

# Western & Southwest Region

## Job Vacancy Survey

March 2002

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**ators & laborers.**

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s. Apply in person at  
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ble nights & week-  
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dree Children's De-  
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patients as directed  
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in the State of NM.  
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shift differentials for  
night. **90 day increase**  
**you of benefits**  
available on site if  
approved center

**Unit Cod**  
**Position Avail**  
**FT-PT -**  
**shifts a**  
**8 an**  
Call 247-221  
New wag  
- Call f  
of Apply in  
Four  
Corners Health Care Center  
2911 Junction St.  
Durango, Colorado 81301  
EOE  
Drug testing required.

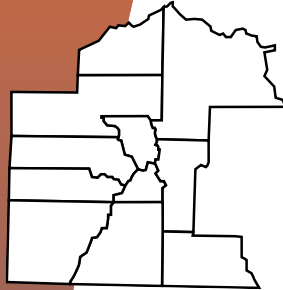
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**Dolores**  
**Gunnison**  
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**La Plata**  
**Montezuma**  
**Montrose**  
**Ouray**  
**San Juan &**  
**San Miguel**  
**Counties**



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





# Western & Southwest Region Job Vacancy Survey

*Conducted  
January 17 - 25, 2002*

## **State of Colorado**

Bill Owens, *Governor*

## **Colorado Department of Labor & Employment**

Vickie Armstrong, *Executive Director*

Jeffrey M. Wells, *Deputy Executive Director*

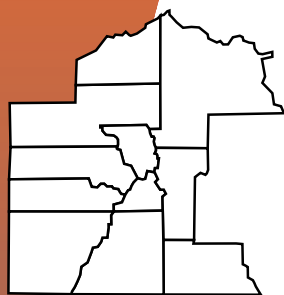
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March 2002



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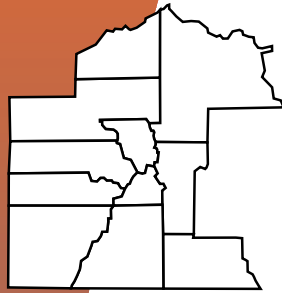
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The Office of Workforce Research and Analysis would like to extend sincerest gratitude to all area employers who participated in this study. The analysis provided in this document would not be possible without their help.

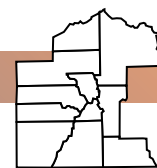


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# Introduction

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 workers at a specific point in time. They also need a measure of where in the economy that demand is located and what education and experience 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

**Colorado Job Vacancy Survey Regions**



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:**

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[www.coworkforce.com/lmi/wra/home.htm](http://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.

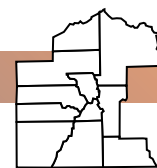
#### ◆ *Compensation and Benefits Planning*—

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](http://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

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

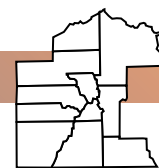
The study provides estimates of job openings for a point-in-time; they do not necessarily portray the distribution of job vacancies in the region. This report does not attempt to explain the cause of vacancies - whether these current vacancies are due to actual growth or to job turnover in an occupation.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

significantly affect the vacancy status of some occupations. Job openings are very dynamic – current openings are being filled, new positions are being created, and some roles are being phased-out.

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

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





## Executive Summary

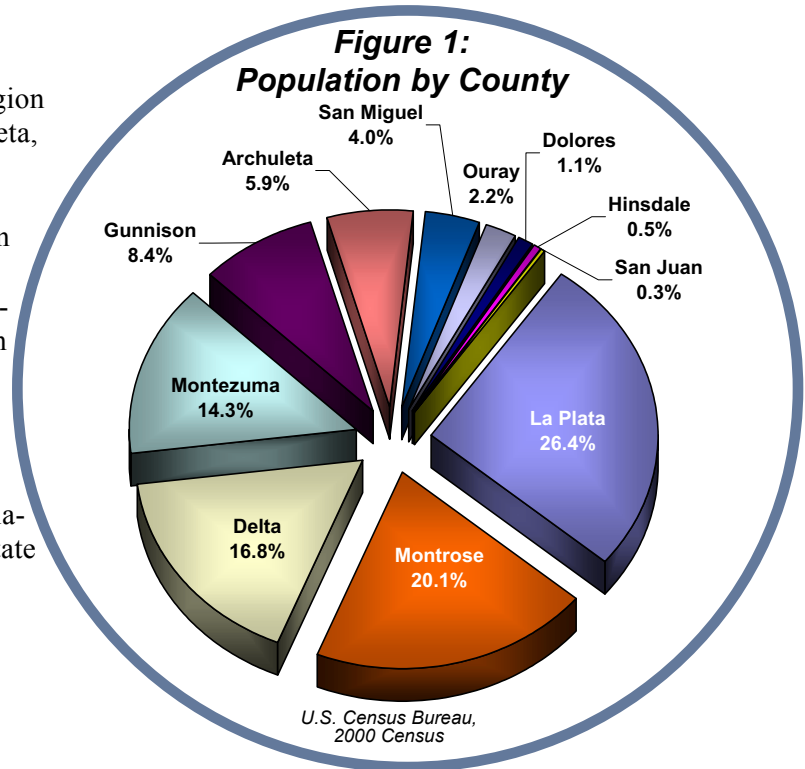
The second Western & Southwest Job Vacancy Survey (JVS) was conducted between January 17th and January 25th, 2002. Over the survey period a sample of private employers with at least five employees, as well as all large employers and government agencies, were contacted in the region. Employers were asked 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 714 employers, representing approximately one-third of the region's total employment, responded to the survey. Out of these, 105 were government agencies, 25 were large employers and 584 were from the small to mid-sized category. The major findings of the survey follow:

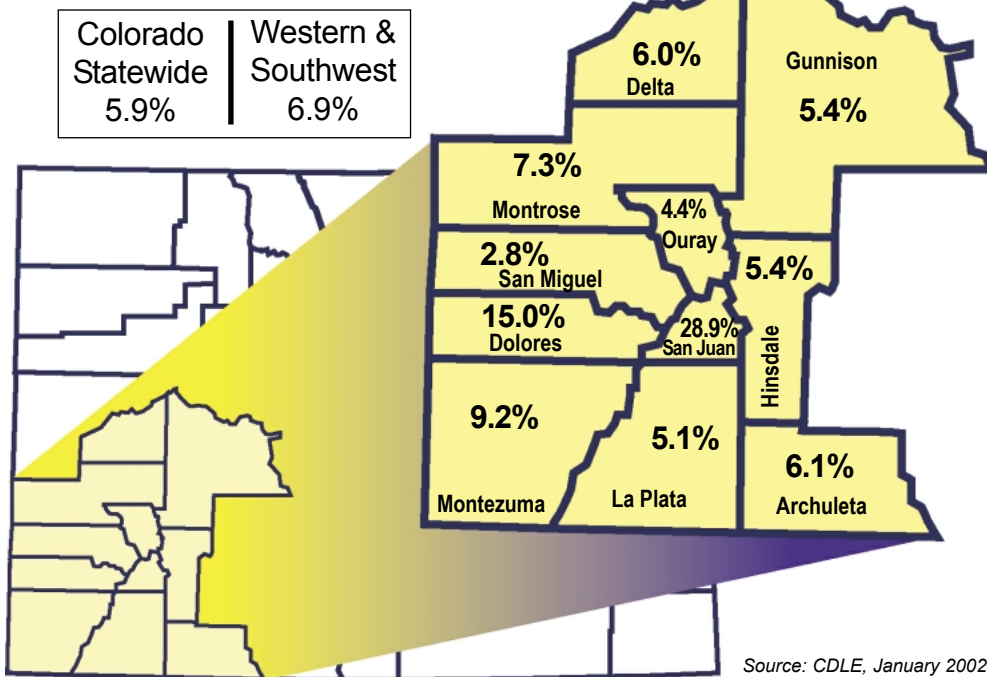
- ◆ It is estimated that a total of 850 jobs were open for hire in the region during the survey period.
- ◆ About 14% of the employers responding reported having at least one vacancy.
- ◆ Small to mid-size employers account for 67% of the estimated vacancies.
- ◆ Eighty-five percent of the openings are full-time.
- ◆ The overall average wage for all vacancies is \$12.40 per hour.
- ◆ Forty-five percent of the openings require more than a high-school education.
- ◆ Over one half of the vacancies require experience either related to or within the same field as the vacant position.
- ◆ According to employer responses, 43% of the vacancies are not considered difficult to fill.
- ◆ Approximately 60% of the vacancies reported by employers include some form of medical insurance.
- ◆ Only one firm offered sign-on bonuses.

# Western & Southwest Region

The Western & Southwest Region (W&SW) consists of Archuleta, Delta, Dolores, Gunnison, Hinsdale, La Plata, Montezuma, Montrose, Ouray, San Juan, and San Miguel counties. The U.S. Census Bureau estimated the region's population at just over 165,000 people in April of 2000. The two most populated counties, La Plata and Montrose, make up almost half (46.5%) of the region's population. Since 1990, the region's 38% population growth rate has outpaced the state as a whole (31%).

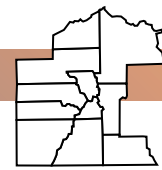


**Figure 2: Unemployment Rates for January 2002**  
(Rates Not Seasonally Adjusted)



The region employed 77,266 people in January of 2002<sup>1</sup> out of a labor force of 83,017. The region's unemployment rate is slightly higher than both the state as whole and the U.S. rate of 5.6%<sup>2</sup>. The unemployment rate is highest in San Juan and Dolores counties which also have the two smallest labor forces. Slight changes in the number of unemployed will greatly affect the unemployment rate in counties with small labor forces. In relation to the 5,751 unemployed people in the region, the 178 unemployed in San Juan and Dolores is a relatively small portion.

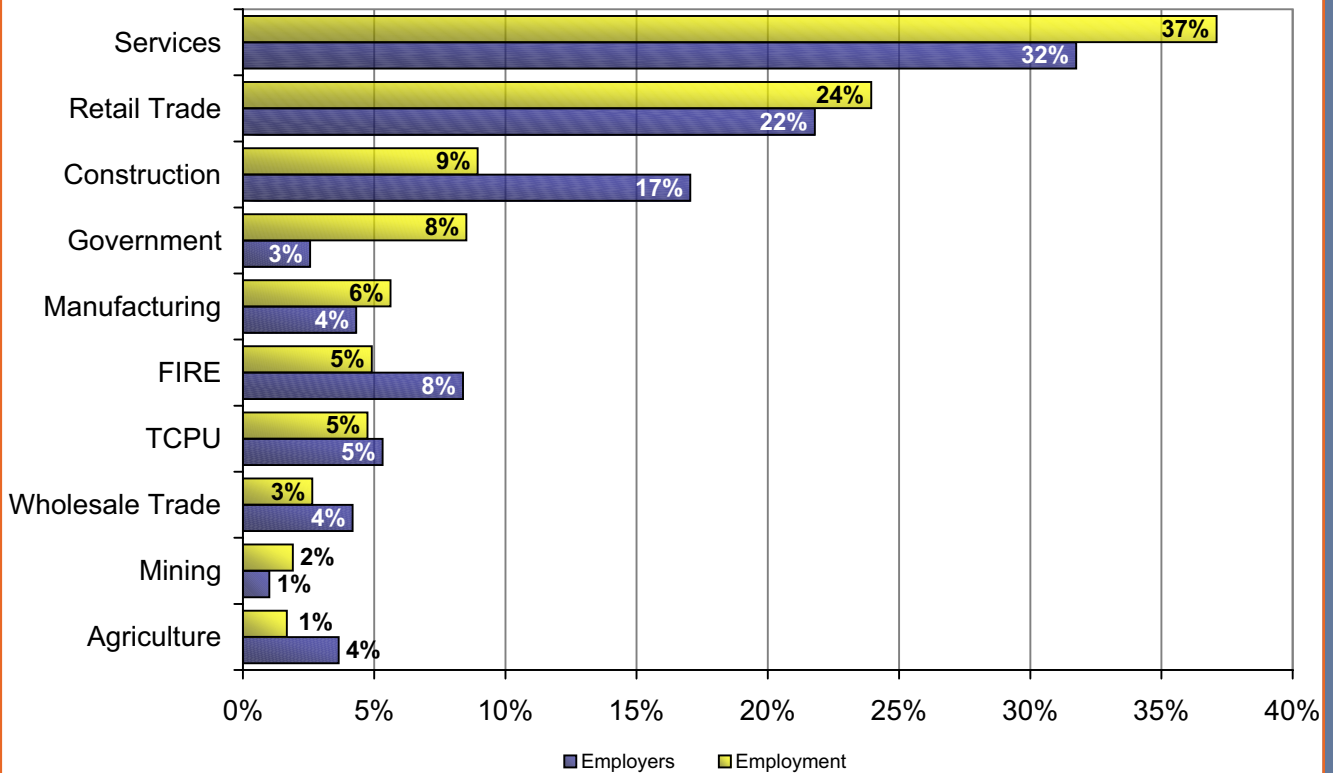
<sup>1</sup>CDLE, Local Area Unemployment Statistics  
<sup>2</sup>Bureau of Labor Statistics, January 2002



Like the rest of the state, the economy of the Western & Southwest Region consists predominantly of service and retail trade businesses. Combined, employers in these

industries make up 54% of the region's total employers and 61% of the employment. The large presence of the construction industry in the region indicates the potential for growth.

**Figure 3: Western & Southwest Region Employers & Employees, 1st Quarter, 2001**



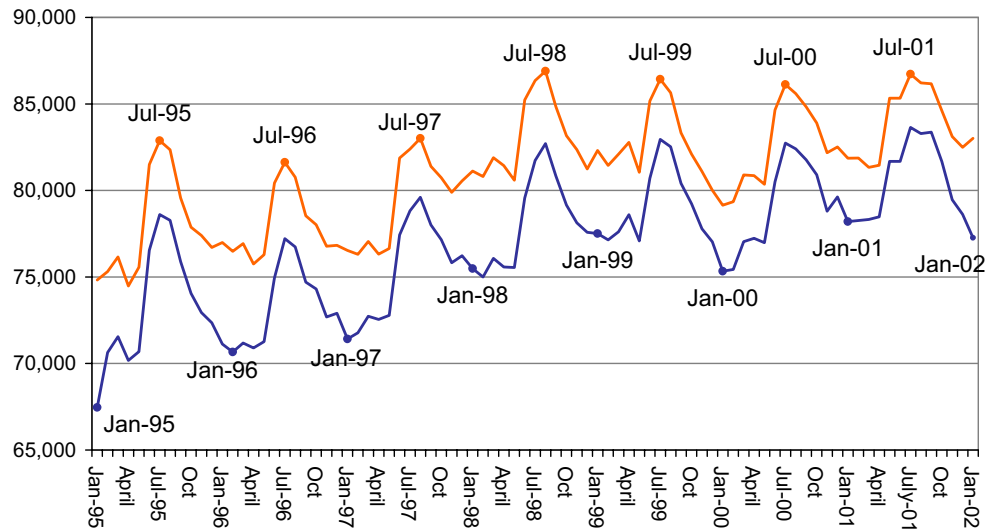
Agriculture includes Forestry and Fishing  
 FIRE—Finance, Insurance, and Real Estate  
 TCPU—Transportation, Communication and Public Utilities

Source: Colorado Employment and Wages (ES-202)

Figure 4 shows the historical progression of both the region's labor force and employment level. Several different conclusions may be drawn from the graph. The rising trend of the lines demonstrate

that the region's labor force and employment levels have grown since 1995. Employment has increased 14.5% in the region, compared with a 14.4% statewide increase.

**Figure 4: Employment & Labor Force Trends for the Western & Southwest Region**

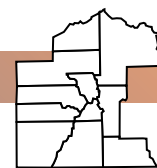


Source: CDLE, Local Area Unemployment Statistics

The graph also illustrates the unemployment level. The unemployment level is the vertical difference between the labor force trend and the employment trend. The larger the distance between the two lines, the larger the number of unemployed. In the Western and Southwest Region the labor force has grown more than the employment level and thus the number of unemployed has increased from 4,662 in January of 1995 to 5,751 in January of 2002.

In addition, Figure 4 demonstrates the region's seasonal trend. Both employment levels and the labor force peak in the middle of the summer and bottom out

in the middle of winter. The Job Vacancy Survey is conducted semi-annually in the winter and summer seasons in order to measure the demand for labor at intervals that provide the most useful information. Surveys conducted in summer represent the demand for labor at a time when employers are nearing peak employment, yet are still in the process of actively recruiting. Vacancies found in winter represent the demand for labor at a time of year when employment is at its cyclical low. A study at this time indicates the type of occupations for which a labor shortage exists even during a seasonal downturn.



## The Job Vacancy Survey Sample

The second Western & Southwest Region survey was conducted from January 17th through January 25th, 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 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. Workers in the sample universe account for approximately 80% of the region’s total employment.

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 major industry<sup>3</sup> and randomly sampled until a representative response is obtained for each category.

Government makes up 17% of the employment in the sample universe. Private industry employers make up the remaining 83%. Private industry employers with at least 150 employees are referred to as large employers. They account for 25% of the private industry employment in the sample universe. Firms employing from five to 149 individuals are considered small to mid-size employers, and account for the remaining 75% of the private industry employment. Over the survey period a total of 714 employers, approximately 22% of employers in the sample universe, responded to the survey. Out of these, 105 were government agencies, 25 were large employers and 584 were from the small to mid-sized category.

**Table 1: Industry Categories**

Government	
Public Administration	
Private Industry	
Goods Producing Industries	Service Producing Industries
<b>Agriculture, Forestry, and Fishing (except Agricultural Services)</b> <b>Mining</b> <b>Construction</b> <b>Manufacturing</b>	<b>Transportation, Communications, and Public Utilities</b> <b>Wholesale Trade</b> <b>Retail Trade</b> <b>Finance, Insurance, and Real Estate</b> <b>Services (including Agricultural Services)</b>

## 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.

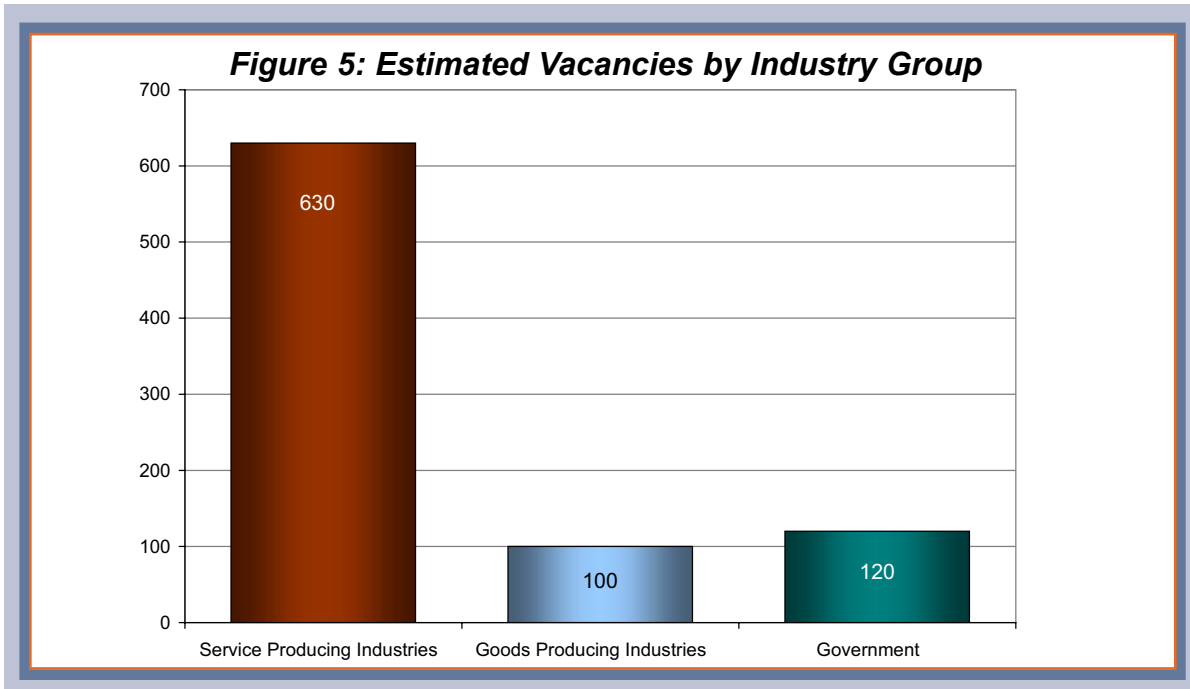
<sup>3</sup>Based on the 1987 Standard Industrial Classification Manual

# Vacancies: Industry, Size and Status

During the survey period, an estimated 850 vacancies were open for immediate hire in firms with at least five employees in the Western & Southwest Region. The overall sample universe employment is estimated at 63,225 resulting in an estimated vacancy rate of 1.3%.

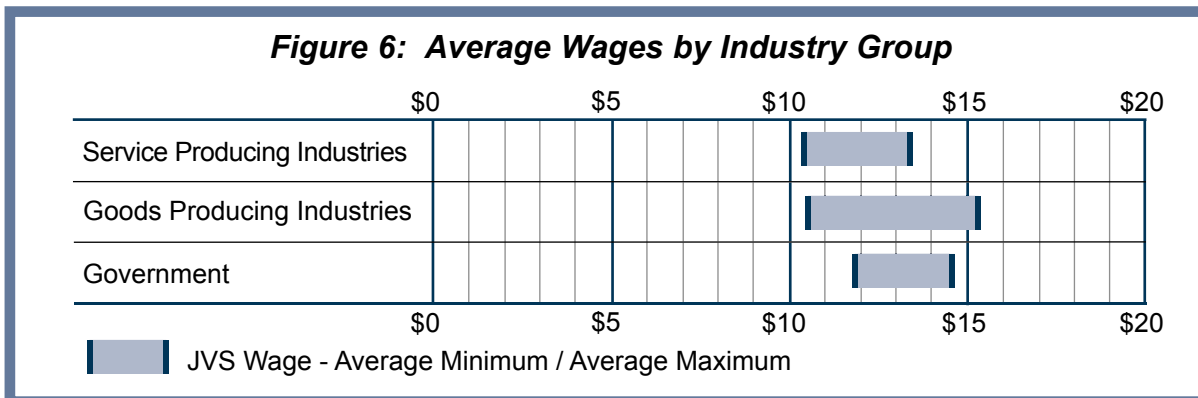
The majority of the openings occur, as expected, in service producing industries. Not only does the

sector employ more than twice as many workers as government and goods producing industries combined, but many high-turnover occupations are found in service related industries. Government and goods producing industries make up less than 35% of the estimated total open jobs.

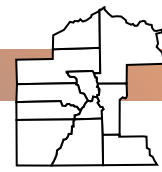


Because wages offered vary according to an individual applicant's qualifications, employers were asked to provide the range of wages offered for the vacancies. The average wage is then calculated based on the mid-point of that range. The overall average

wage offered for all vacancies in the region is \$12.40 per hour. Vacancies reported in the government category offered higher minimum wages than in either the service or goods producing industries.



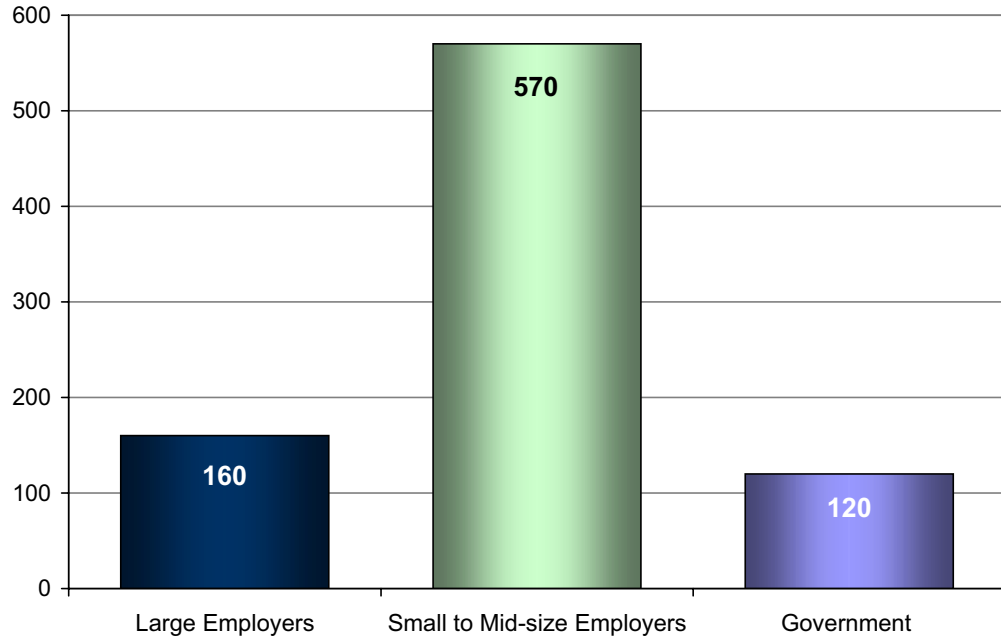




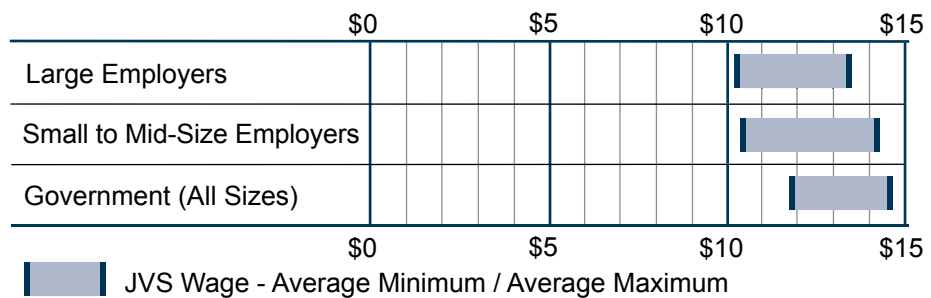
Most vacancies are found in the small to mid-size (five to 149 employees) category. Large employers and government agencies combined make up 33% of the vacancies.

Both large and small to mid-size private employers offered similar wages for the vacancies reported in this survey round. Wages reported in the Job Vacancy Survey may change substantially in either direction from one survey to another. The wage estimates are intended to represent wages offered for vacancies open at the time of the study, not average wages for people currently working in that field.

**Figure 7: Estimated Vacancies by Size Class**



**Figure 8: Average Wages by Size Class**

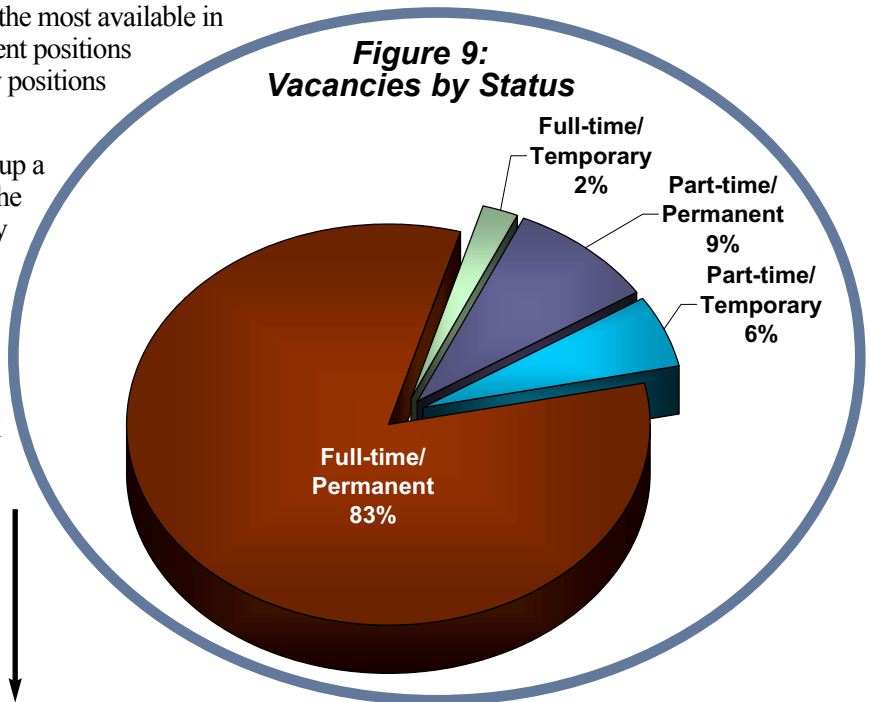


Full-time/Permanent positions are by far the most available in the Job Vacancy Survey. Part-time/ Permanent positions have the second most vacancies. Temporary positions make up only 8% of the total.

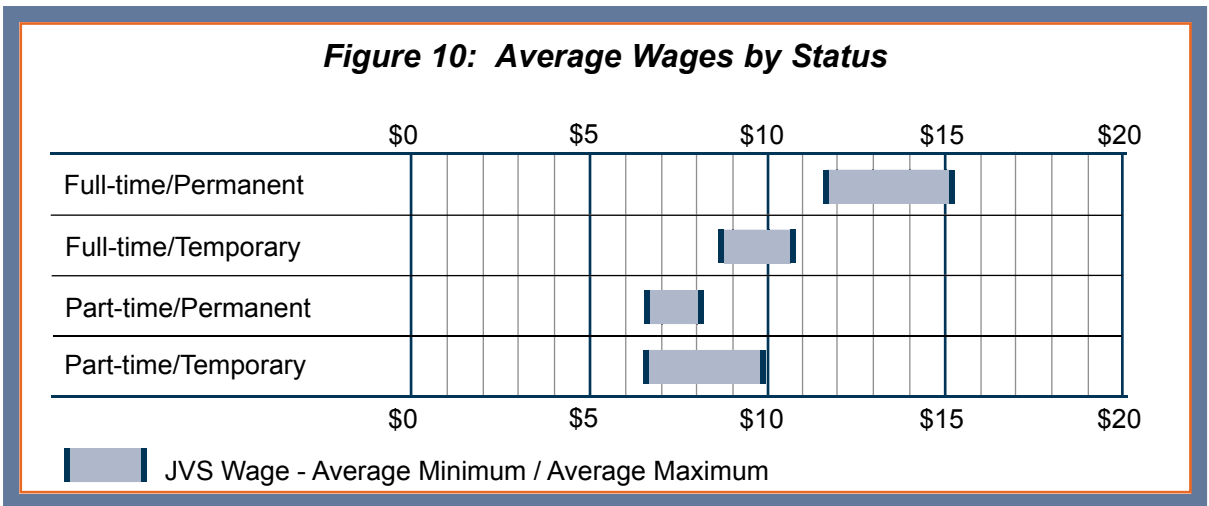
Temporary positions will typically make up a small proportion of total vacancies despite the dramatic increase in popularity of temporary workers during the 1990s<sup>4</sup>. Temporary workers provide a cost effective and productive solution to certain staffing needs, but most vacancies still must be filled permanently.

Full-Time/Permanent positions also offer the highest salaries. Whether for permanent or temporary positions, full-time workers are offered higher wages than part-time employees.

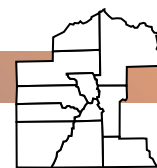
**Figure 9: Vacancies by Status**



**Figure 10: Average Wages by Status**



<sup>4</sup>Daily temporary employment increased 157% from 1990-2000, *American Staffing Association*.



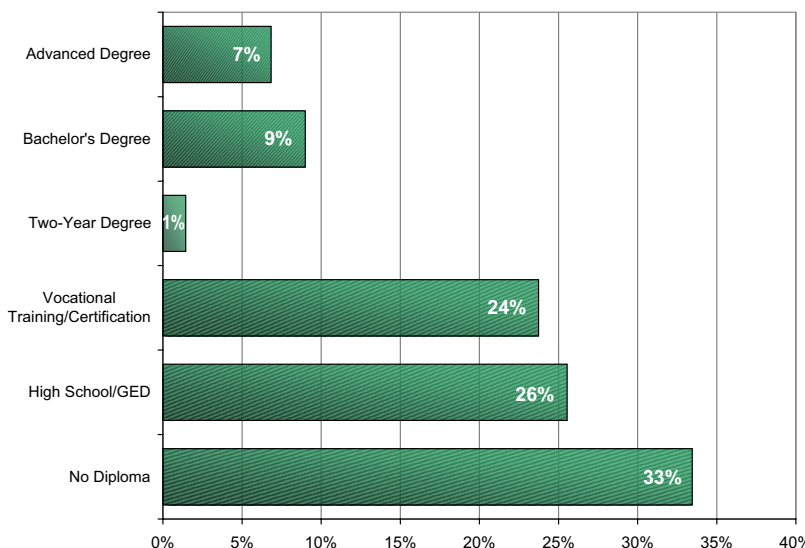
# Vacancies: Education and Experience Requirements

The majority of economic reporting treats all workers as if they are part of the same labor market. For example, if the unemployment rate is high, newspapers imply there are lots of qualified candidates and no job openings. The reality is that even in recessions many employers cannot find qualified candidates for their open positions. Because a region's overall labor force is made up of hundreds of smaller labor groups, only a certain number of qualified candidates have the necessary knowledge, skills and experience to compete for any given job. It is extremely important, therefore, that job seekers have accurate information regarding what types of education and experience are in highest demand.

As shown in *Figure 11*, the majority of vacancies reported in the region require low levels of education. Vacancies requiring either no diploma or a high-school diploma/GED make up 59% of all the vacancies. Jobs requiring either a bachelor's degree or an advanced degree make up 16% of total vacancies.

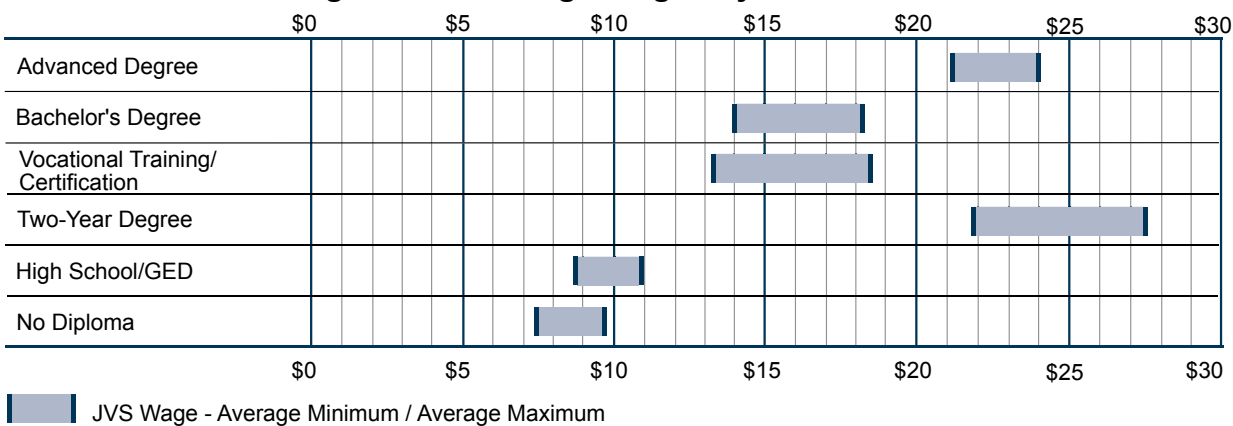
It is not surprising that, in general, the higher the level of education required to fill a position, the higher the

**Figure 11: Proportion of Vacancies by Education**

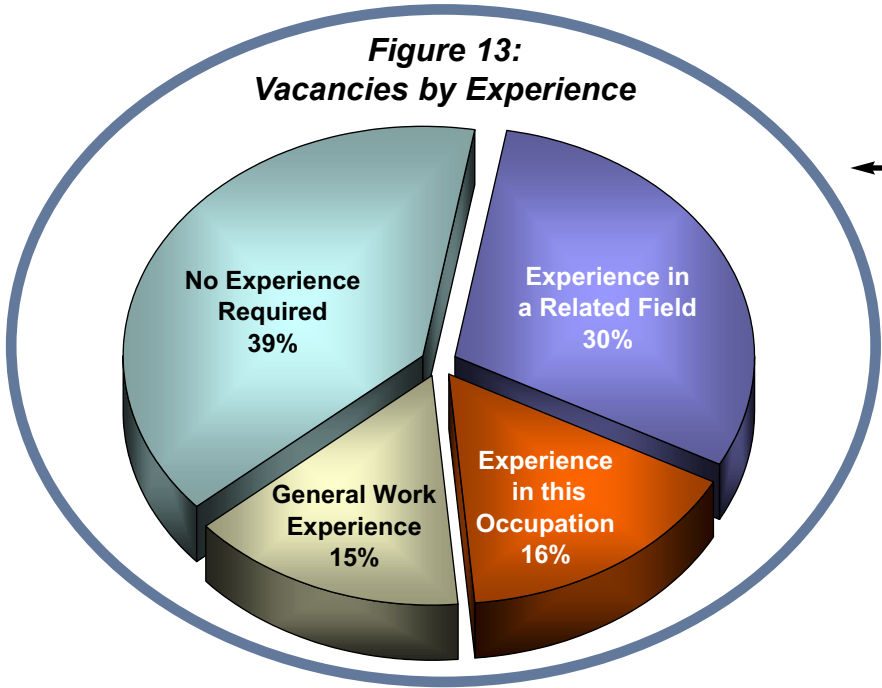


wages offered in the survey. *Figure 12* illustrates that vacancies with advanced degrees offer more than twice as much as jobs requiring a high-school diploma. In the survey, positions requiring a two-year degree offer more than positions requiring advanced degrees. It is important to highlight, however, that only 1% of all vacancies require a two-year degree. In samples this small, one vacancy can drastically affect the overall result. Positions requiring two-year degrees do not typically offer more than positions requiring graduate level training. This result should be interpreted as an oddity, not a trend.

**Figure 12: Average Wages by Education**



**Figure 13:  
Vacancies by Experience**



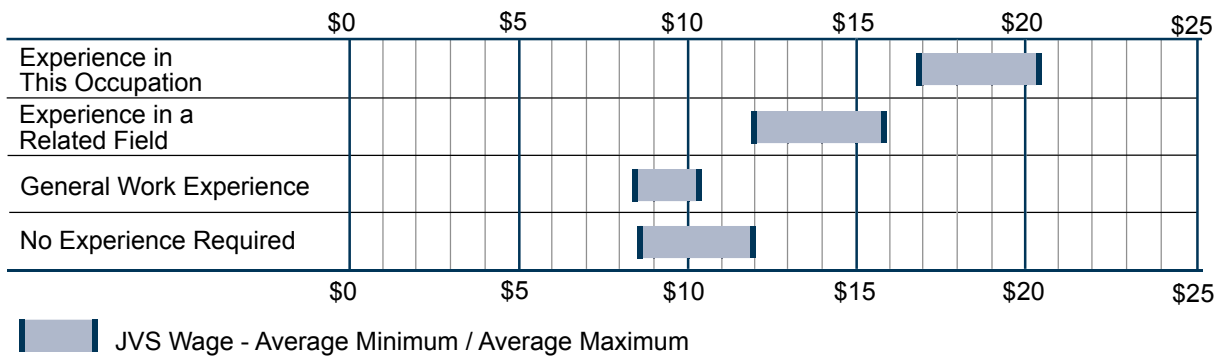
Employers contacted in our survey are seeking a relatively even mix of experience levels. The two lowest experience level categories make up 54% of the sample and the two highest make up 46%.

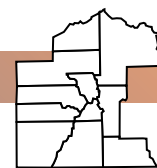
Positions needing higher levels of experience pay higher wages. Vacancies requiring experience in a particular occupation offered the highest wages, and those requiring no experience offered the lowest wages. Firms offer experienced candidates better compensation packages, because experience usually increases worker productivity.

experience? In this survey, 17% of the jobs requiring no experience are for registered nurses or radiology technicians. The shortage of healthcare workers throughout the state is forcing employers to seek candidates with the necessary education but not necessarily with experience. Most of these positions offer at least \$15 an hour and bring up the entire category average.

Why then do openings requiring no experience offer slightly higher wages than those seeking general work

**Figure 14: Average Wages by Experience**





An interesting relationship exists between the type of education required to fill a position and the level of experience desired. In both the survey and in general, the higher the level of education demanded, the higher the level of experience required as well. Internships and apprenticeships have gained importance and popularity in recent years, because to be competitive in today’s job market students must obtain quality experience along with academic knowledge.

Jobs that require no high-school diploma are typically low skill, entry-level jobs that require little experience. In the Western & Southwest Region, 77% of jobs that do not require a high-school diploma also don’t require work experience.

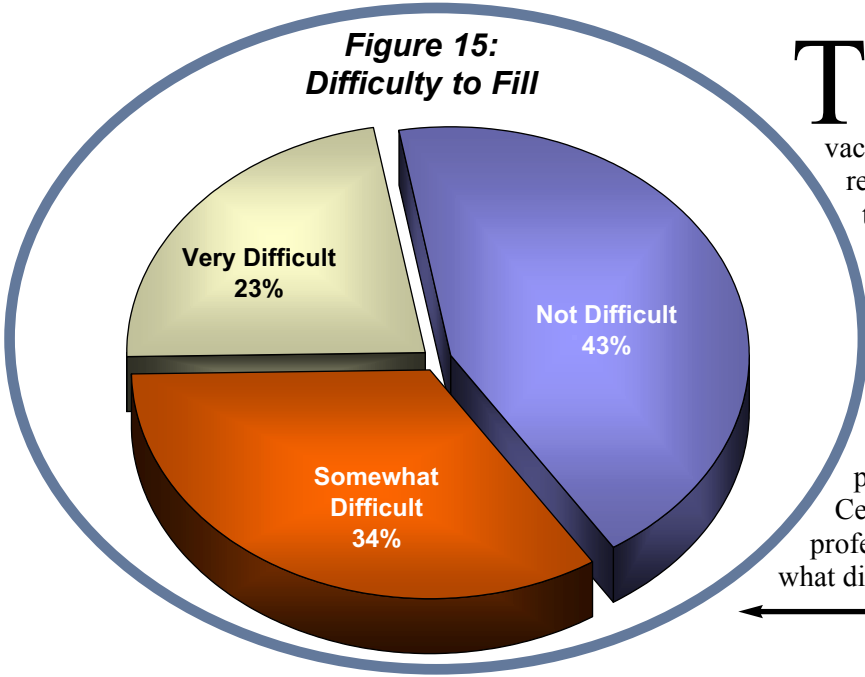
**Table 2: Experience Requirements by Educational Level**

	No Experience	General Work Experience	Experience in a Related Field	Experience in This Occupation
<b>No Diploma</b>	<b>77%</b>	<b>11%</b>	<b>5%</b>	<b>7%</b>
<b>High School Diploma/GED</b>	<b>16%</b>	<b>41%</b>	<b>35%</b>	<b>8%</b>
<b>Vocational Training/Certification</b>	<b>39%</b>	<b>3%</b>	<b>42%</b>	<b>16%</b>
<b>Two-Year Degree</b>	<b>0%</b>	<b>0%</b>	<b>80%</b>	<b>20%</b>
<b>Bachelor’s Degree</b>	<b>4%</b>	<b>8%</b>	<b>72%</b>	<b>16%</b>
<b>Advanced Degree</b>	<b>0%</b>	<b>0%</b>	<b>11%</b>	<b>89%</b>

Note: Percentages based on each educational category. Shading added to highlight trend.

# Vacancies: Difficulty to Fill

**Figure 15: Difficulty to Fill**



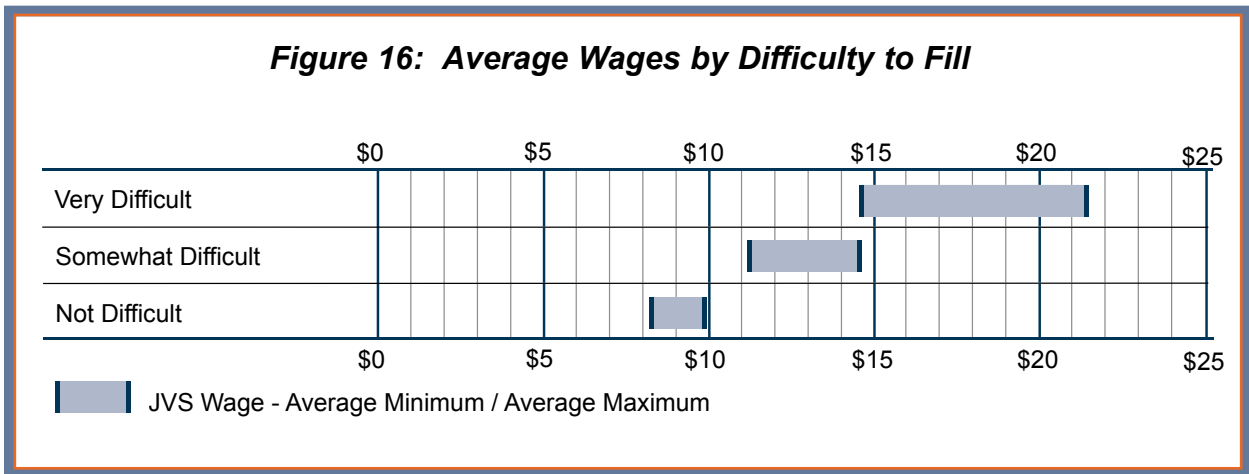
To estimate the level of difficulty in filling vacancies, employers are asked about their perceived level of difficulty in filling vacancies and the time period that positions remained vacant. Fifty-seven percent of the vacancies are considered at least somewhat difficult to fill.

One half of all the positions considered very difficult to fill are in the health care industry. The majority of these openings are for registered nurses, but doctors, radiology technicians and phlebotomists are demanded as well. Certified nursing assistants and university professors figure prominently in the somewhat difficult to fill category.

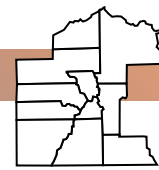
In this survey, vacancies that are difficult to fill tend to offer higher wages. Vacancies that are very difficult to fill offer an average minimum wage of \$14.70 while

positions that are not difficult to fill offer an average maximum wage of \$9.90.

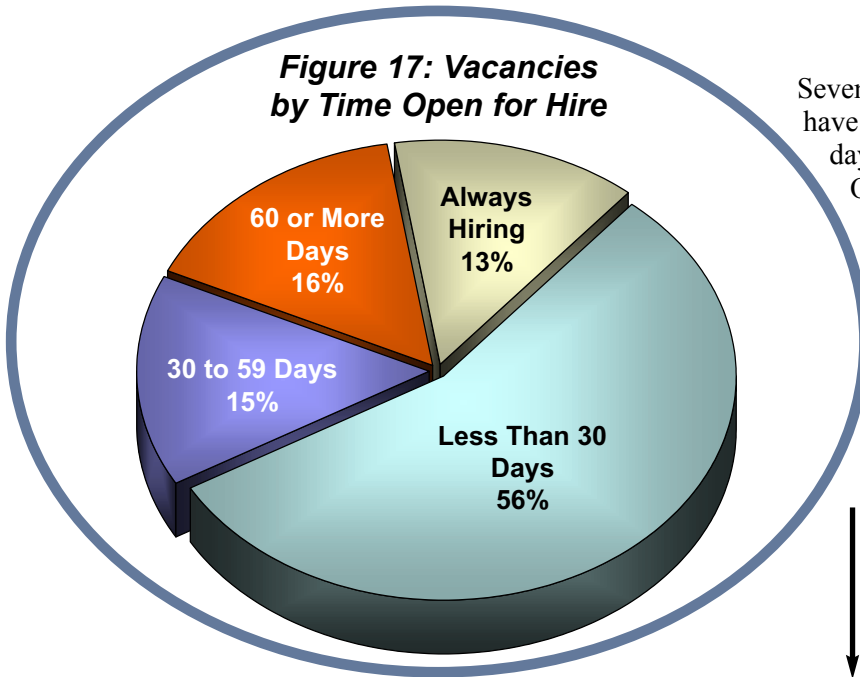
**Figure 16: Average Wages by Difficulty to Fill**







**Figure 17: Vacancies by Time Open for Hire**



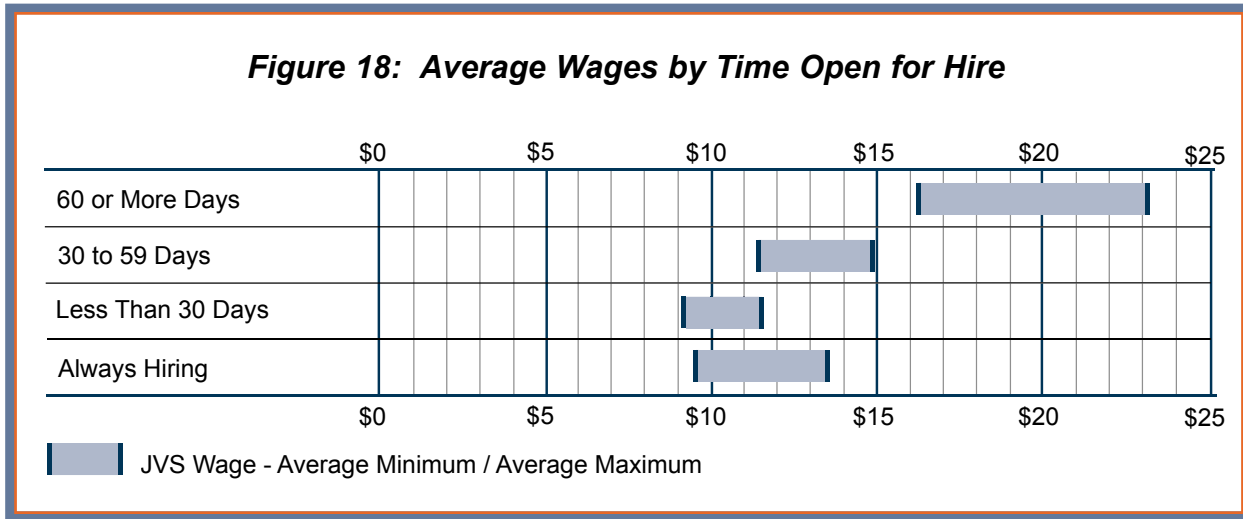
Seventy-one percent of the vacancies have either been open less than 30 days or are always being hired. Only 15% of the vacancies have been open for more than 60 days.



Positions open for more than 60 days offer almost twice as much as positions open for less than 30 days. One explanation is that jobs requiring higher skill levels often stay open longer due to the limited number of qualified candidates.

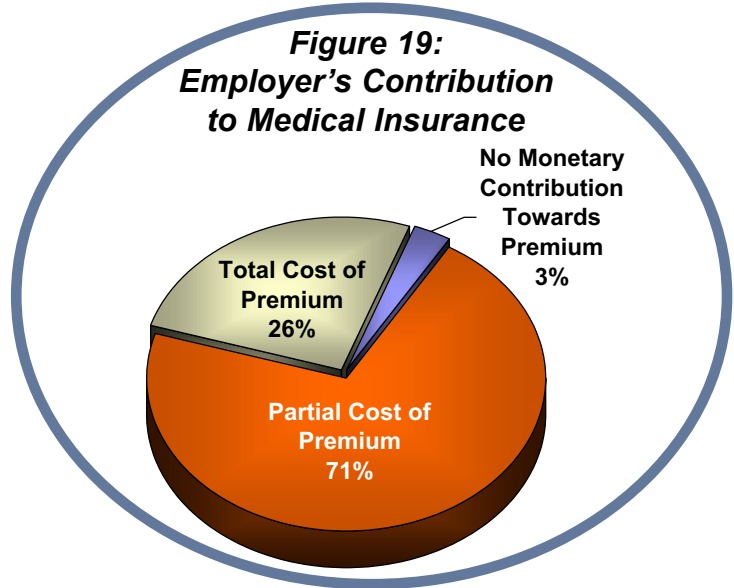


**Figure 18: Average Wages by Time Open for Hire**

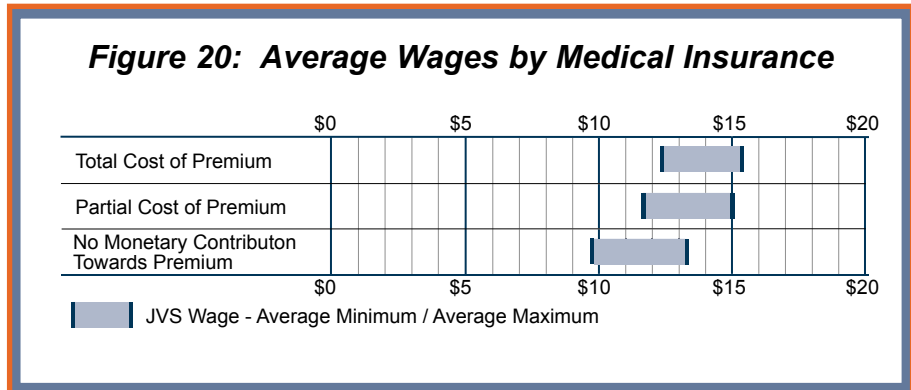


# Vacancies: Medical Insurance

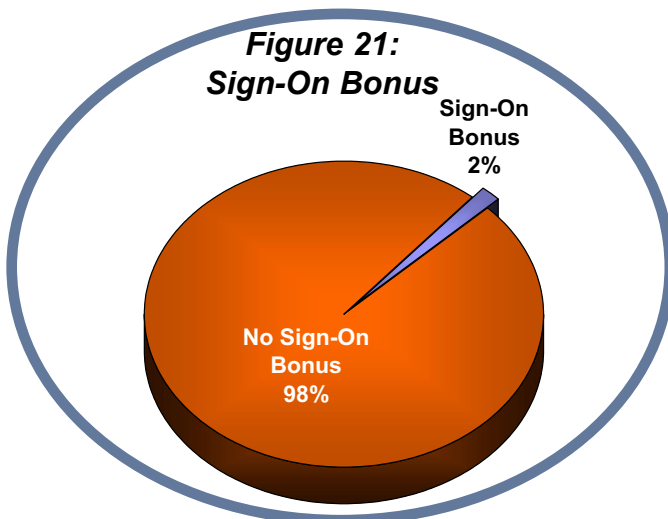
Approximately 60% of the vacancies reported by employers include some form of medical insurance. More than 70% of vacancies that offer medical insurance pay a partial cost of that premium. Twenty-six percent of positions pay the entire premium and only 2% make no monetary contribution towards the premium.



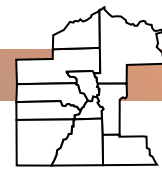
Positions paying a higher proportion of a medical insurance premium also pay higher wages. The higher the skill set demanded by employers the higher the compensation level required to attract candidates. Paying a partial or total portion of a medical insurance premium is an important part of that compensation package.



## Sign-On Bonus



Employers are asked if they offer sign-on bonuses for the positions for which they are recruiting. Sign-on bonuses became popular lore in the late nineties due to the tight labor market situation, but it is unclear whether the actual size and frequency of sign-on bonuses deserved the hype. Out of the 97 companies in this survey that reported vacancies, only one offered a sign-on bonus. As the economy climbs out of recession and the labor market once again tightens, it will be interesting to see how popular sign-on bonuses become as a means of attracting candidates.

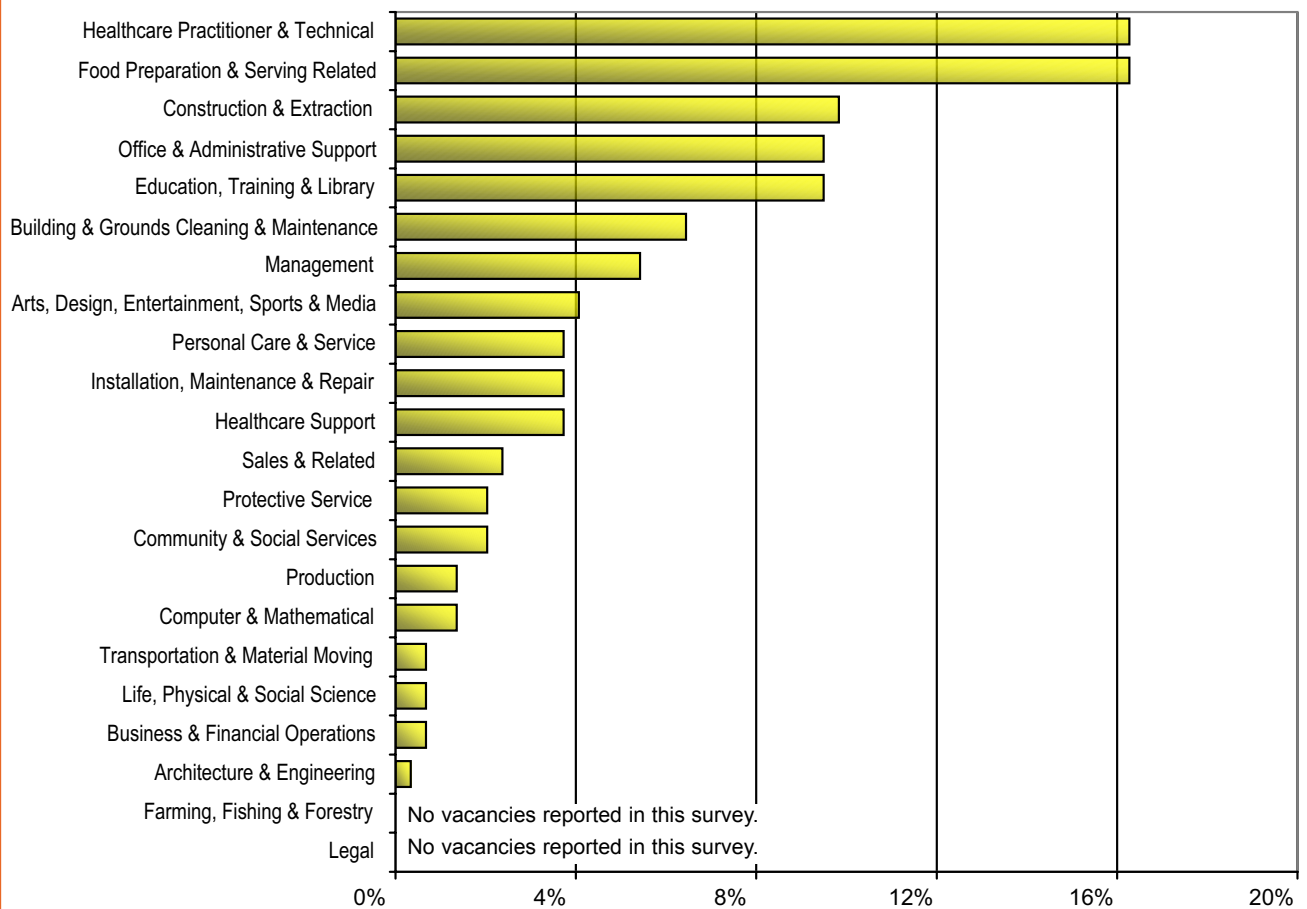


# Occupations

In order to facilitate comparisons between the results of this survey and other sources of employment statistics, all jobs reported are assigned a Standard Occupational Classification (SOC) code<sup>5</sup>.

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 Groups**

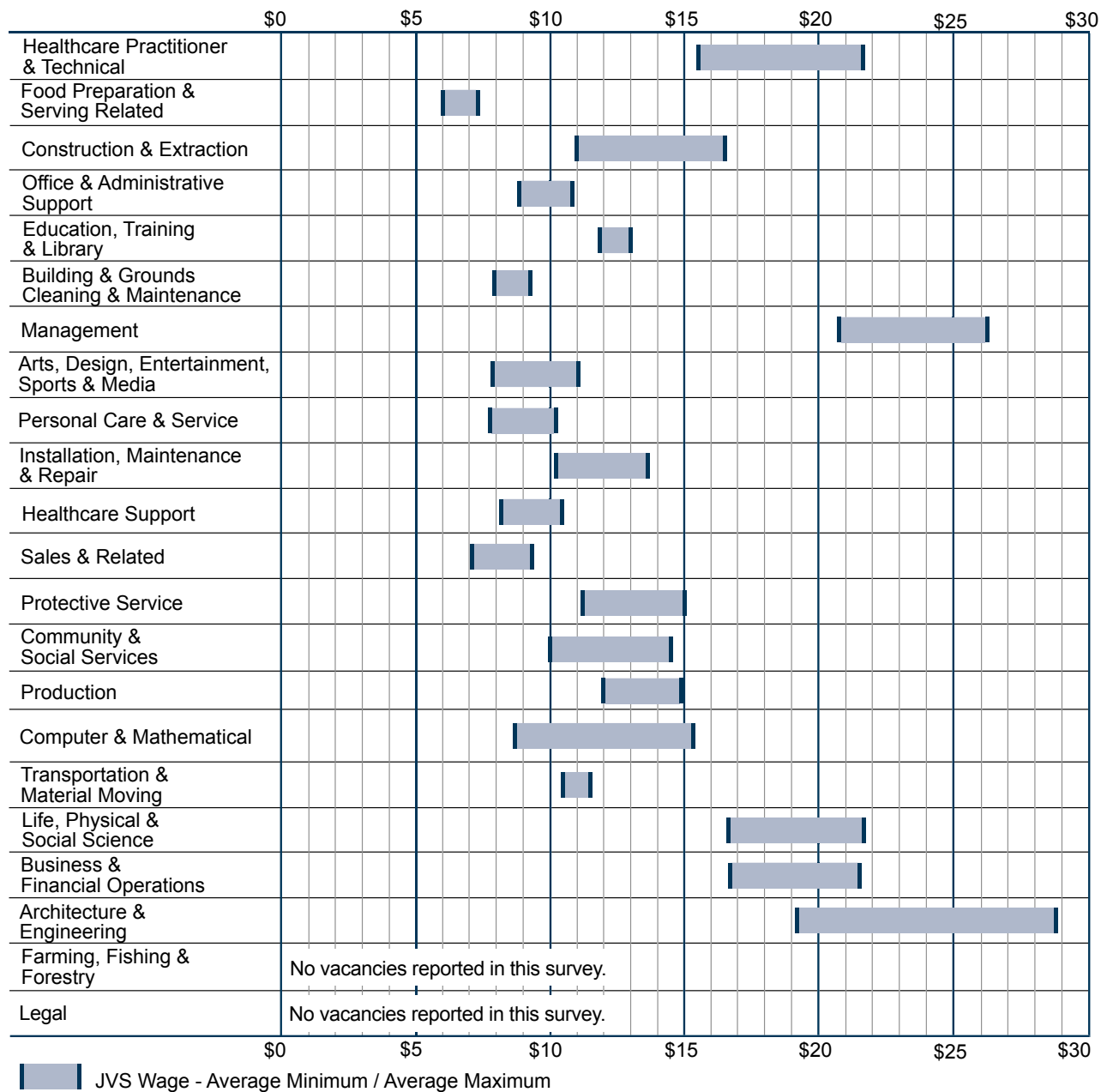


<sup>5</sup>Reported as defined by the *Standard Occupational Classification Manual, 2000*

The results of the survey 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 the investigation of other vacancy characteristics. Occupations offering the lowest wage ranges tend

to be occupations typically requiring lower levels of education and experience. Healthcare, architecture & engineering and management occupations command the highest wage ranges in the survey. These high skill occupations typically require higher levels of education and experience.

**Figure 23: Average Wages by Major Occupational Group**



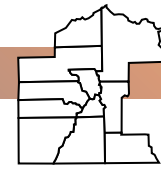


Table 3: Job Vacancy Survey Occupations with OES Wages

Occupational Employment Statistics Wage Data (2001)											
SOC Code	SOC Occupational Title	Average JVS Wage	† Vacancy Rank	Average Wages			Percentile Distribution				
				Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
11-0000	Management	†		\$14.70	\$27.12	\$33.33	\$12.69	\$17.39	\$23.85	\$33.08	\$47.26
11-1021	General & Operations Managers	\$23.60	H	\$14.55	\$28.71	\$35.79	\$12.81	\$16.58	\$23.48	\$38.56	\$54.19
11-3011	Administrative Services Managers	\$29.90	L	\$11.19	\$20.34	\$24.93	\$10.30	\$12.58	\$20.79	\$26.42	\$32.51
11-9021	Construction Managers	\$24.20	M	\$21.68	\$29.14	\$32.87	\$18.38	\$23.83	\$26.91	\$33.03	\$47.79
11-9039	Education Administrators, All Other	\$32.70	M	†	†	†	†	†	†	†	†
11-9051	Food Service Managers	\$14.30	M	\$10.89	\$17.62	\$20.98	\$9.99	\$12.20	\$18.00	\$21.29	\$26.46
11-9111	Medical & Health Services Managers	†	L	\$18.34	\$23.81	\$26.54	\$16.84	\$20.25	\$24.07	\$27.08	\$31.09
11-9121	Natural Sciences Managers	\$30.00	L	\$20.27	\$28.07	\$31.96	\$17.26	\$23.33	\$29.13	\$33.04	\$35.40
11-9151	Social & Community Service Managers	\$15.50	M	\$12.20	\$21.73	\$26.50	\$10.36	\$14.50	\$20.27	\$27.33	\$34.64
11-9199	Managers, All Other	\$24.20	M	\$17.21	\$25.56	\$29.74	\$15.74	\$19.32	\$24.34	\$31.18	\$37.57
13-0000	Business & Financial Operations	†		\$12.68	\$19.78	\$23.33	\$11.15	\$14.38	\$18.67	\$23.75	\$29.91
13-1199	Business Operations Specialists, All Other	\$21.60	L	\$13.83	\$21.24	\$24.95	\$12.45	\$15.64	\$20.57	\$26.49	\$31.94
13-2011	Accountants & Auditors	\$16.80	L	\$13.47	\$20.58	\$24.13	\$12.29	\$15.21	\$19.87	\$24.73	\$29.97
15-0000	Computer & Mathematical	†		\$15.29	\$21.97	\$25.31	\$14.02	\$17.36	\$22.58	\$26.13	\$28.87
15-1041	Computer Support Specialists	\$12.00	H	\$14.46	\$18.04	\$19.83	\$13.78	\$15.13	\$17.12	\$20.84	\$24.29
17-0000	Architecture & Engineering	†		\$15.42	\$23.57	\$27.64	\$13.47	\$17.94	\$21.64	\$29.09	\$36.60
17-2051	Civil Engineers	\$24.00	L	\$13.53	\$22.96	\$27.67	\$8.13	\$18.95	\$24.81	\$29.33	\$33.17
19-0000	Life, Physical, & Social Science	†		\$12.67	\$19.40	\$22.77	\$11.28	\$14.21	\$18.24	\$24.66	\$28.51
19-1023	Zoologists & Wildlife Biologists	\$25.00	L	\$18.37	\$22.96	\$25.27	\$17.24	\$19.83	\$23.44	\$26.39	\$28.46
19-4099	Life, Physical, & Social Science Technicians, All Other	\$13.50	L	\$13.39	\$16.87	\$18.62	\$12.32	\$14.06	\$15.77	\$17.48	\$25.20
21-0000	Community & Social Services	†		\$9.20	\$14.85	\$17.68	\$8.36	\$10.47	\$14.02	\$18.28	\$22.22

\* OES wages reported for Colorado statewide

† No wage data available

‡ L - Lowest 25% of actual vacancies

M - Middle 50% of actual vacancies

H - Highest 25% of actual vacancies

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

Occupational Employment Statistics Wage Data (2001)											
SOC Code	SOC Occupational Title	‡ Vacancy Rank	Average JVS Wage	Average Wages			Percentile Distribution				
				Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
* 21-1011	Substance Abuse & Behavioral Disorder Counselors	L	\$10.80	\$10.83	\$14.27	\$16.00	\$9.83	\$11.73	\$13.55	\$16.27	\$20.46
21-1019	Counselors, All Other	L	†	†	†	†	†	†	†	†	†
21-1022	Medical & Public Health Social Workers	M	\$19.80	\$13.79	\$17.74	\$19.72	\$12.00	\$15.28	\$17.96	\$20.80	\$22.51
21-1093	Social & Human Service Assistants	L	†	\$7.59	\$10.57	\$12.08	\$7.30	\$7.82	\$8.70	\$11.01	\$18.23
21-2099	Religious Workers, All Other	L	\$6.10	†	†	†	†	†	†	†	†
<b>25-0000</b>	<b>Education, Training, &amp; Library</b>		<b>†</b>	<b>\$9.90</b>	<b>\$16.29</b>	<b>\$19.48</b>	<b>\$8.51</b>	<b>\$11.56</b>	<b>\$15.63</b>	<b>\$20.54</b>	<b>\$25.82</b>
25-1011	Business Teachers, Postsecondary	M	†	\$34,369	\$52,260	\$61,205	\$29,509	\$35,988	\$54,981	\$65,366	\$71,987
25-1022	Mathematical Science Teachers, Postsecondary	H	\$16.80	\$35,886	\$48,239	\$54,416	\$32,347	\$40,057	\$48,711	\$57,234	\$66,739
25-1042	Biological Science Teachers, Postsecondary	L	\$16.80	\$38,185	\$48,447	\$53,577	\$36,190	\$42,096	\$49,524	\$55,384	\$61,075
* 25-1063	Economics Teachers, Postsecondary	L	†	\$35,392	\$59,199	\$71,093	\$32,578	\$40,741	\$61,920	\$73,216	\$87,799
25-1065	Political Science Teachers, Postsecondary	L	†	\$41,654	\$53,471	\$59,380	\$39,590	\$44,313	\$53,876	\$63,896	\$69,889
25-1066	Psychology Teachers, Postsecondary	M	\$16.80	\$39,576	\$48,443	\$52,876	\$38,096	\$42,895	\$49,358	\$54,797	\$58,061
25-1081	Education Teachers, Postsecondary	L	\$16.80	\$32,878	\$40,677	\$44,576	\$31,332	\$34,919	\$40,038	\$44,863	\$53,333
* 25-1122	Communications Teachers, Postsecondary	L	\$16.80	\$32,671	\$46,945	\$54,077	\$29,022	\$37,597	\$44,760	\$56,406	\$70,454
25-1123	English Language & Literature Teachers, Postsecondary	L	\$16.80	\$25,137	\$39,005	\$45,939	\$24,141	\$26,891	\$38,546	\$46,688	\$61,595
25-1125	History Teachers, Postsecondary	L	\$16.80	\$34,817	\$46,375	\$52,154	\$32,107	\$36,976	\$46,936	\$55,012	\$63,198
25-3099	Teachers & Instructors, All Other	H	\$10.00	†	†	†	†	†	†	†	†
25-4031	Library Technicians	M	\$8.20	\$9.97	\$13.06	\$14.60	\$8.28	\$11.36	\$13.16	\$15.46	\$17.03
25-9041	Teacher Assistants	H	\$9.10	\$15,978	\$18,994	\$20,501	\$15,211	\$16,430	\$18,470	\$21,359	\$23,605
25-9099	Education, Training, & Library Workers, All Other	L	\$7.50	†	†	†	†	†	†	†	†

\* OES wages reported for Colorado statewide

† Lowest 25% of actual vacancies

‡ No wage data available

M - Middle 50% of actual vacancies

H - Highest 25% of actual vacancies



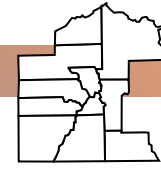


Table 3: Job Vacancy Survey Occupations with OES Wages – Page 3

SOC Code		SOC Occupational Title		Average Wages		Percentile Distribution					
				Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
27-0000	Arts, Design, Entertainment, Sports, & Media	†		\$7.99	\$14.36	\$17.54	\$7.16	\$9.02	\$11.83	\$16.56	\$23.93
27-1024	Graphic Designers	M		\$8.73	\$11.94	\$13.55	\$8.07	\$9.28	\$11.16	\$14.40	\$17.12
27-2022	Coaches & Scouts	L	†	\$19,546	\$29,384	\$34,303	\$18,857	\$20,714	\$27,028	\$36,697	\$44,780
* 27-2023	Umpires, Referees, & Other Sports Officials	H		\$19,520	\$25,405	\$28,353	\$18,314	\$20,087	\$22,282	\$27,672	\$41,586
* 27-2041	Music Directors & Composers	L		\$21,468	\$48,553	\$62,095	\$15,707	\$26,930	\$40,596	\$59,673	\$97,003
<b>29-0000</b>	<b>Healthcare Practitioners &amp; Technical</b>			<b>\$11.87</b>	<b>\$20.15</b>	<b>\$24.29</b>	<b>\$10.19</b>	<b>\$14.07</b>	<b>\$19.36</b>	<b>\$23.89</b>	<b>\$30.23</b>
* 29-1063	Physicians & Surgeons	M		\$49.90	\$38.18	\$51.08	\$11.90	\$13.15	\$34.01	\$65.85	†
29-1111	Registered Nurses	H		\$18.40	\$20.88	\$22.74	\$15.95	\$18.51	\$20.63	\$23.49	\$27.28
29-1122	Occupational Therapists	L		\$21.40	\$24.60	\$26.74	\$18.96	\$22.07	\$24.57	\$27.08	\$30.68
29-1123	Physical Therapists	M		\$18.00	\$24.99	\$26.68	\$19.82	\$22.76	\$25.20	\$27.63	\$31.25
* 29-2012	Medical & Clinical Laboratory Technicians	H		\$9.30	\$14.62	\$16.64	\$9.83	\$11.40	\$13.87	\$17.39	\$20.76
* 29-2021	Dental Hygienists	L	†	\$12.10	\$25.52	\$32.23	\$8.41	\$17.69	\$28.38	\$34.36	\$40.20
29-2032	Diagnostic Medical Sonographers	L	†	\$17.83	\$22.05	\$24.15	\$16.47	\$18.80	\$22.89	\$25.70	\$27.38
29-2034	Radiologic Technologists & Technicians	H		\$19.50	\$18.62	\$20.33	\$14.54	\$16.25	\$18.67	\$21.00	\$22.99
29-2041	Emergency Medical Technicians & Paramedics	H		\$14.20	\$14.15	\$16.23	\$9.42	\$10.08	\$11.17	\$19.56	\$21.25
29-2051	Dietetic Technicians	L		\$8.00	\$7.93	\$8.89	\$5.69	\$6.26	\$7.41	\$8.81	\$12.06
29-2061	Licensed Practical & Licensed Vocational Nurses	M		\$11.40	\$13.04	\$14.38	\$9.80	\$11.01	\$12.63	\$14.50	\$17.10
29-2071	Medical Records & Health Information Technicians	L	†	\$7.85	\$9.85	\$10.85	\$7.41	\$8.04	\$9.45	\$11.37	\$13.06
<b>31-0000</b>	<b>Healthcare Support</b>			<b>\$6.68</b>	<b>\$9.15</b>	<b>\$10.39</b>	<b>\$6.14</b>	<b>\$7.20</b>	<b>\$8.32</b>	<b>\$9.95</b>	<b>\$11.58</b>
31-1012	Nursing Aides, Orderlies, & Attendants	H		\$9.40	\$8.71	\$9.23	\$7.29	\$7.79	\$8.62	\$9.80	\$10.70
* 31-2022	Physical Therapist Aides	L		\$9.00	\$10.18	\$11.31	\$7.60	\$8.42	\$9.77	\$11.78	\$13.42

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

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

SOC Code		SOC Occupational Title		Average JVS Wage	‡ Vacancy Rank	Average Wages				Percentile Distribution				
						Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th	
* 31-9011		Massage Therapists		\$8.70	L	\$9.33	\$20.62	\$26.27	\$9.15	\$10.19	\$13.56	\$35.52	\$40.93	
<b>33-0000</b>		<b>Protective Service Occupations</b>		†		<b>\$10.13</b>	<b>\$15.30</b>	<b>\$17.89</b>	<b>\$8.76</b>	<b>\$11.96</b>	<b>\$14.74</b>	<b>\$17.74</b>	<b>\$22.40</b>	
33-1099		First-Line Supervisors/Managers, Protective Service Workers, All Other		\$9.90	L	\$15.34	\$23.37	\$27.38	\$14.69	\$16.21	\$19.94	\$29.25	\$35.18	
33-2011		Fire Fighters		\$13.20	H	\$15.17	\$17.66	\$18.90	\$14.21	\$15.04	\$16.38	\$19.31	\$25.32	
33-3051		Police Officers		\$14.50	M	\$13.52	\$16.43	\$17.89	\$12.58	\$14.14	\$16.06	\$18.50	\$21.26	
<b>35-0000</b>		<b>Food Preparation &amp; Serving Related</b>		†		<b>\$6.00</b>	<b>\$7.88</b>	<b>\$8.83</b>	<b>\$5.64</b>	<b>\$6.13</b>	<b>\$6.93</b>	<b>\$9.04</b>	<b>\$11.95</b>	
35-2012		Cooks, Institution & Cafeteria		\$10.10	L	\$6.73	\$8.53	\$9.42	\$6.28	\$7.14	\$8.09	\$9.65	\$11.94	
35-2014		Cooks, Restaurant		\$10.10	H	\$7.03	\$9.17	\$10.25	\$6.53	\$7.62	\$9.25	\$10.65	\$12.14	
35-2015		Cooks, Short Order		\$6.50	L	\$6.60	\$7.81	\$8.42	\$6.03	\$7.02	\$7.81	\$8.58	\$9.92	
35-2019		Cooks, All Other		\$12.50	L	†	†	†	†	†	†	†	†	
35-3021		Combined Food Preparation & Serving Workers, Including Fast Food		\$6.50	H	\$6.00	\$6.27	\$6.41	\$5.52	\$5.81	\$6.27	\$6.74	\$7.49	
35-3031		Waiters & Waitresses		\$5.20	H	\$5.98	\$8.35	\$9.53	\$5.61	\$6.09	\$6.87	\$10.44	\$13.26	
35-9011		Dining Room & Cafeteria Attendants & Bartender Helpers		\$5.50	H	\$6.00	\$8.60	\$9.90	\$5.66	\$6.18	\$7.58	\$11.19	\$12.90	
35-9021		Dishwashers		\$5.20	L	\$5.99	\$6.63	\$6.96	\$5.54	\$5.88	\$6.47	\$7.35	\$8.47	
35-9031		Hosts & Hostesses, Restaurant, Lounge, & Coffee Shop		\$7.50	L	\$5.98	\$7.35	\$8.04	\$5.72	\$6.36	\$7.40	\$8.28	\$9.03	
35-9099		Food Preparation & Serving Related Workers, All Other		\$8.00	H	\$7.82	\$9.37	\$10.14	\$7.30	\$7.80	\$8.64	\$10.35	\$12.69	
<b>37-0000</b>		<b>Building &amp; Grounds Cleaning &amp; Maintenance</b>		†		<b>\$6.69</b>	<b>\$9.25</b>	<b>\$10.52</b>	<b>\$6.13</b>	<b>\$7.18</b>	<b>\$8.52</b>	<b>\$10.81</b>	<b>\$13.47</b>	
37-2011		Janitors & Cleaners, Except Maids & Housekeeping Cleaners		\$9.30	L	\$6.76	\$9.25	\$10.48	\$6.20	\$7.35	\$9.12	\$10.82	\$12.87	
37-2012		Maids & Housekeeping Cleaners		\$8.50	H	\$6.33	\$8.04	\$8.89	\$5.93	\$6.83	\$7.77	\$8.66	\$10.69	

\* OES wages reported for Colorado statewide

† No wage data available

‡ L - Lowest 25% of actual vacancies

M - Middle 50% of actual vacancies

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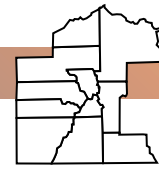


Table 3: Job Vacancy Survey Occupations with OES Wages – Page 5

SOC Code		SOC Occupational Title		Average JVS Wage	Vacancy Rank	Average Wages			Percentile Distribution					
						Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th	
37-2019		Building Cleaning Workers, All Other	L	†	\$10.00	†	†	†	†	†	†	†	†	†
37-3011		Landscaping & Groundskeeping Workers	L		\$10.00	\$7.90	\$10.78	\$12.22	\$6.77	\$9.16	\$10.94	\$12.75	\$14.26	
<b>39-0000</b>		<b>Personal Care &amp; Service Occupations</b>		†		<b>\$6.42</b>	<b>\$9.44</b>	<b>\$10.95</b>	<b>\$6.03</b>	<b>\$6.97</b>	<b>\$8.56</b>	<b>\$10.94</b>	<b>\$13.97</b>	
39-1021		First-Line Supervisors/Managers of Personal Service Workers	L		\$11.70	\$9.38	\$10.97	\$11.77	\$8.93	\$9.48	\$10.40	\$12.00	\$14.08	
39-3091		Amusement & Recreation Attendants	H		\$8.20	\$7.80	\$10.00	\$11.09	\$7.30	\$7.84	\$8.78	\$10.74	\$15.32	
39-5012		Hairdressers, Hairstylists, & Cosmetologists	M		\$11.00	\$6.01	\$7.09	\$7.62	\$5.58	\$5.93	\$6.52	\$7.67	\$10.12	
* 39-5092		Manicurists & Pedicurists	L		\$6.30	\$6.04	\$8.62	\$9.91	\$5.82	\$6.48	\$7.68	\$9.05	\$10.80	
39-6012		Concierges	L		\$9.80	\$9.53	\$12.19	\$13.52	\$9.08	\$10.03	\$11.91	\$14.57	\$16.30	
<b>41-0000</b>		<b>Sales &amp; Related Occupations</b>		†		<b>\$6.17</b>	<b>\$10.89</b>	<b>\$13.25</b>	<b>\$5.84</b>	<b>\$6.68</b>	<b>\$8.45</b>	<b>\$11.68</b>	<b>\$17.18</b>	
41-2011		Cashiers	L		\$7.50	\$5.93	\$8.08	\$9.15	\$5.60	\$6.12	\$7.12	\$8.94	\$13.67	
41-2031		Retail Salespersons	L		\$7.50	\$6.53	\$8.78	\$9.89	\$6.03	\$7.02	\$8.10	\$9.75	\$11.88	
41-3011		Advertising Sales Agents	H		\$8.00	\$9.52	\$14.37	\$16.80	\$8.88	\$10.57	\$12.49	\$14.49	\$30.14	
* 41-3021		Insurance Sales Agents	L		\$10.30	\$16.42	\$27.06	\$32.37	\$13.86	\$19.57	\$25.37	\$32.16	\$37.77	
41-9099		Sales & Related Workers, All Other	L		\$7.60	\$7.25	\$9.99	\$11.36	\$6.90	\$7.98	\$9.65	\$11.31	\$13.11	
<b>43-0000</b>		<b>Office &amp; Administrative Support</b>		†		<b>\$8.02</b>	<b>\$11.73</b>	<b>\$13.58</b>	<b>\$7.18</b>	<b>\$9.00</b>	<b>\$10.75</b>	<b>\$13.80</b>	<b>\$17.91</b>	
43-2011		Switchboard Operators, Including Answering Service	L		\$7.40	\$7.29	\$9.56	\$10.69	\$6.85	\$8.09	\$9.65	\$11.08	\$12.73	
43-3031		Bookkeeping, Accounting, & Auditing Clerks	H		\$10.00	\$9.34	\$12.81	\$14.54	\$9.10	\$10.38	\$12.25	\$14.46	\$18.02	
* 43-3041		Gaming Cage Workers	L		\$7.50	\$9.31	\$12.08	\$13.47	\$8.92	\$10.01	\$11.93	\$13.90	\$16.29	
43-3071		Tellers	L	†		\$8.17	\$10.50	\$11.66	\$7.45	\$8.93	\$10.46	\$12.30	\$13.63	
43-4051		Customer Service Representatives	L		\$11.00	\$8.90	\$12.16	\$13.79	\$8.20	\$9.47	\$11.27	\$13.84	\$18.46	
43-4071		File Clerks	L		\$8.00	\$6.22	\$8.38	\$9.46	\$5.89	\$6.71	\$8.61	\$9.98	\$10.86	
43-4081		Hotel, Motel, & Resort Desk Clerks	H		\$9.90	\$7.10	\$8.73	\$9.54	\$6.53	\$7.53	\$8.75	\$10.07	\$10.86	

\* OES wages reported for Colorado statewide  
 † No wage data available  
 ‡ L - Lowest 25% of actual vacancies  
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Table 3: Job Vacancy Survey Occupations with OES Wages – Page 6

SOC Code		SOC Occupational Title		Average JVS Wage	‡ Vacancy Rank	Average Wages					Percentile Distribution				
						Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th		
														10th	25th
43-4171	Receptionists & Information Clerks	\$9.30	L	\$7.92	\$9.56	\$10.39	\$6.89	\$8.89	\$9.74	\$10.61	\$11.12				
43-5081	Stock Clerks & Order Fillers	\$11.50	M	\$6.73	\$10.34	\$12.14	\$6.14	\$7.33	\$8.91	\$12.15	\$18.24				
43-6014	Secretaries, Except Legal, Medical, & Executive	\$12.60	H	\$8.63	\$11.28	\$12.60	\$7.87	\$9.27	\$10.58	\$12.90	\$15.92				
43-9061	Office Clerks, General	\$8.60	H	\$6.45	\$9.51	\$11.04	\$6.00	\$6.94	\$9.39	\$10.95	\$13.78				
<b>45-0000</b>	<b>Farming, Fishing, &amp; Forestry Occupations</b>	†		<b>\$7.12</b>	<b>\$10.47</b>	<b>\$12.15</b>	<b>\$6.23</b>	<b>\$8.25</b>	<b>\$9.98</b>	<b>\$11.63</b>	<b>\$16.53</b>				
* 45-4011	Forest & Conservation Workers	†	L	\$11.02	\$15.01	\$17.00	\$10.07	\$11.98	\$14.33	\$17.73	\$20.79				
<b>47-0000</b>	<b>Construction &amp; Extraction</b>	†		<b>\$10.33</b>	<b>\$16.37</b>	<b>\$19.39</b>	<b>\$9.40</b>	<b>\$11.49</b>	<b>\$15.02</b>	<b>\$20.21</b>	<b>\$24.76</b>				
47-1011	First-Line Supervisors/Managers of Construction Trades & Extraction Workers	†	L	\$15.13	\$23.64	\$27.90	\$14.76	\$16.50	\$20.93	\$27.02	\$41.20				
47-2021	Brickmasons & Blockmasons	\$22.00	M	\$15.63	\$20.75	\$23.31	\$15.01	\$16.58	\$21.74	\$25.09	\$26.95				
47-2061	Construction Laborers	\$9.30	H	\$8.38	\$11.32	\$12.79	\$7.75	\$9.10	\$11.04	\$12.96	\$14.17				
47-2073	Operating Engineers & Other Construction Equipment Operators	\$13.80	M	\$12.98	\$16.88	\$18.84	\$12.14	\$13.70	\$16.32	\$19.62	\$23.43				
47-2111	Electricians	\$12.50	L	\$16.90	\$20.92	\$22.93	\$15.32	\$18.22	\$21.14	\$24.61	\$26.88				
47-2152	Plumbers, Pipefitters, & Steamfitters	\$20.20	H	\$12.36	\$19.18	\$22.59	\$11.35	\$14.34	\$18.83	\$22.13	\$27.94				
47-2181	Roofers	\$19.50	H	\$9.53	\$12.84	\$14.49	\$8.98	\$10.46	\$12.53	\$14.69	\$17.50				
47-3014	Helpers--Painters, Paperhangers, Plasterers, & Stucco Masons	\$9.00	M	\$7.11	\$9.51	\$10.72	\$6.60	\$7.68	\$9.13	\$11.10	\$13.28				
* 47-3016	Helpers--Roofers	\$11.00	M	\$7.31	\$9.58	\$10.73	\$6.73	\$8.29	\$9.84	\$11.00	\$12.47				
47-4011	Construction & Building Inspectors	\$15.40	L	\$11.51	\$17.94	\$21.14	\$10.48	\$12.75	\$18.80	\$21.11	\$25.35				
* 47-5081	Helpers--Extraction Workers	\$12.40	M	\$9.37	\$14.46	\$17.00	\$9.11	\$10.17	\$14.81	\$18.51	\$21.27				
<b>49-0000</b>	<b>Installation, Maintenance, &amp; Repair</b>	†		<b>\$8.70</b>	<b>\$15.36</b>	<b>\$18.69</b>	<b>\$7.83</b>	<b>\$9.91</b>	<b>\$14.42</b>	<b>\$19.76</b>	<b>\$24.55</b>				
49-3011	Aircraft Mechanics & Service Technicians	\$14.00	L	\$9.91	\$14.06	\$16.12	\$9.24	\$10.78	\$13.30	\$17.46	\$20.40				

† OES wages reported for Colorado statewide

‡ No wage data available

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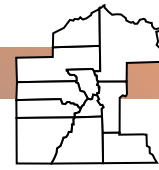


Table 3: Job Vacancy Survey Occupations with OES Wages – Page 7

SOC Code		SOC Occupational Title	‡ Vacancy Rank	Average JVS Wage	Average Wages			Percentile Distribution				
					Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
49-3023		Automotive Service Technicians & Mechanics	L	†	\$7.52	\$11.54	\$13.56	\$7.18	\$7.93	\$9.86	\$15.41	\$18.67
49-3031		Bus & Truck Mechanics & Diesel Engine Specialists	L	\$15.50	\$11.89	\$15.75	\$17.68	\$11.45	\$12.88	\$15.36	\$18.18	\$21.40
* 49-3092		Recreational Vehicle Service Technicians	L	\$12.50	\$8.77	\$14.23	\$16.96	\$7.18	\$10.47	\$13.96	\$17.47	\$21.86
49-9021		Heating, Air Conditioning, & Refrigeration Mechanics & Installers	H	\$11.20	\$13.51	\$17.92	\$20.14	\$12.69	\$14.28	\$18.64	\$20.87	\$22.21
49-9042		Maintenance & Repair Workers, General	H	\$10.80	\$7.78	\$12.67	\$15.11	\$7.44	\$8.22	\$11.64	\$17.05	\$20.43
<b>51-0000</b>		<b>Production</b>		†	<b>\$7.07</b>	<b>\$11.82</b>	<b>\$14.20</b>	<b>\$6.49</b>	<b>\$7.95</b>	<b>\$10.25</b>	<b>\$14.24</b>	<b>\$19.79</b>
51-7011		Cabinetmakers & Bench Carpenters	L	\$16.00	\$8.26	\$12.09	\$14.00	\$6.60	\$9.55	\$11.28	\$15.67	\$16.88
51-7042		Woodworking Machine Setters, Operators & Tenders	L	\$16.00	\$7.83	\$10.58	\$11.97	\$7.47	\$8.53	\$10.16	\$12.04	\$14.42
* 51-9031		Cutters & Trimmers	M	\$10.90	\$6.44	\$10.28	\$12.20	\$6.08	\$7.01	\$8.65	\$12.71	\$18.23
<b>53-0000</b>		<b>Transportation &amp; Material Moving</b>		†	<b>\$7.68</b>	<b>\$11.72</b>	<b>\$13.73</b>	<b>\$6.86</b>	<b>\$8.71</b>	<b>\$10.90</b>	<b>\$13.56</b>	<b>\$17.49</b>
53-3022		Bus Drivers, School	L	\$9.90	\$8.96	\$10.15	\$10.75	\$8.18	\$9.19	\$10.07	\$10.96	\$12.77
53-3033		Truck Drivers, Light or Delivery Services	L	\$12.00	\$9.33	\$13.58	\$15.71	\$8.75	\$10.08	\$12.08	\$14.50	\$24.36

\* OES wages reported for Colorado statewide

† No wage data available

‡

L - Lowest 25% of actual vacancies

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## 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

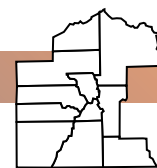
11. *How long has this vacancy been open?*

- ♦ 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

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

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



## Definitions

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

### Average

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

### Average Minimum and Average Maximum Wage

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

### Employer

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

### Employment

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

### Full-time and Part-time Employment

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

### Industry Classification

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

### Job Seekers

People actively looking for employment or researching career options.

### Job Vacancy

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

### Job Vacancy Rate

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

### Labor Force

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

### Level of Education

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

### Medical Insurance Premium

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

### Permanent and Temporary Employment

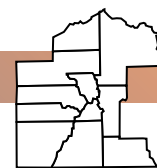
A vacancy is classified as permanent if it will be filled for more than six months. Temporary employment refers to those positions that will be filled for six months or less.

### Sign-on Bonus

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

### SOC

The Standard Occupational Classification is a system for classifying all occupations in the economy, including private, public, and military occupations. This classification system replaces all occupational



classification systems previously used by Federal statistical agencies. It will be used by all Federal statistical agencies and programs collecting occupational data, providing a means to compare occupational data across agencies. It is designed to cover all occupations in which work is performed for pay or profit, reflecting the current occupational structure in the United States.

#### **Survey Sample Universe**

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

#### **Unemployment**

Includes people 16 years of age and over who had no employment during the reference period, were

available for work (except for temporary illness), and have made specific efforts to find employment. People who did not look for work because they were on temporary layoff or waiting to start new jobs within the next thirty days are also counted among the unemployed.

#### **Unemployment rate**

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

#### **Wage**

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