# Job Vacancy Survey 



# Pueblo County Job Vacancy Survey 

Conducted
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## State of Colorado

Bill Owens, Governor

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## Introduction

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

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

Colorado Job Vacancy Survey Regions

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

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

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

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## How to Use This Report

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

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

The answers to these and similar questions are important in the decision-making processes of employers, employees, job seekers, trainers, and planning officials. While Labor Market Information (LMI) provides data on the local labor force supply, the Job Vacancy Survey complements this by providing information about the demand for labor and offers a more complete picture of local labor markets.

## Employers

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

## - Employee Recruitment-

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

## - Employee Training-

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

## - Compensation and Benefits Planning-

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

## - New Site Selection-

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

## Job Seekers

TThe 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

This Pueblo County Job Vacancy Survey was conducted from March 1st to March 11th, 2002. Over the survey period a sample of Pueblo County private employers with at least five employees, as well as all large employers and government agencies were contacted. Employers were asked if they are actively hiring at the time of the survey and a variety of questions about the positions that they are seeking to fill.

A total of 977 employers representing over one half of the region's total employment responded to the survey. Of these, 30 were government agencies, 22 were large employers and the remaining 925 were from the small to mid-sized category. The major findings of the survey follow:

- An estimated 860 jobs were open for hire in the region during the survey period.
- Twenty percent of the employers responding reported having at least one vacancy.
- Small to mid-size employers account for three out of four of the total estimated vacancies.
- Eighty percent of the openings are full-time.
- The overall average wage for all vacancies is $\$ 9.40$ per hour.
- Twenty-nine percent of the openings require more than a high-school education.
- Vacancies requiring experience either related to or within the same field as the vacant position account for $40 \%$ of all reported openings.
- According to employer responses, $42 \%$ of the vacancies are not considered difficult to fill.
- Seventy percent of the vacancies reported by employers include some form of medical insurance.
- A sign-on bonus was offered to fill approximately $13 \%$ of all reported vacancies.


## Pueblo County

According to the U.S. Census Bureau, Pueblo County was home to over 140,000 people at the turn of the century. The area employed over 55,000 individuals from a labor pool of 60,000 resulting in an $7.7 \%$ unemployment rate in January 2002. Compared with the previous year, both the
region's labor force and level of employment have increased with the rate of change in the labor force outpacing employment, resulting in higher unemployment. Over the five previous years (1996-2001), however, Pueblo County's unemployment rate was cut in half.

Figure 1: Unemployment Rates for January 2002
(Rates Not Seasonally Adjusted)


Like the rest of the state, both employers and employment in Pueblo County are concentrated in the Services and Retail Trade industries. These two industries
combined make up over $50 \%$ of the region's total employment. Government follows with $7 \%$ of the local employment.

Figure 2: Pueblo County Employers and Employees


Trends in the Pueblo County labor force and employment levels show that while both generally decreased between 1998 and 2001, the trend reversed throughout 2001. Despite the drop in both labor force and employment levels before 2001, Pueblo County's
unemployment rate fell from a high of $10.3 \%$ in June 1998, to just 3.3\% in May, 2000. Throughout 2001, however, growth in the labor force outpaced that of the employment level resulting in an 7.7\% unemployment rate at the beginning of 2002.

Figure 3: Pueblo County Employment and Labor Force Trends


Figure 3 also illustrates the seasonal employment trend in the region. Both employment levels and the labor force peak at the end of the summer and bottom out in early winter. The Job Vacancy Survey is conducted semi-annually at these times in order to measure the demand for labor at intervals that provide the most useful information. Surveys conducted in or
around peak employment times represent the demand for labor when employers are still in the process of actively recruiting for seasonal positions. Vacancies found in the winter represent the types of occupations that employers demand regardless of seasonal business patterns.

## The Job Vacancy Survey Sample

This Pueblo County Job Vacancy Survey was conducted from March 1st to March 11th, 2002. For the purpose of this report, employers with five or more employees are referred to as the "sample universe." Firms with fewer than five employees make up a large portion of all employers in the region, but only a small proportion of total employment. The possibility of employing statistical methods to estimate vacancies for this group is currently being explored. Employment in the sample universe accounts for approximately $90 \%$ of total employment in the region.

The Job Vacancy Survey separates employers into either government or private industry categories. 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 industry and randomly sampled until a representative response is obtained for each category.

Government makes up $15 \%$ of the employment in the sample universe. Private industry employers make up the remaining $85 \%$. Private industry employers with at least 200 employees are referred to as large employers. They account for $30 \%$ of the private industry employment in the sample universe. Firms employing from five to 199 individuals are considered small to mid-size employers, and account for the remaining $70 \%$ of private industry employment. Over the survey period a total of 977 employers, approximately $51 \%$ of employers in the sample universe responded to the survey. Of these, 30 were government agencies, 22 were large employers and 925 were from the small to mid-sized category.

## 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 860 vacancies were open for immediate hire in firms with at least five employees in Pueblo County. The overall sample universe employment is estimated at 51,550 resulting in an estimated vacancy rate of $1.7 \%$.

This survey, conducted during the winter, is intended to provide a snapshot of the types of vacancies for
which Pueblo County employers are recruiting at a time when the labor supply is least constrained. The vacancies reported here are expected to represent those jobs for which demand exists independent of the seasonal upturn in summer employment. Similar to past surveys, however, the large number of employers in the Services and Retail Trade industries influence the proportion of estimated vacancies in those industries.

Figure 4: Estimated Vacancies by Industry


Because wages offered vary according to an individual applicant's qualifications, employers were asked to provide the range of wages offered for the vacancies. The average wage is then calculated based on the midpoint of that range. The overall average wage offered for all vacancies in the region is $\$ 9.40$ per hour. The overall average minimum and maximum are $\$ 8.40$ and $\$ 10.30$, respectively. These wages are reported by employers for vacant positions and are not representative of the wages paid to positions currently occupied.

The wages reported for vacancies in Services heavily influence the overall average because of the large concentration of vacancies in that industry. Vacancies reported in the government category offer an average minimum wage well above the overall average and higher than any other industry's maximum, except Construction (see page 15 for more).

Figure 5: Average Wages by Industry


Small to mid-size employers account for the largest proportion of estimated total vacancies by size class. This group also has the highest vacancy rate, at $2.1 \%$. It is important, however, to keep these numbers in perspective. While small to mid-size employers make up $96 \%$ of the sample universe and $95 \%$ of the employers
contacted in the survey, they only account for $48 \%$ of total employment reported by survey respondents. Sixteen percent of employers in this category reported at least one vacancy compared to $50 \%$ and $23 \%$ for large employers and government agencies, respectively.

Figure 6: Estimated Vacancies by Size Class


Figure 7: Average Wages by Size Class



Despite reported increases in temporary employment during the 1990 's, nearly all vacancies reported were for permanent employment opportunities. In addition to providing a stable income, these positions also offer higher wages. Full-time/permanent positions in particular account for $78 \%$ of all reported vacancies and offer the highest average wages compared to other employment status categories. No vacancies were reported for parttime/temporary employment.

Figure 8: Vacancies by Employment Status


Figure 9: Average Wages by Employment Status


## Vacancies: Education and Experience Requirements

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 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 highschool diploma/GED comprise $70 \%$ of the job
openings. Thirteen percent of reported job openings require either a bachelor's or advanced degree.

Although most sampled employers are not seeking applicants with higher levels of education, they are looking for candidates with experience. About three quarters of employers reporting vacancies require at least general work experience.

Figure 11: Vacancies


Survey results show that wages increase along with the education and experience employer's require to fill vacant positions. The wages offered for jobs requiring an advanced degree are over three times higher than
the overall average of $\$ 9.40$ per hour. Vacancies requiring no work experience offer an average wage nearly $\$ 3.00$ per hour lower than the overall average.

Figure 12: Average Wages by Education

| | JVS Wage - Average Minimum / Average Maximum

Figure 13: Average Wages by Experience


In this survey, government offers the highest wages and requires the highest levels of education and experience. Forty-seven percent of the vacancies reported by Government agencies require a bachelor's or advanced degree. Finance, Insurance, and Real Estate follows close behind with $29 \%$ of vacancies requiring bachelor's degrees. Nearly 19 out of 20 vacancies
reported by Government agencies require experience either in or related to the vacant position. Vacancies reported by employers in the Durable Manufacturing and Construction industries also require high levels of experience with $82 \%$ and $72 \%$ requiring experience either in or related to the vacant position, respectively.

The results of the survey also show a positive relationship between the level of education and the experience required to fill positions. At least $80 \%$ of
positions requiring a two-year degree or higher also require the candidate to have experience.

Table 1: Experience Requirements by Educational Level

|  | No Experience | General Work <br> Experience | Experience in a <br> Related Field | Experience in <br> This Occupation |
| :--- | :---: | :---: | :---: | :---: |
| No Diploma | $73 \%$ | $23 \%$ | $3 \%$ | $1 \%$ |
| High School Diploma/GED | $11 \%$ | $55 \%$ | $21 \%$ | $13 \%$ |
| Vocational Training/Certification | $10 \%$ | $25 \%$ | $20 \%$ | $45 \%$ |
| Two-Year Degree | $20 \%$ | $0 \%$ | $40 \%$ | $40 \%$ |
| Bachelor's Degree | $0 \%$ | $2 \%$ | $46 \%$ | $52 \%$ |
| Advanced Degree | $0 \%$ | $0 \%$ | $15 \%$ | $85 \%$ |

Note: Percentages based on each educational category.


## 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. The highest proportion of vacancies considered very difficult to fill are in the Production as well as Education, Training and Library major occupational groups. Vacancies that are very difficult to fill offer an average minimum wage of $\$ 10.60$ while those that are not difficult to fill offer an average maximum wage of $\$ 8.90$.

Figure 15: Average Wages by Difficulty to Fill


Figure 16: Vacancies by Time Open for Hire

Although employers indicated a degree of difficulty in filling positions, $50 \%$ of the reported vacancies have been open for less than 30 days. Healthcare Practitioner and Technical, as well as


Less Than 30
Days 50\%

Figure 17: Average Wages by Time Open for Hire


1
JVS Wage - Average Minimum / Average Maximum

## Vacancies: Additional Compensation

## Medical Insurance

Employers may offer health insurance coverage as an incentive in addition to attractive wages to recruit skilled employees. In this survey, $70 \%$ of the vacancies reported by employers include some form of medical insurance. More than $90 \%$ of vacancies with medical insurance pay either partial or full medical insurance premiums for open positions.

Figure 18: Employer's Contribution to Medical Insurance


No Monetary Contribution

There is some 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 19: Average Wages by Medical Insurance


## Sign-On Bonus



## Occupations

In order to make comparisons between the results of this survey and other sources of employment statistics easier, all jobs reported are assigned a Standard Occupational Classification (SOC) code. 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 and Retail Trade.

Figure 21: Proportion of Reported Vacancies by Major Occupational Groups


The results of the survey show that the most frequently occurring job vacancies do not necessarily offer the highest wages. This suggests that the rate of pay offered to workers can be explained by other vacancy characteristics. Occupations offering the lowest wage ranges tend to be occupations requiring lower
levels of education and experience. Legal;
Architecture\& Engineering; and Life, Physical \& Social Sciences occupations command the highest wage ranges in the survey. These high skill occupations typically require higher levels of education and experience.

Figure 22: Average Wages by Major Occupational Groups

| \$0 |  | \$5 |  |  | \$10 |  | \$15 |  | \$20 |  |  | \$25 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sales \& Related |  |  |  | \|| | \| |  |  |  |  |  |  |  |
| Food Preparation \& Serving Related |  |  |  | 1 \| |  |  |  |  |  |  |  |  |
| Office \& Administrative Support |  |  |  |  | \|| |  |  |  |  |  |  |  |
| Production |  |  |  |  |  |  |  |  |  |  |  |  |
| Healthcare Support |  |  |  | 1 | - 1 |  |  |  |  |  |  |  |
| Healthcare Practitioner \& Technical |  |  |  |  |  | \| |  |  |  |  |  |  |
| Transportation \& Material Moving |  |  |  |  |  | , |  |  |  |  |  |  |
| Installation, Maintenance \& Repair |  |  |  |  | \| |  |  |  |  |  |  |  |
| Building \& Grounds Cleaning \& Maintenance |  |  |  |  |  |  |  |  |  |  |  |  |
|  <br> Financial Operations |  |  |  |  |  | - |  |  |  |  |  |  |
| Education, Training \& Library |  |  |  |  |  |  | 1 |  |  |  |  |  |
| Computer \& Mathematical |  |  |  |  | $1 \mid$ |  |  |  |  |  |  |  |
| Construction \& Extraction |  |  |  |  | - | 1 |  |  |  |  |  |  |
| Community \& Social Services |  |  |  |  |  | I | I |  |  |  |  |  |
| Management |  |  |  |  |  | \| |  |  | \\| |  |  |  |
| Life, Physical \& Social Science |  |  |  |  |  |  |  |  |  | I |  |  |
| Architecture \& Engineering |  |  |  |  |  |  |  |  | - | + |  |  |
| Protective Service |  | Wages | R Repo | ported | in this | Category) |  |  |  |  |  |  |
| Personal Care \& Service |  | Wages |  | ported | in this | Category) |  |  |  |  |  |  |
| Legal |  |  |  |  |  |  |  |  |  |  |  |  |
| Farming, Fishing \& Forestry |  | Wages |  | ported | in this | Category) |  |  |  |  |  |  |
| Arts, Design, Entertainment, Sports \& Media |  |  |  |  |  | 1 |  |  |  |  |  |  |
| \$0 |  |  | \$5 |  | \$10 |  | \$15 |  |  | \$20 |  | \$25 |

JVS Wage - Average Minimum / Average Maximum
Table 3: Job Vacancy Survey Occupations with OES Wages

|  |  |  |  | Occupational Employment Statistics Wage Data (2001) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Average Wages |  |  | Percentile Distribution |  |  |  |  |
| $\begin{aligned} & \text { SOC } \\ & \text { Code } \end{aligned}$ | SOC Occupational Title | $\ddagger$ Vacancy Rank | $\begin{gathered} \hline \text { Average } \\ \text { JVS } \\ \text { Wage } \end{gathered}$ | EntryLevel | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 11-0000 | Management |  | \$21.10 | \$12.72 | \$25.37 | \$31.70 | \$11.12 | \$15.30 | \$22.93 | \$33.34 | \$43.10 |
| 11-1021 | General and Operations Managers | M | \$8.00 | \$11.33 | \$22.40 | \$27.94 | \$10.24 | \$13.28 | \$19.92 | \$27.44 | \$40.28 |
| 11-3011 | Administrative Services Managers | L | \$15.40 | \$8.08 | \$18.52 | \$23.75 | \$7.40 | \$9.04 | \$15.39 | \$24.80 | \$36.27 |
| 11-3049 | Human Resources Managers, All Other | M | \$27.10 | $\dagger$ | t | t | t | t | t | $\dagger$ | t |
| 11-3071 | Transportation, Storage, and Distribution Managers | M | $\dagger$ | \$9.79 | \$18.51 | \$22.87 | \$9.29 | \$10.11 | \$15.33 | \$25.82 | \$32.82 |
| 11-9032 | Education Administrators, Elementary and Secondary School | L | \$30.90 | \$54,455 | \$66,743 | \$72,898 | \$50,191 | \$59,520 | \$67,051 | \$75,466 | \$87,713 |
| 11-9039 | Education Administrators, All Other | L | \$18.00 | † | $\dagger$ | $\dagger$ | † | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |
| 13-0000 | Business \& Financial Operations |  | \$13.80 | \$11.11 | \$19.38 | \$23.51 | \$10.06 | \$12.93 | \$18.20 | \$24.68 | \$30.70 |
| 13-2011 | Accountants and Auditors | L | t | \$11.25 | \$16.95 | \$19.81 | \$10.46 | \$12.19 | \$15.72 | \$20.86 | \$25.63 |
| 13-2031 | Budget Analysts | L | $\dagger$ | \$16.57 | \$23.31 | \$26.69 | \$14.73 | \$18.33 | \$22.39 | \$27.78 | \$33.95 |
| 13-2052 | Personal Financial Advisors | H | \$11.70 | \$13.05 | \$27.45 | \$34.66 | \$12.14 | \$14.12 | \$19.69 | \$32.03 | $\dagger$ |
| 13-2072 | Loan Officers | L | † | \$14.14 | \$22.03 | \$25.98 | \$12.85 | \$15.87 | \$19.95 | \$26.11 | \$36.14 |
| 13-2099 | Financial Specialists, All Other | M | \$32.50 | \$16.24 | \$23.01 | \$26.40 | \$15.03 | \$17.45 | \$21.36 | \$27.47 | \$34.66 |
| 15-0000 | Computer \& Mathematical |  | \$9.70 | \$15.20 | \$23.84 | \$28.16 | \$14.63 | \$17.06 | \$22.32 | \$28.00 | \$34.45 |
| 15-1021 | Computer Programmers | L | $\dagger$ | \$13.10 | \$23.14 | \$28.16 | \$11.28 | \$16.40 | \$24.62 | \$30.52 | \$34.10 |
| 15-1041 | Computer Support Specialists | H | \$8.00 | \$14.29 | \$17.99 | \$19.85 | \$13.14 | \$15.09 | \$17.03 | \$20.50 | \$24.43 |
| 15-1071 | Network and Computer Systems Administrators | L | \$21.30 | \$19.12 | \$25.81 | \$29.16 | \$17.46 | \$21.15 | \$25.35 | \$29.59 | \$34.91 |
| 15-1081 | Network Systems and Data Communications Analysts | M | $\dagger$ | \$19.75 | \$29.25 | \$34.00 | \$18.13 | \$22.05 | \$28.16 | \$35.38 | \$43.36 |
| 15-1099 | Computer Specialists, All Other | L | \$6.50 | \$17.78 | \$23.90 | \$26.96 | \$16.44 | \$19.22 | \$23.87 | \$27.29 | \$33.06 |
| 17-0000 | Architecture \& Engineering |  | \$27.50 | \$15.28 | \$23.63 | \$27.81 | \$13.42 | \$17.62 | \$21.42 | \$30.02 | \$37.75 |
| 17-3029 | Engineering Technicians, Except Drafters, All Other | L | \$27.50 | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |
| 19-0000 | Life, Physical, \& Social Science |  | \$16.10 | \$15.38 | \$23.02 | \$26.84 | \$13.34 | \$17.77 | \$23.08 | \$28.50 | \$33.18 |
| 19-3051 | Urban and Regional Planners | H | $\dagger$ | \$17.06 | \$23.90 | \$27.33 | \$15.52 | \$18.46 | \$22.64 | \$27.82 | \$34.08 |
| 19-4031 | Chemical Technicians | L | \$13.00 | \$12.32 | \$13.47 | \$14.05 | \$11.66 | \$12.33 | \$13.44 | \$14.54 | \$16.33 |
| 19-4099 | Life, Physical, and Social Science Technicians, All Other | L | \$19.20 | \$12.17 | \$19.33 | \$22.91 | \$11.51 | \$13.60 | \$20.40 | \$24.56 | \$26.92 |
| 21-0000 | Community \& Social Services |  | \$12.80 | \$10.10 | \$16.34 | \$19.46 | \$9.15 | \$11.47 | \$15.48 | \$20.94 | \$25.83 |

[^1]|  |  |  |  | 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 |
| 21-1019 | Counselors, All Other | M | \$7.80 | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | † | † | † | $\dagger$ |
| 21-1029 | Social Workers, All Other | M | \$15.60 | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | + | $\dagger$ | $\dagger$ |
| 21-2011 | Clergy | M | \$18.00 | \$11.05 | \$17.82 | \$21.21 | \$9.85 | \$12.70 | \$17.35 | \$21.38 | \$28.05 |
| 21-2021 | Directors, Religious Activities and Education | L | \$9.60 | \$12.25 | \$15.72 | \$17.46 | \$10.31 | \$14.23 | \$15.59 | \$16.97 | \$21.46 |
| 23-0000 | Legal |  | \$21.60 | \$12.42 | \$26.52 | \$33.57 | \$11.86 | \$13.77 | \$28.68 | \$37.44 | \$42.96 |
| 23-1011 | Lawyers | L | \$21.60 | \$28.43 | \$35.57 | \$39.13 | \$27.88 | \$30.71 | \$35.24 | \$41.31 | \$44.66 |
| 25-0000 | Education, Training, \& Library |  | \$12.20 | \$10.04 | \$17.19 | \$20.77 | \$8.79 | \$11.99 | \$16.12 | \$21.64 | \$27.39 |
| 25-2021 | Elementary School Teachers, Except Special Education | M | \$14.70 | \$27,672 | \$37,906 | \$43,029 | \$25,611 | \$29,929 | \$35,855 | \$44,750 | \$54,067 |
| 25-2022 | Middle School Teachers, Except Special and Vocational Education | M | \$14.70 | \$29,352 | \$40,133 | \$45,523 | \$26,941 | \$31,403 | \$38,082 | \$47,873 | \$56,952 |
| 25-3021 | Self-Enrichment Education Teachers | H | \$12.50 | \$6.87 | \$10.32 | \$12.03 | \$6.30 | \$7.33 | \$8.62 | \$11.47 | \$16.65 |
| 25-3099 | Teachers and Instructors, All Other | L | \$13.70 | $\dagger$ | t | $\dagger$ | t | $\dagger$ | , | 1 | 1 |
| 25-9041 | Teacher Assistants | M | \$5.80 | \$15,147 | \$20,020 | \$22,452 | \$14,288 | \$16,503 | \$19,648 | \$22,783 | \$27,201 |
| 27-0000 | Arts, Design, Entertainment, Sports, \& Media |  | \$14.40 | \$8.87 | \$15.71 | \$19.13 | \$7.33 | \$10.72 | \$14.84 | \$20.50 | \$24.87 |
| * 27-1024 | Graphic Designers | L | \$10.50 | \$11.16 | \$16.70 | \$19.47 | \$10.13 | \$12.34 | \$16.09 | \$19.90 | \$24.72 |
| 27-3021 | Broadcast News Analyst | L | \$18.30 | 1 | t | f | 1 | t | t | 1 | $\dagger$ |
| 29-0000 | Healthcare Practitioners \& Technical |  | \$20.40 | \$13.15 | \$23.24 | \$28.29 | \$11.73 | \$15.17 | \$19.54 | \$25.66 | \$38.40 |
| 29-1021 | Dentists, General | M | \$28.90 | 1 | 1 | 1 | 1 | $t$ | t | + | 1 |
| 29-1051 | Pharmacists | L | \$35.00 | \$23.31 | \$31.78 | \$36.02 | \$20.04 | \$28.07 | \$31.89 | \$35.37 | \$41.07 |
| 29-1063 | Internists, General | M | \$78.70 | \$12.40 | \$38.18 | \$51.08 | \$11.90 | \$13.15 | \$34.01 | \$65.85 | t |
| 29-1111 | Registered Nurses | H | \$14.90 | \$17.91 | \$21.85 | \$23.81 | \$16.49 | \$18.79 | \$21.68 | \$25.25 | \$27.62 |
| 29-1122 | Occupational Therapists | L | $\dagger$ | \$18.28 | \$23.79 | \$26.54 | \$17.18 | \$20.06 | \$23.61 | \$26.69 | \$30.48 |
| 29-1123 | Physical Therapists | H | \$19.80 | \$20.65 | \$26.17 | \$28.93 | \$18.89 | \$22.39 | \$25.85 | \$30.72 | \$34.80 |
| 29-1126 | Respiratory Therapists | L | \$17.00 | \$14.27 | \$17.59 | \$19.25 | \$13.10 | \$14.99 | \$17.31 | \$20.28 | \$22.37 |
| 29-1127 | Speech-Language Pathologists | L | t | \$18.15 | \$22.96 | \$25.37 | \$17.27 | \$20.34 | \$23.75 | \$26.31 | \$27.85 |
| 29-2034 | Radiologic Technologists and Technicians | L | \$16.00 | \$12.34 | \$15.28 | \$16.76 | \$11.65 | \$12.54 | \$14.18 | \$17.34 | \$20.86 |
| 29-2041 | Emergency Medical Technicians and Paramedics | H | \$10.30 | \$8.69 | \$12.87 | \$14.96 | \$7.98 | \$9.42 | \$12.91 | \$15.86 | \$17.80 |

[^2]|  |  | Occupational Employment Statistics Wage Data(2001) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Average Wages |  |  | Percentile Distribution |  |  |  |  |
| $\left\lvert\, \begin{gathered} \ddagger \text { Vacancy } \\ \text { Rank } \end{gathered}\right.$ | $\begin{gathered} \hline \text { Average } \\ \text { JVS } \\ \text { Wage } \\ \hline \end{gathered}$ | EntryLevel | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| H | \$8.70 | \$8.73 | \$14.04 | \$16.70 | \$7.92 | \$9.45 | \$11.49 | \$14.16 | \$17.35 |
| L | $\dagger$ | \$11.09 | \$13.57 | \$14.81 | \$10.05 | \$12.00 | \$13.84 | \$15.68 | \$16.92 |
|  | \$7.90 | \$7.51 | \$9.89 | \$11.08 | \$7.22 | \$8.12 | \$9.55 | \$11.09 | \$13.53 |
| H | \$7.90 | \$7.68 | \$9.36 | \$10.21 | \$7.37 | \$8.23 | \$9.40 | \$10.46 | \$11.36 |
| L | $\dagger$ | \$6.40 | \$9.72 | \$11.37 | \$5.84 | \$6.67 | \$9.87 | \$11.40 | \$14.16 |
| L | \$8.00 | \$9.57 | \$10.59 | \$11.10 | \$8.98 | \$9.53 | \$10.45 | \$11.74 | \$13.08 |
|  | $\dagger$ | \$11.69 | \$18.72 | \$22.24 | \$8.71 | \$14.25 | \$17.99 | \$22.86 | \$28.63 |
| L | $\dagger$ | \$7.33 | \$11.81 | \$14.05 | \$6.27 | \$8.53 | \$11.86 | \$14.58 | \$17.68 |
|  | \$5.80 | \$6.04 | \$7.59 | \$8.37 | \$5.68 | \$6.13 | \$6.87 | \$8.56 | \$11.00 |
| M | \$6.30 | \$7.56 | \$11.20 | \$13.01 | \$6.55 | \$8.87 | \$11.58 | \$13.16 | \$14.66 |
| H | \$7.40 | \$6.23 | \$8.16 | \$9.12 | \$5.99 | \$6.78 | \$7.92 | \$9.60 | \$10.94 |
| M | \$6.30 | \$6.06 | \$7.87 | \$8.77 | \$5.84 | \$6.49 | \$7.56 | \$8.81 | \$10.89 |
| L | \$6.00 | \$5.98 | \$6.93 | \$7.41 | \$5.56 | \$5.95 | \$6.61 | \$7.83 | \$9.18 |
| H | \$5.60 | \$6.05 | \$7.16 | \$7.72 | \$5.68 | \$6.10 | \$6.79 | \$8.12 | \$9.82 |
| H | \$5.80 | \$6.02 | \$7.33 | \$7.97 | \$5.62 | \$6.03 | \$6.71 | \$8.45 | \$10.53 |
| M | \$5.60 | \$6.03 | \$7.43 | \$8.14 | \$5.66 | \$6.12 | \$6.86 | \$8.34 | \$10.19 |
| L | \$7.60 | \$6.01 | \$6.65 | \$6.97 | \$5.58 | \$5.94 | \$6.53 | \$7.26 | \$8.30 |
| L | \$6.00 | \$6.02 | \$6.80 | \$7.18 | \$5.63 | \$6.03 | \$6.70 | \$7.70 | \$8.51 |
|  | \$8.60 | \$6.10 | \$8.95 | \$10.39 | \$5.88 | \$6.61 | \$8.19 | \$10.57 | \$13.19 |
| H | \$10.50 | \$6.73 | \$9.03 | \$10.19 | \$6.18 | \$7.25 | \$8.59 | \$10.42 | \$12.74 |
| H | \$7.00 | \$6.04 | \$6.91 | \$7.35 | \$5.63 | \$6.00 | \$6.61 | \$7.57 | \$9.01 |
| L | \$11.10 | \$6.93 | \$10.06 | \$11.63 | \$6.35 | \$7.72 | \$10.07 | \$12.12 | \$13.84 |
|  | $\dagger$ | \$6.03 | \$8.23 | \$9.34 | \$5.79 | \$6.40 | \$7.48 | \$8.67 | \$11.44 |
| L | $\dagger$ | \$7.20 | \$9.72 | \$10.97 | \$6.62 | \$7.80 | \$9.00 | \$11.50 | \$13.63 |

[^3] H - highest $25 \%$ of actual responses

|  |  |  |  | Occupational Employment Statistics Wage Data(2001) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Average Wages |  |  | Percentile Distribution |  |  |  |  |
| SOC Code | SOC Occupational Title | $\ddagger$ Vacancy Rank | $\begin{array}{c\|} \hline \text { Average } \\ \text { JVS } \\ \text { Wage } \\ \hline \end{array}$ | EntryLevel | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 41-0000 | Sales \& Related Occupations |  | \$7.70 | \$6.09 | \$10.90 | \$13.31 | \$5.87 | \$6.65 | \$8.49 | \$12.56 | \$18.33 |
| 41-1011 | First-Line Supervisors/Managers of Retail Sales Workers | L | \$9.30 | \$8.44 | \$13.45 | \$15.95 | \$7.63 | \$9.53 | \$12.18 | \$15.62 | \$21.12 |
| 41-2011 | Cashiers | H | \$6.70 | \$5.96 | \$8.14 | \$9.24 | \$5.68 | \$6.26 | \$7.37 | \$9.07 | \$12.64 |
| 41-2022 | Parts Salespersons | M | $\dagger$ | \$8.84 | \$12.35 | \$14.12 | \$8.66 | \$9.47 | \$10.75 | \$14.44 | \$19.62 |
| 41-2031 | Retail Salespersons | H | \$8.20 | \$6.02 | \$8.79 | \$10.16 | \$5.76 | \$6.32 | \$7.48 | \$9.99 | \$13.63 |
| 41-3011 | Advertising Sales Agents | L | \$15.90 | \$10.75 | \$19.89 | \$24.46 | \$9.62 | \$12.32 | \$15.95 | \$21.65 | \$37.78 |
| 41-3021 | Insurance Sales Agents | L | \$7.90 | \$16.92 | \$30.59 | \$37.41 | \$13.04 | \$21.96 | \$33.16 | \$39.59 | \$43.11 |
| 41-3041 | Travel Agents | L | \$7.00 | \$5.92 | \$9.81 | \$11.75 | \$5.67 | \$6.33 | \$10.00 | \$12.56 | \$13.68 |
| 41-3099 | Sales Representatives, Services, All Other | L | \$13.00 | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |
| 41-4012 | Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products | L | \$14.40 | \$10.29 | \$16.33 | \$19.35 | \$9.33 | \$11.72 | \$15.78 | \$19.99 | \$22.28 |
| 41-9022 | Real Estate Sales Agents | L | $\dagger$ | \$12.75 | \$30.20 | \$38.92 | \$9.54 | \$10.98 | \$37.60 | \$41.05 | \$43.11 |
| 41-9041 | Telemarketers | H | \$7.30 | \$6.07 | \$7.01 | \$7.47 | \$5.70 | \$6.10 | \$6.77 | \$7.82 | \$8.68 |
| 43-0000 | Office \& Administrative Support |  | \$8.20 | \$7.54 | \$11.58 | \$13.60 | \$7.08 | \$8.44 | \$10.55 | \$14.04 | \$17.89 |
| 43-3031 | Bookkeeping, Accounting, and Auditing Clerks | L | \$7.90 | \$7.90 | \$11.39 | \$13.13 | \$7.40 | \$8.73 | \$10.72 | \$13.96 | \$16.76 |
| 43-3071 | Tellers | L | \$9.30 | \$7.72 | \$9.59 | \$10.53 | \$7.42 | \$8.15 | \$9.35 | \$10.78 | \$12.25 |
| 43-4051 | Customer Service Representatives | H | \$8.00 | \$8.04 | \$10.93 | \$12.36 | \$7.37 | \$8.91 | \$10.41 | \$12.75 | \$15.73 |
| 43-4081 | Hotel, Motel, and Resort Desk Clerks | L | $\$ 9.00$ | \$6.07 | \$6.89 | \$7.29 | \$5.68 | \$6.07 | \$6.75 | \$7.72 | \$8.59 |
| 43-4141 | New Accounts Clerks | L | \$10.60 | \$9.33 | \$10.64 | \$11.29 | \$8.73 | \$9.55 | \$10.55 | \$11.79 | \$13.42 |
| 43-4171 | Receptionists and Information Clerks | H | \$8.90 | \$7.45 | \$9.15 | \$9.99 | \$7.10 | \$7.81 | \$8.98 | \$10.48 | \$11.56 |
| 43-6011 | Executive Secretaries and Administrative Assistants | L | \$11.80 | \$10.80 | \$15.99 | \$18.58 | \$9.96 | \$11.92 | \$15.93 | \$19.87 | \$21.97 |
| 43-6013 | Medical Secretaries | M | \$9.00 | \$9.53 | \$11.85 | \$13.00 | \$9.03 | \$10.29 | \$12.08 | \$13.52 | \$14.45 |
| 43-6014 | Secretaries, Except Legal, Medical, and Executive | L | \$5.80 | \$7.03 | \$9.76 | \$11.12 | \$6.41 | \$7.66 | \$9.14 | \$11.42 | \$14.40 |
| 43-9022 | Word Processors and Typists | M | $\dagger$ | \$6.25 | \$10.10 | \$12.01 | \$6.06 | \$6.86 | \$10.17 | \$12.19 | \$14.11 |
| 43-9051 | Mail Clerks and Mail Machine Operators, Except Postal Service | H | \$5.40 | \$8.30 | \$10.50 | \$11.61 | \$7.82 | \$8.79 | \$10.04 | \$11.24 | \$13.75 |

[^4]Table 3: Job Vacancy Survey Occupations with OES Wages - Page 5


| Occupational Employment Statistics Wage Data |  |
| :--- | :--- |
| (2001) |  |
| Average Wages | Percentile Distribution |


|  |  |  |  | Average Wages |  |  | Percentile Distribution |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SOC Code | SOC Occupational Title | $\ddagger$ Vacancy Rank | Average JVS Wage | Entry- <br> Level | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 51-3092 | Food Batchmakers | H | \$6.60 | \$6.93 | \$10.38 | \$12.11 | \$6.30 | \$7.53 | \$9.50 | \$13.34 | \$15.93 |
| 51-4012 | Numerical Tool and Process Control Programmers | H | \$11.70 | \$15.86 | \$23.14 | \$26.78 | \$14.51 | \$18.35 | \$21.60 | \$30.49 | \$33.57 |
| 51-4023 | Rolling Machine Setters, Operators, and Tenders, Metal and Plastic | L | \$7.30 | \$9.71 | \$13.66 | \$15.63 | \$9.33 | \$10.39 | \$12.97 | \$16.41 | \$19.17 |
| 51-4033 | Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic | L | \$7.00 | \$9.10 | \$11.47 | \$12.66 | \$8.63 | \$9.50 | \$10.79 | \$13.05 | \$15.94 |
| 51-4121 | Welders, Cutters, Solderers, and Brazers | H | \$9.80 | \$9.98 | \$13.37 | \$15.06 | \$9.53 | \$10.44 | \$12.31 | \$15.20 | \$19.92 |
| 51-5023 | Printing Machine Operators |  | \$10.50 | \$10.11 | \$13.17 | \$14.71 | \$9.71 | \$10.73 | \$12.51 | \$14.63 | \$18.89 |
| 51-6011 | Laundry and Dry-Cleaning Workers | L | \$6.60 | \$6.48 | \$7.90 | \$8.61 | \$6.06 | \$7.01 | \$7.76 | \$8.48 | \$9.54 |
| 51-6031 | Sewing Machine Operators | M | \$9.80 | \$7.61 | \$9.06 | \$9.79 | \$7.22 | \$7.77 | \$8.68 | \$10.21 | \$11.11 |
| 51-9082 | Medical Appliance Technicians | L | \$11.00 | \$11.11 | \$13.96 | \$15.38 | \$10.24 | \$11.70 | \$13.32 | \$15.91 | \$18.62 |
| 51-9083 | Ophthalmic Laboratory Technicians | L | \$11.50 | \$8.33 | \$10.83 | \$12.09 | \$7.71 | \$8.85 | \$10.21 | \$12.23 | \$15.77 |
| 53-0000 | Transportation \& Material Moving |  | \$9.80 | \$6.95 | \$11.81 | \$14.24 | \$6.36 | \$7.88 | \$10.82 | \$14.46 | \$18.54 |
| 53-3032 | Truck Drivers, Heavy and Tractor-Trailer | H | \$9.80 | \$10.22 | \$13.29 | \$14.82 | \$9.67 | \$11.14 | \$12.75 | \$14.92 | \$17.77 |
| 53-4099 | Rail Transportation Workers, All Other | L | \$7.00 | t | t | + | $\dagger$ | t | t | t | t |
| 53-6041 | Traffic Technicians | H | \$15.30 | \$13.96 | \$19.15 | \$21.75 | \$12.76 | \$15.12 | \$18.28 | \$22.70 | \$27.25 |
| 53-6099 | Transportation Workers, All Other | L | \$9.00 | \$9.40 | \$15.50 | \$18.55 | \$9.21 | \$10.30 | \$13.15 | \$20.14 | \$26.38 |
| 53-7051 | Industrial Truck and Tractor Operators |  | \$8.00 | \$8.70 | \$11.08 | \$12.28 | \$7.89 | \$9.19 | \$10.43 | \$13.33 | \$15.91 |
| 53-7062 | Laborers and Freight, Stock, and Material Movers, Hand | H | \$9.80 | \$6.78 | \$9.77 | \$11.27 | \$6.29 | \$7.33 | \$8.90 | \$11.45 | \$15.32 |
| 53-7064 | Packers and Packagers, Hand | H | \$7.90 | \$6.09 | \$7.44 | \$8.12 | \$5.79 | \$6.34 | \$7.18 | \$8.21 | \$9.23 |
| * 53-7081 | Refuse and Recyclable Material Collectors | L | \$9.00 | \$8.80 | \$12.93 | \$15.01 | \$7.88 | \$9.97 | \$12.19 | \$14.67 | \$19.86 |

[^5]
## 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


## Survey Sample Methodology

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

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

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

## Data Editing

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

## Occupational Coding

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, bachelor's, and graduate degrees all are examples of completed programs.

## Medical Insurance Premium

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

## Permanent and Temporary Employment

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

## Sign-on Bonus

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

## SOC

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

## Survey Sample Universe

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

## Unemployment

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

## Unemployment rate

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

## Wage

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


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

[^2]:    * OES wages reported for Colorado statewide
    $\dagger$ No wage data available H - highest $25 \%$ of actual responses No wage data available

[^3]:    $\ddagger \mathrm{L}$ - lowest $25 \%$ of actual responses

[^4]:    $\ddagger \quad \mathrm{L}$ - lowest $25 \%$ of actual responses M - middle $50 \%$ of actual responses
    H - highest $25 \%$ of actual responses

    * OES wages reported for Colorado statewide
    $\dagger$ No wage data available

[^5]:    $\ddagger \quad \mathrm{L}$ - lowest $25 \%$ of actual responses
    H - highest $25 \%$ of actual responses

    * OES wages reported for Colorado statewide
    + No wage data available
    $\dagger$ No wage data available

