experience generally pay higher wages. Vacancies requiring experience in the particular occupation for which the vacancy exists pay the highest wages.

Management occupations offer the highest wages for candidates with prior experience in the field or related
job experience. A few positions for hire in Management; Education, Training, and Library; and Protective Service jobs had no experience requirements and raised the average wage for the "No Experience Required" category. In general, firms offer experienced candidates better compensation packages, in part because experience usually increases worker productivity.

Figure 14: Average Wages by Experience


The survey results confirm a notion generally held as true-the higher the level of education demanded, the higher the level of experience required. Internships and apprenticeships are important options to consider; in today's job market employers are looking for candidates with experience as well as academic knowledge. More than $80 \%$ of positions requesting a bachelor's degree or higher also desire the candidate to have experience.

In the Northwest \& Rural Resort region, most employers are expecting new hires to have some level of experience regardless of educational requirements for the position. However, there are still a significant proportion of vacancies requiring lower levels of education and requiring no experience.

Table 2: Experience Requirements by Educational Level

|  | No Experience | General Work <br> Experience | Experience in <br> Related Field | Experience in <br> This Occupation |
| :--- | :---: | :---: | :---: | :---: |
| No Diploma | $17 \%$ | $46 \%$ | $34 \%$ | $2 \%$ |
| High School Diploma/GED | $33 \%$ | $17 \%$ | $42 \%$ | $7 \%$ |
| Vocational Training/Certification | $8 \%$ | $8 \%$ | $31 \%$ | $53 \%$ |
| Two-Year Degree | $0 \%$ | $29 \%$ | $14 \%$ | $57 \%$ |
| Bachelor's Degree | $11 \%$ | $0 \%$ | $17 \%$ | $72 \%$ |
| Advanced Degree | $13 \%$ | $0 \%$ | $53 \%$ | $33 \%$ |
| Note: Percentages based on each educational category. |  |  |  |  |
| Shading added to highlight trend. |  |  |  |  |

## Job Vacancy Survey



## Vacancies: Difficulty to Fill



To estimate the level of difficulty in filling vacancies, employers are asked about their perceived level of difficulty in filling a job and the length of time that a position has been open. If a large proportion of vacancies in a region are difficult to fill, it may signal one of the following: a) too few specifically skilled workers to satisfy the labor demand, b) a need for alternate employer recruitment efforts, c) a mismatch between jobs offered and work desired by job seekers d) unattractive compensation.

The majority of surveyed employers indicated that they had some degree of difficulty in filling open positions. They most often found occupations in the Healthcare Practitioner and Technical fields very difficult to fill.

In this survey vacancies that are difficult to fill tend to offer higher wages - those considered "very difficult" offer an average minimum wage of $\$ 18.20$
while positions that are not difficult to fill offer an average maximum wage of $\$ 13.70$.

Figure 16: Average Wages by Difficulty to Fill


Although employers indicated a degree of difficulty in
filling open positions, $64 \%$ of the reported vacancies have been open for less than 30 days.

Most surveyed positions requiring 60 or more days to hire are those demanding experience in the particular occupation along with higher levels of education. Employers may allow more time to fill a position in order to ensure the fit of the candidate with the organization, or because there may be a limited number of qualified applicants.

Healthcare Practitioner and Technical Occupations were found in both the "taking 60 or more days to fill" group and, in the "always hiring" category.
Fifteen percent of reported vacancies are constantly open for hire - this could be due to high turnover, growing demand for these roles, or a perpetual short supply of qualified candidates.

Positions open for 60 or more days offer the highest wages - in line with the idea that many of these positions require specialized skills for which employers are willing to pay higher compensation.

Management and Protective Service occupations are representative of the higher wages offered for
positions surveyed as open for 60 or more days. As mentioned, Healthcare Practitioners and Technical workers are in constant demand and command the highest salaries in the "Always Hiring" group.

Figure 18: Average Wages by Time Open for Hire

| |
JVS Wage - Average Minimum / Average Maximum

## Job Vacancy Survey



## Vacancies: Medical Insurance



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

Figure 20: Average Wages by Medical Insurance


## Sign-On Bonus

ign-on bonuses became popular lore in the late 1990s when a tight labor market existed in many occupational sectors. It is unclear whether the actual size and frequency of sign-on bonuses deserved the hype. Nine of the 163 employers responding to this question offer a sign-on bonus. When offered, this bonus is currently used to attract professionals in the Healthcare Practitioner and Technical field. As the economy climbs out of recession and the labor market once again tightens, it will be interesting to see if sign-on bonuses are offered more frequently.

## Occupations

In order to help make comparisons between the results of this survey and other sources of employment statistics, all jobs reported are assigned a Standard Occupational Classification code from the 2000 Standard Occupational Classification Manual. Figure 22 shows the distribution of job vacancies by
major occupational groups. Figure 22 depicts the distribution of vacancies by occupation. Not surprisingly, the most frequently occurring job vacancies fall into occupational groups that are most often associated with the largest industries in the region: services, retail trade, and construction.

Figure 22: Proportion of Actual Vacancies by Major Occupational Group



The survey results show that the most frequently occurring job vacancies are not necessarily offering the highest wages. This indicates that compensation for workers can be explained by looking at other vacancy characteristics. Occupations offering the lowest wage ranges also tend to be those typically requiring
lower levels of education and experience. Management, Business and Financial, Healthcare and some Transportation and Material Moving vacancies are offering the highest wages. These occupations typically require specific knowledge acquired through education and experience.

Figure 23: Average Wages by Major Occupational Group

Table 3: Job Vacancy Survey Occupations with OES Wages

|  |  |  |  | Occupational Employment Statistics Wage Data |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Average Wages |  |  | Percentile Distribution |  |  |  |  |
| SOC <br> Code | SOC Occupational Title | $\ddagger$ Vacancy Rank | $\begin{gathered} \text { Average } \\ \text { JVS } \\ \text { Wage } \end{gathered}$ | Entry- <br> Level | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 11-0000 | Management Occupations |  | $\dagger$ | \$15.66 | \$28.67 | \$35.18 | \$14.09 | \$18.35 | \$25.71 | \$35.94 | \$50.26 |
| 11-1011 | Chief Executives | L | \$36.10 | \$26.30 | \$47.76 | \$58.48 | \$20.43 | \$33.01 | \$49.94 | \$59.12 | \$74.55 |
| 11-1021 | General and Operations Managers | M | \$44.50 | \$18.23 | \$33.46 | \$41.09 | \$15.89 | \$21.31 | \$30.84 | \$43.94 | \$56.54 |
| 11-2021 | Marketing Managers | L | $\dagger$ | \$15.71 | \$24.91 | \$29.50 | \$15.00 | \$16.51 | \$21.91 | \$28.16 | \$43.41 |
| 11-2022 | Sales Managers | L | \$17.10 | \$14.26 | \$21.18 | \$24.64 | \$13.07 | \$15.15 | \$17.69 | \$25.12 | \$34.18 |
| 11-2031 | Public Relations Managers | M | \$25.20 | \$17.75 | \$29.52 | \$35.40 | \$15.76 | \$20.24 | \$29.73 | \$39.87 | \$43.81 |
| 11-3031 | Financial Managers | L | $\dagger$ | \$20.90 | \$33.96 | \$40.49 | \$18.33 | \$24.49 | \$35.67 | \$43.02 | \$51.20 |
| 11-3071 | Transportation, Storage, and Distribution Managers | L | $\dagger$ | \$6.77 | \$15.13 | \$19.33 | \$6.05 | \$6.90 | \$13.33 | \$19.81 | \$30.47 |
| 11-9041 | Engineering Managers | L | \$33.70 | \$23.21 | \$31.77 | \$36.05 | \$22.87 | \$25.87 | \$31.87 | \$39.07 | \$43.38 |
| 11-9051 | Food Service Managers | L | \$23.40 | \$13.43 | \$19.54 | \$22.60 | \$12.21 | \$14.98 | \$18.54 | \$21.73 | \$29.89 |
| 11-9111 | Medical and Health Services Managers | H | \$18.40 | \$20.06 | \$29.87 | \$34.78 | \$19.00 | \$20.84 | \$25.13 | \$32.48 | \$59.16 |
| 11-9151 | Social and Community Service Managers | L | $\dagger$ | \$13.69 | \$19.94 | \$23.07 | \$12.40 | \$14.91 | \$18.27 | \$24.80 | \$30.39 |
| 11-9199 | Managers, All Other | L | \$27.60 | \$15.27 | \$24.65 | \$29.34 | \$14.18 | \$16.84 | \$23.36 | \$28.68 | \$40.15 |
| 13-0000 | Business and Financial Operations Occupations |  | $\dagger$ | \$14.35 | \$23.58 | \$28.19 | \$13.44 | \$16.01 | \$19.78 | \$26.25 | \$41.35 |
| 13-1023 | Purchasing Agents, Except Wholesale, Retail, and Farm Products | H | \$24.00 | \$14.86 | \$20.66 | \$23.56 | \$14.12 | \$15.89 | \$19.53 | \$24.91 | \$29.06 |
| 13-1079 | Human Resources, Training, and Labor Relations Specialists, All Other | L | \$21.20 | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |
| 13-1121 | Meeting and Convention Planners | L | \$19.20 | \$14.10 | \$17.30 | \$18.91 | \$12.93 | \$14.69 | \$16.74 | \$19.77 | \$21.93 |
| 19-0000 | Life, Physical, and Social Science Occupations |  | $\dagger$ | \$15.19 | \$22.18 | \$25.67 | \$13.33 | \$17.42 | \$22.31 | \$26.25 | \$29.80 |
| 19-3051 | Urban and Regional Planners | L | \$22.10 | \$18.66 | \$22.51 | \$24.44 | \$17.39 | \$19.46 | \$22.29 | \$25.71 | \$28.29 |

21-1012 21-1022 $\stackrel{\text { N}}{\stackrel{\circ}{\circ}}$ 23-0000 둗 25-0000 $\bar{ल}$
$\stackrel{N}{\grave{N}}$
N $25-2043$
$25-4031$
$25-9031$

$25-9041$ 25-9099 | 8 |
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| 8 |
| i |
| N | 29-1111 29-2011

[^0]|  |  |  |  | Occupational Employment Statistics Wage Data(2001) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Average Wages |  |  | Percentile Distribution |  |  |  |  |
| SOC Code | SOC Occupational Title | $\ddagger$ Vacancy Rank | $\begin{gathered} \text { Average } \\ \text { JVS } \\ \text { Wage } \end{gathered}$ | EntryLevel | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 29-2034 | Radiologic Technologists and Technicians | L | \$11.30 | \$15.38 | \$18.63 | \$20.26 | \$14.68 | \$16.21 | \$18.51 | \$21.01 | \$23.07 |
| 29-2041 | Emergency Medical Technicians and Paramedics | M | \$32.50 | \$12.06 | \$15.99 | \$17.94 | \$11.56 | \$12.85 | \$15.17 | \$17.73 | \$22.12 |
| 29-2055 | Surgical Technologists | L | \$12.70 | \$10.79 | \$13.71 | \$15.17 | \$9.98 | \$11.37 | \$13.36 | \$16.05 | \$18.05 |
| 31-0000 | Healthcare Support Occupations |  | $\dagger$ | \$9.01 | \$12.41 | \$14.10 | \$8.42 | \$9.47 | \$10.77 | \$12.71 | \$16.15 |
| * 31-1013 | Psychiatric Aides | H | \$8.20 | \$9.14 | \$10.98 | \$11.89 | \$8.51 | \$9.47 | \$10.64 | \$12.53 | \$14.04 |
| 31-9011 | Massage Therapists | M | \$14.40 | \$9.58 | \$21.15 | \$26.94 | \$9.33 | \$10.30 | \$13.86 | \$36.45 | \$41.49 |
| 33-0000 | Protective Service Occupations |  | $\dagger$ | \$8.70 | \$14.73 | \$17.74 | \$7.40 | \$10.33 | \$13.64 | \$18.58 | \$23.57 |
| 33-1021 | First-Line Supervisors/Managers of Fire Fighting and Prevention Workers | M | \$21.30 | \$19.66 | \$27.92 | \$32.05 | \$18.86 | \$20.84 | \$28.78 | \$34.06 | \$38.40 |
| * 33-2011 | Fire Fighters | L | \$16.80 | \$13.95 | \$20.42 | \$23.65 | \$12.80 | \$15.84 | \$20.91 | \$25.34 | \$27.69 |
| * 33-2021 | Fire Inspectors and Investigators | L | \$20.40 | \$10.13 | \$20.42 | \$25.56 | \$9.56 | \$10.33 | \$19.13 | \$31.22 | \$34.51 |
| 33-3012 | Correctional Officers and Jailers | L | \$15.20 | \$12.44 | \$16.86 | \$19.08 | \$11.39 | \$14.36 | \$16.72 | \$20.12 | \$23.56 |
| 33-3051 | Police and Sheriff's Patrol Officers | H | \$24.60 | \$13.98 | \$17.49 | \$19.24 | \$12.79 | \$14.80 | \$17.15 | \$20.36 | \$22.47 |
| 33-9011 | Animal Control Workers | L | \$9.50 | \$5.97 | \$8.30 | \$9.47 | \$5.51 | \$5.86 | \$6.42 | \$10.93 | \$14.91 |
| 33-9031 | Gaming Surveillance Officers and Gaming Investigators | L | \$16.80 | \$9.74 | \$11.73 | \$12.73 | \$9.29 | \$10.15 | \$11.53 | \$13.06 | \$14.47 |
| 33-9032 | Security Guards | L | $\dagger$ | \$7.09 | \$9.73 | \$11.04 | \$6.49 | \$8.00 | \$9.71 | \$11.03 | \$13.09 |
| 33-9092 | Lifeguards, Ski Patrol, and Other Recrational Protective Service Workers | L | \$13.00 | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |
| 35-0000 | Food Preparation and Serving-Related Occupations |  | $\dagger$ | \$5.99 | \$9.06 | \$10.60 | \$5.75 | \$6.40 | \$7.87 | \$10.24 | \$13.46 |
| 35-1011 | Chefs and Head Cooks | L | \$26.40 | \$11.67 | \$25.88 | \$32.98 | \$10.22 | \$13.45 | \$18.96 | \$25.77 | \$71.84 |
| 35-2012 | Cooks, Institution and Cafeteria | L | \$8.80 | \$7.88 | \$11.07 | \$12.66 | \$7.56 | \$8.36 | \$10.18 | \$14.29 | \$16.27 |


|  |  |  |  | Occupational Employment Statistics Wage Data(2001) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Average Wages |  |  | Percentile Distribution |  |  |  |  |
| SOC Code | SOC Occupational Title | $\ddagger$ Vacancy Rank | Average JVS <br> Wage | EntryLevel | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 35-2014 | Cooks, Restaurant | H | \$8.60 | \$8.54 | \$10.24 | \$11.09 | \$7.65 | \$9.13 | \$10.07 | \$11.00 | \$13.37 |
| 35-2015 | Cooks, Short Order | L | \$8.00 | \$5.98 | \$7.35 | \$8.04 | \$5.61 | \$6.10 | \$6.91 | \$8.39 | \$10.22 |
| 35-2019 | Cooks, All Other | L | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |
| 35-2021 | Food Preparation Workers | L | \$8.50 | \$7.60 | \$9.72 | \$10.78 | \$7.26 | \$7.92 | \$9.19 | \$11.14 | \$13.43 |
| 35-3021 | Combined Food Preparation and Serving Workers, Including Fast Food | L | \$11.80 | \$6.43 | \$8.05 | \$8.85 | \$6.01 | \$6.96 | \$7.81 | \$8.72 | \$10.51 |
| 35-3031 | Waiters and Waitresses | M | \$6.00 | \$5.98 | \$7.77 | \$8.65 | \$5.56 | \$5.96 | \$6.62 | \$8.64 | \$11.41 |
| 35-9011 | Dining Room and Cafeteria Attendants and Bartender Helpers | M | \$7.30 | \$6.00 | \$7.33 | \$7.99 | \$5.65 | \$6.16 | \$7.00 | \$8.37 | \$9.80 |
| 35-9021 | Dishwashers | M | \$9.00 | \$5.98 | \$7.47 | \$8.21 | \$5.70 | \$6.30 | \$7.35 | \$8.44 | \$9.85 |
| 35-9031 | Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop | L | \$9.00 | \$6.00 | \$8.03 | \$9.04 | \$5.76 | \$6.42 | \$7.66 | \$9.02 | \$10.87 |
| 35-9099 | Food Preparation and Serving Related Workers, All Other | L | \$9.00 | \$7.88 | \$9.79 | \$10.74 | \$7.31 | \$8.56 | \$9.78 | \$10.93 | \$12.77 |
| 37-0000 | Building and Grounds Cleaning and Maintenance Occupations |  | $\dagger$ | \$8.00 | \$11.04 | \$12.56 | \$6.93 | \$9.07 | \$10.63 | \$12.87 | \$15.60 |
| 37-1011 | First-Line Supervisors/Managers of Housekeeping and Janitorial Workers | H | \$10.80 | \$10.54 | \$15.27 | \$17.63 | \$9.60 | \$11.61 | \$14.79 | \$18.13 | \$21.70 |
| 37-2012 | Maids and Housekeeping Cleaners | H | \$9.90 | \$8.77 | \$10.45 | \$11.28 | \$8.10 | \$9.22 | \$10.27 | \$11.68 | \$13.35 |
| 39-0000 | Personal Care and Service Occupations |  | $\dagger$ | \$6.62 | \$11.80 | \$14.40 | \$6.05 | \$7.31 | \$9.99 | \$14.76 | \$21.71 |
| 39-1021 | First-Line Supervisors/Managers of Personal Service Workers | L | \$17.50 | \$9.44 | \$13.52 | \$15.56 | \$6.40 | \$11.67 | \$13.10 | \$15.95 | \$20.19 |
| * 39-5092 | Manicurists and Pedicurists | M | $\dagger$ | \$6.04 | \$8.62 | \$9.91 | \$5.82 | \$6.48 | \$7.68 | \$9.05 | \$10.80 |
| 39-6012 | Concierges | L | \$12.00 | \$9.72 | \$12.14 | \$13.35 | \$9.25 | \$10.07 | \$11.38 | \$13.54 | \$16.73 |
| 39-9011 | Child Care Workers | L | \$9.30 | \$7.73 | \$9.65 | \$10.60 | \$7.44 | \$8.14 | \$9.30 | \$10.96 | \$12.95 |

[^1]Table 3: Job Vacancy Survey Occupations with OES Wages - Page 5

|  |  |  |  | Occupational Employment Statistics Wage Data (2001) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Average Wages |  |  | Percentile Distribution |  |  |  |  |
| SOC Code | SOC Occupational Title | $\ddagger$ Vacancy Rank | $\begin{gathered} \hline \text { Average } \\ \text { JVS } \\ \text { Wage } \end{gathered}$ | Entry- <br> Level | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 39-9031 | Fitness Trainers and Aerobics Instructors | H | $\dagger$ | \$11.71 | \$19.57 | \$23.51 | \$8.85 | \$14.95 | \$19.40 | \$26.07 | \$28.18 |
| 41-0000 | Sales and Related Occupations |  | $\dagger$ | \$8.09 | \$12.96 | \$15.40 | \$7.44 | \$8.89 | \$10.66 | \$14.77 | \$21.32 |
| 41-1011 | First-Line Supervisors/Managers of Retail Sales Workers | L | $\dagger$ | \$11.84 | \$18.41 | \$21.70 | \$11.17 | \$13.18 | \$16.56 | \$21.34 | \$27.86 |
| 41-2012 | Gaming Change Persons and Booth Cashiers | H | \$11.40 | \$6.81 | \$9.66 | \$11.07 | \$6.22 | \$7.46 | \$9.35 | \$11.43 | \$13.85 |
| 41-2021 | Counter and Rental Clerks | H | \$10.50 | \$7.10 | \$10.65 | \$12.43 | \$6.59 | \$7.95 | \$9.75 | \$12.89 | \$16.70 |
| 41-2022 | Parts Salespersons | H | \$7.30 | \$7.25 | \$11.50 | \$13.64 | \$6.81 | \$8.06 | \$11.37 | \$13.66 | \$17.93 |
| 41-2031 | Retail Salespersons | H | \$16.00 | \$8.09 | \$11.05 | \$12.54 | \$7.57 | \$8.76 | \$10.04 | \$11.81 | \$15.74 |
| 41-3011 | Advertising Sales Agents | L | \$15.10 | \$14.12 | \$21.09 | \$24.57 | \$13.34 | \$15.16 | \$17.58 | \$21.89 | \$37.02 |
| 43-0000 | Office and Administrative Support Occupations |  | $\dagger$ | \$8.91 | \$13.36 | \$15.59 | \$8.30 | \$10.28 | \$12.77 | \$15.92 | \$19.31 |
| 43-1011 | First-Line Supervisors/Managers of Office and Administrative Support Workers | L | \$25.20 | \$12.66 | \$18.56 | \$21.52 | \$11.23 | \$14.21 | \$16.61 | \$20.44 | \$28.33 |
| 43-2011 | Switchboard Operators, Including Answering Service | M | \$11.00 | \$9.05 | \$11.05 | \$12.04 | \$8.30 | \$9.49 | \$10.91 | \$12.70 | \$13.95 |
| * 43-2021 | Telephone Operators | L | \$11.00 | \$6.90 | \$10.92 | \$12.92 | \$6.37 | \$7.74 | \$11.71 | \$13.68 | \$15.62 |
| 43-3031 | Bookkeeping, Accounting, and Auditing Clerks | L | \$10.30 | \$10.82 | \$15.28 | \$17.51 | \$9.94 | \$12.27 | \$15.00 | \$17.88 | \$20.99 |
| 43-3071 | Tellers | M | \$11.50 | \$12.43 | \$12.49 | \$12.51 | \$11.40 | \$11.84 | \$12.56 | \$13.28 | \$13.72 |
| 43-4031 | Court, Municipal, and License Clerks | L | $\dagger$ | \$7.27 | \$13.33 | \$16.35 | \$6.19 | \$8.46 | \$13.14 | \$17.27 | \$21.03 |
| 43-4061 | Eligibility Interviewers, Government Programs | L | \$13.20 | \$11.47 | \$15.21 | \$17.07 | \$10.64 | \$12.07 | \$14.02 | \$18.01 | \$21.66 |
| 43-4081 | Hotel, Motel, and Resort Desk Clerks | H | \$10.10 | \$9.66 | \$10.57 | \$11.03 | \$9.05 | \$9.56 | \$10.38 | \$11.35 | \$13.09 |
| 43-4171 | Receptionists and Information Clerks | L | \$10.50 | \$8.33 | \$11.42 | \$12.96 | \$6.91 | \$9.67 | \$11.81 | \$13.42 | \$14.58 |

* OES wages reported for Colorado statewide $\quad \ddagger \quad \mathrm{L}$ - lowest $25 \%$ of actual responses H - highest $25 \%$ of actual responses

43-5031 43-5041

43-6011
$43-9061$
47-0000 47-2031 47-2061 47-2111 N
$\underset{N}{N}$
N

47-3015
49-0000
49-2095
49-3023
49-3031
49-9021
N
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$\ddagger \quad \mathrm{L}$ - lowest $25 \%$ of actual responses
M - middle 50\% of actual responses H - highest $25 \%$ of actual responses
Table 3: Job Vacancy Survey Occupations with OES Wages - Page 7

|  |  |  |  | Occupational Employment Statistics Wage Data(2001) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Average Wages |  |  | Percentile Distribution |  |  |  |  |
| SOC Code | SOC Occupational Title | $\ddagger$ Vacancy Rank | Average JVS Wage | EntryLevel | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 49-9091 | Coin, Vending, and Amusement Machine Servicers and Repairers | M | \$14.30 | \$11.33 | \$15.16 | \$17.09 | \$10.33 | \$12.40 | \$15.13 | \$18.04 | \$20.63 |
| 51-0000 | Production Occupations |  | $\dagger$ | \$8.88 | \$15.17 | \$18.32 | \$8.12 | \$10.20 | \$13.98 | \$19.16 | \$25.36 |
| 51-4121 | Welders, Cutters, Solderers, and Brazers | L | \$17.50 | \$11.43 | \$19.23 | \$23.14 | \$10.01 | \$12.80 | \$19.56 | \$25.24 | \$27.66 |
| 51-6011 | Laundry and Dry-Cleaning Workers | L | \$7.30 | \$7.34 | \$9.33 | \$10.32 | \$7.00 | \$7.64 | \$8.69 | \$10.68 | \$12.80 |
| 51-8031 | Water and Liquid Waste Treatment Plant and System Operators | M | \$13.30 | \$11.22 | \$16.32 | \$18.87 | \$9.96 | \$12.77 | \$16.10 | \$19.64 | \$23.55 |
| 53-0000 | Transportation and Material Moving Occupations |  | $\dagger$ | \$8.83 | \$14.39 | \$17.16 | \$8.10 | \$10.18 | \$13.64 | \$17.64 | \$22.10 |
| 53-3031 | Driver/Sales Workers | H | \$15.40 | \$7.11 | \$9.94 | \$11.36 | \$6.09 | \$8.78 | \$9.87 | \$10.98 | \$13.85 |
| 53-3033 | Truck Drivers, Light or Delivery Services | L | \$8.00 | \$9.37 | \$13.94 | \$16.22 | \$8.92 | \$10.20 | \$12.83 | \$16.36 | \$23.54 |
| 53-6021 | Parking Lot Attendants | L | \$7.50 | \$6.20 | \$8.00 | \$8.90 | \$5.89 | \$6.70 | \$7.85 | \$9.11 | \$10.59 |
| 53-7062 | Laborers and Freight, Stock, and Material Movers, Hand | L | \$11.50 | \$8.67 | \$11.35 | \$12.69 | \$7.92 | \$9.31 | \$10.82 | \$13.18 | \$15.92 |
| * 53-7064 | Packers and Packagers, Hand | L | \$10.80 | \$6.10 | \$7.96 | \$8.88 | \$5.84 | \$6.41 | \$7.40 | \$8.85 | \$11.00 |

[^2]
## Job Vacancy Survey



## Methodology

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

## Computer Assisted Telephone Interview

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

## In General

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

## For Each Vacancy

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

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

4. What is the maximum wage offered for this vacancy?
5. What is the minimum wage offered for this vacancy?
6. Is a sign-on bonus offered? If yes, how much?

## 7. Is medical insurance offered?

8. If yes, does your firm pay the total cost of the premium, partial cost of the premium or do you make no contribution at all to the premium?
9. Which of the following best describes the education level required to fill this vacancy?

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

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

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

11. How long has this vacancy been open?

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

12. How difficult is this vacancy to fill?

- Not difficult
- Somewhat difficult
- Very difficult to fill


## Sunvey Sample Methodology

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

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

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

## Data Editing

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

## Occupational Coding

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

## Wage Conversion

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

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


## Definitions

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

## Average

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

## Average Minimum and Average Maximum Wage

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

## Employer

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

## Employment

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

## Full-time and Part-time Employment

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

## Industry Classification

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

## Job Seekers

People actively looking for employment or researching career options.

## Job Vacancy

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

## Job Vacancy Rate

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

## Labor Force

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

## Level of Education

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

## Medical Insurance Premium

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

## Permanent and Temporary Employment

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

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

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

## SOC

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

## Survey Sample Universe

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

## Unemployment

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

## Unemployment rate

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

## Wage

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


[^0]:    $\ddagger \quad \mathrm{L}$ - lowest $25 \%$ of actual responses M - middle $50 \%$ of actual responses
    H - highest $25 \%$ of actual responses

[^1]:    - lowest $25 \%$ of actual responses M - middle 50\% of actual responses H - highest $25 \%$ of actual responses

[^2]:    $\ddagger$ L - lowest 25\% of actual responses M - middle $50 \%$ of actual responses H - highest $25 \%$ of actual responses

