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# Upper Arkansas Region

## Job Vacancy Survey

Winter 2004



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# Introduction

## The Colorado Job Vacancy Survey

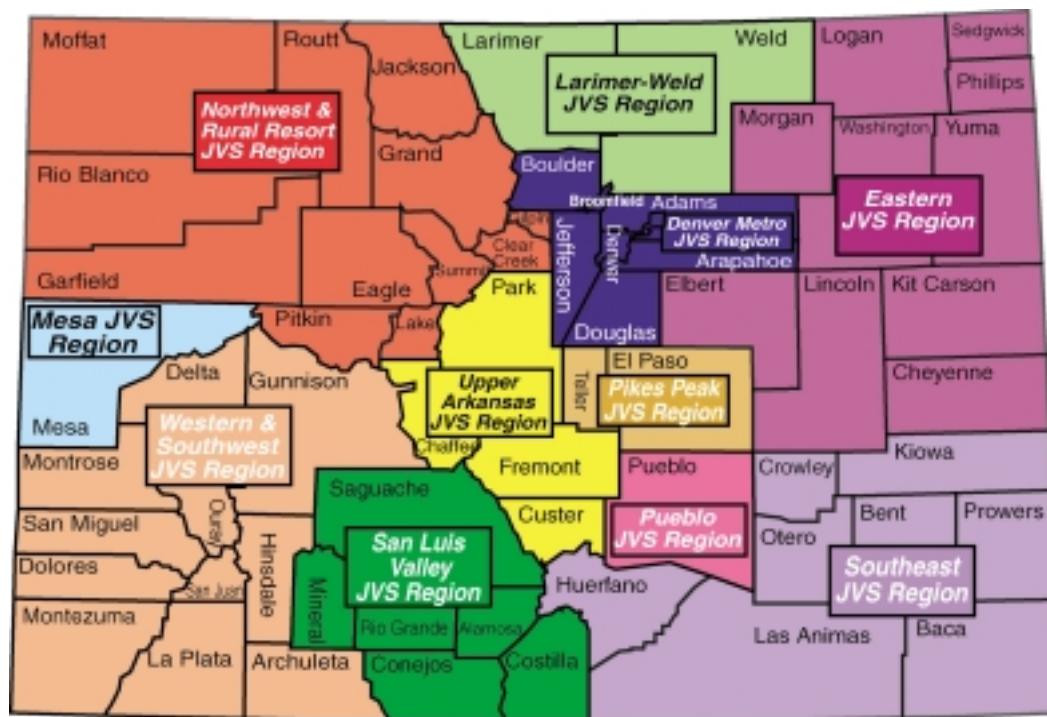
The unemployment rate, along with the level and growth rate of employment, has been used as an indicator of labor market conditions for decades. While this indicator provides information about changes in the supply and demand for labor, it reveals nothing about the skills most sought after by employers. 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 sample of employers in a given region. The department's economists analyze the raw data, estimate the number of

Figure 1: Colorado Job Vacancy Survey Regions



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 for each region in Colorado by Labor Market Information's office of Workforce Research and Analysis.

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

# Executive Summary

**The winter 2004 Upper Arkansas Job Vacancy Survey** was conducted from January 1st through 12th, 2004. The goal of the survey is to provide current information on the demand for workers so that employers, job seekers, economic developers, educators, and workforce centers can make informed decisions in the Upper Arkansas Region.

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

A total of 554 employers representing approximately 53% of the region's total employment responded to the survey. Out of these, 26 were large employers (75 employees or more), 61 were government employers, and 467 were from the small to mid-size category (five to 74 employees). The survey had a response rate of 87% and a near perfect (99%) cooperation rate. The margin of sampling error for the overall vacancy estimate is plus or minus 5% or about 6 vacancies.

## **Major Findings of Survey:**

- ◆ It is estimated that a total of 119 jobs were open for hire in the Upper Arkansas Region during the survey period. ....Page 8
- ◆ Six percent of employers responding to the survey reported having at least one vacancy. ....Page 8
- ◆ Thirty-five percent of the estimated job openings are in Government and 23% are in Education & Health Services. ....Page 8
- ◆ Forty-two percent of the estimated vacancies are offered by small to mid-size employers and 23% by large employers. ....Page 9
- ◆ The overall average wage for all reported vacancies is \$14.50 per hour. ....Page 9
- ◆ Ninety-two percent of all reported vacancies are for permanent positions. ....Page 10
- ◆ Eighty-two percent of the reported vacancies are for full-time positions compared to 87% a year ago. ....Page 10
- ◆ Thirteen percent of all vacancies in this survey do not require high school completion. Thirty-nine percent require high school completion. Most vacancies that have educational requirements beyond high school require vocational training/certification. ....Page 11
- ◆ Forty-eight percent of all vacancies require post-secondary education. A year ago 63% of all vacancies required postsecondary education. ....Page 11
- ◆ Seventy-four percent of all vacancies are considered not difficult to fill. This has changed dramatically from a year ago when only 36% of all vacancies were considered not difficult to fill. ....Page 13
- ◆ For this report, 70% of the reported vacancies are open for hire for less than 30 days, significantly higher than last year's report of 48%. ....Page 14

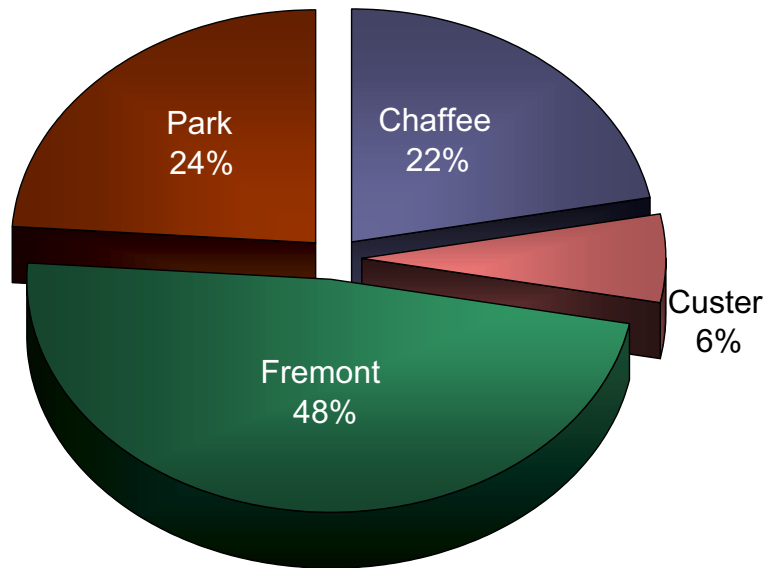


# Regional Information

**The Upper Arkansas Region includes Chaffee, Custer, Fremont and Park counties.** The U.S. Census Bureau's Census updates for 2002 estimates the region's population to be nearly 84,000 people. Fremont County accounts for 57% of the population in the region. Chaffee County has 20% of the population while Park has 19%. Custer accounts for 4% of the population in the area. Population changes from July 1, 2001 to July 1, 2002 have slowed in all four counties. Park County showed the highest percent change of 4.2% while Fremont showed only a 1.1% increase in population. Population estimate updates for 2003 will be available later this spring.

Employment and population proportions in the area are comparable, with Fremont County recording nearly half of all employed individuals (*Figure 2*). Park County makes up nearly one-fourth of the area's employment, with many of these individuals commuting to the Metro Denver area. In fact, according to the U.S. Census, 2001 updates, Park County residents spend 45 minutes, on average, to commute to work while workers in the remaining counties spend less than one-half hour in the commute. Those employed in Chaffee County require only an average of 15 minutes to get to work.

**Figure 2: Employment by County, December 2003**



Source: CDLE, Local Area Unemployment Statistics, January 2004

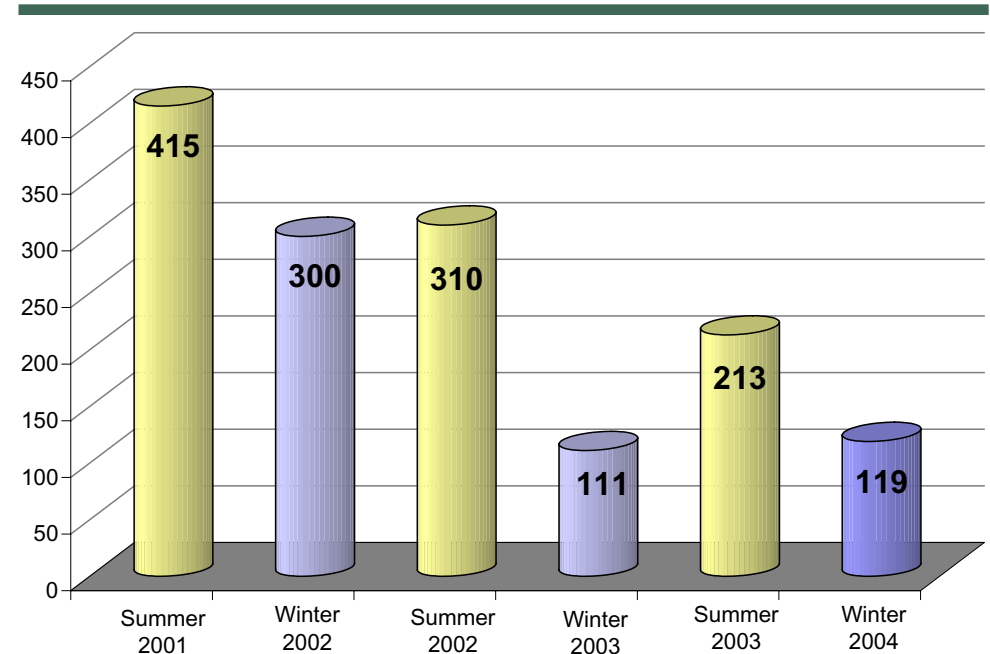
## Regional Information —continued

In the summer of 2001, the Colorado Department of Labor and Employment began collecting data on job vacancies in the Upper Arkansas Region. On average, the summer season shows more employment opportunities than in the winter due to a strong volume of seasonal businesses. However, job vacancies in general have steadily decreased mostly due to the decrease in economic activity seen not just in the state of Colorado, but in the nation as well (*Figure 3*). This current survey shows a small increase over last winter's vacancies.

Although the overall availability of job opportunities has declined over the last five surveys, employment per season has increased. For example, not only did employment increase from the summer of 2001 to the summer of 2002 and again to the summer of 2003, employment also increased from the winter of 2002 to the winter of 2003, and again to the winter of 2004. Furthermore, over the last three winter reports, the unemployment rate has continued to decline from 5.5% in the winter of 2002, to 5.4% in the winter 2003 report, and finally to 4.3% for this winter. This implies that the employment levels are increasing at a faster pace than the increases in the labor force.

Upper Arkansas Region Job Vacancy Surveys are conducted semi-annually in the winter and summer months. The timing of the survey was developed with the intent of measuring demand for labor at intervals that provide the most useful information. Vacancies found in the winter represent demand for labor at a time of year when employment is at its seasonal low. A study at this time indicates the types of occupations found at the time when demand for workers is at its lowest. When the Job Vacancy Survey is conducted

**Figure 3: Historical Vacancies—Upper Arkansas Region**



	Summer 2001	Winter 2002	Summer 2002	Winter 2003	Summer 2003	Winter 2004
Vacancies	415	300	310	111	213	119
Employment	37,698	33,631	37,994	33,943	38,774	35,773
Unemployed	1,244	1,967	1,734	1,954	1,861	1,625
Unemployment Rate	3.2%	5.5%	4.4%	5.4%	4.6%	4.3%

Source: CDLE, Local Area Unemployment Statistics, January 2004

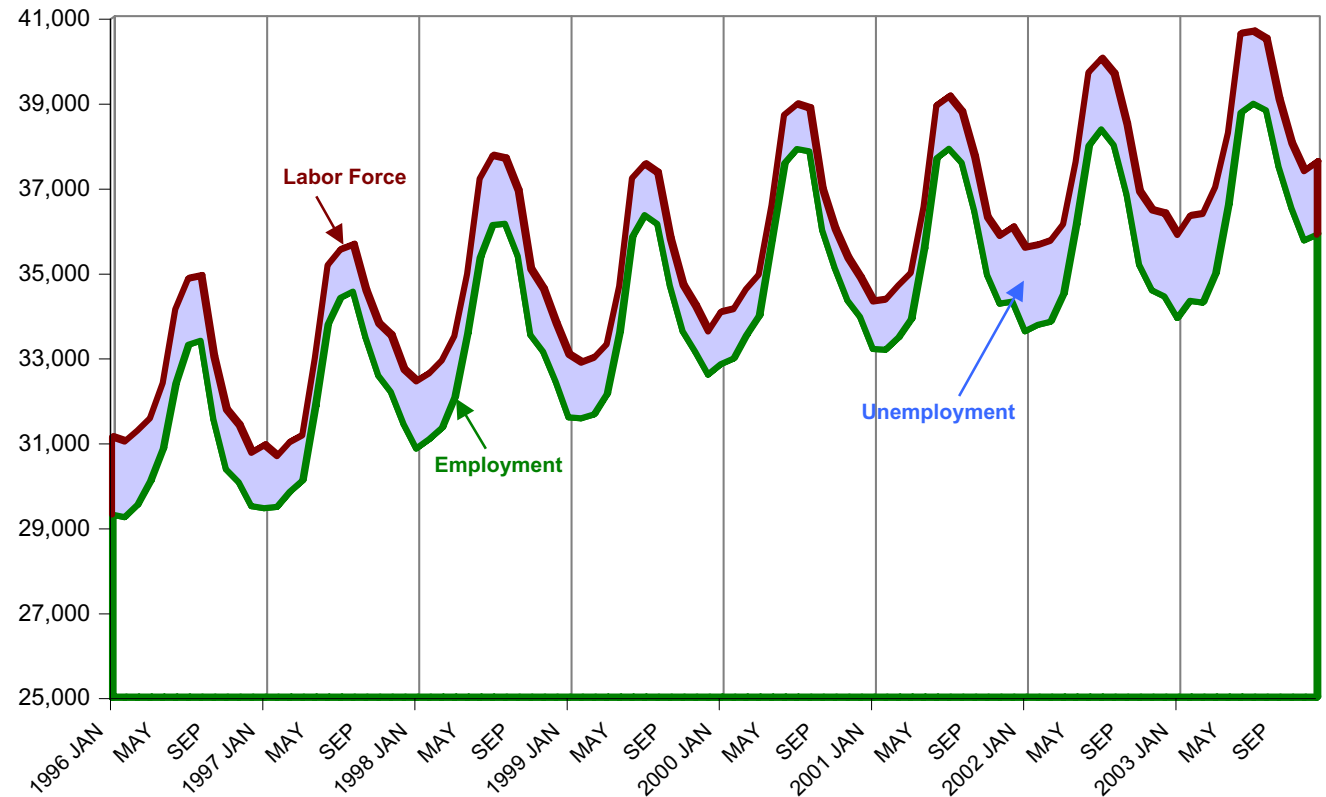
## Regional Information —continued

during the summer, results represent demand for labor at a time when employers are nearing peak employment, yet are still in the process of actively recruiting.

Historically, the level of employment in the Upper Arkansas Region peaks in or around the month of July. The labor force, the number of people employed or actively looking for work, also peaks at that time (*Figure 4*). Unemployment levels have increased over the last couple of years, following the state and national trend, although in general, the region has experienced declining unemployment through the better part of the decade. The unemployment rate tends to peak in the months of January and June. The remainder of each year's employment and available workers are more closely balanced.

While this trend has been apparent for years, changes in the employment and labor force have been notable over the past two years. Increases in the total number employed occurred at a slower pace since mid-2001, reflecting the softened economy. Yet, rather than slowing, the total labor force kept its pace as individuals remained in or reentered the labor market. Consequently the actual number of unemployed individuals increased over the last half of 2001 and throughout most of 2002, as seen by the widening gap between the two series. This

**Figure 4: Employment and Labor Force Trends for the Upper Arkansas Region**  
(Not Seasonally Adjusted)



Source: CDLE, Local Area Unemployment Statistics, January 2004

trend continued into 2003 until May when the number of unemployed individuals finally decreased. The unemployment rate continued on a downward trend until just recently, when it edged up over the winter holiday season.

## Regional Information — continued

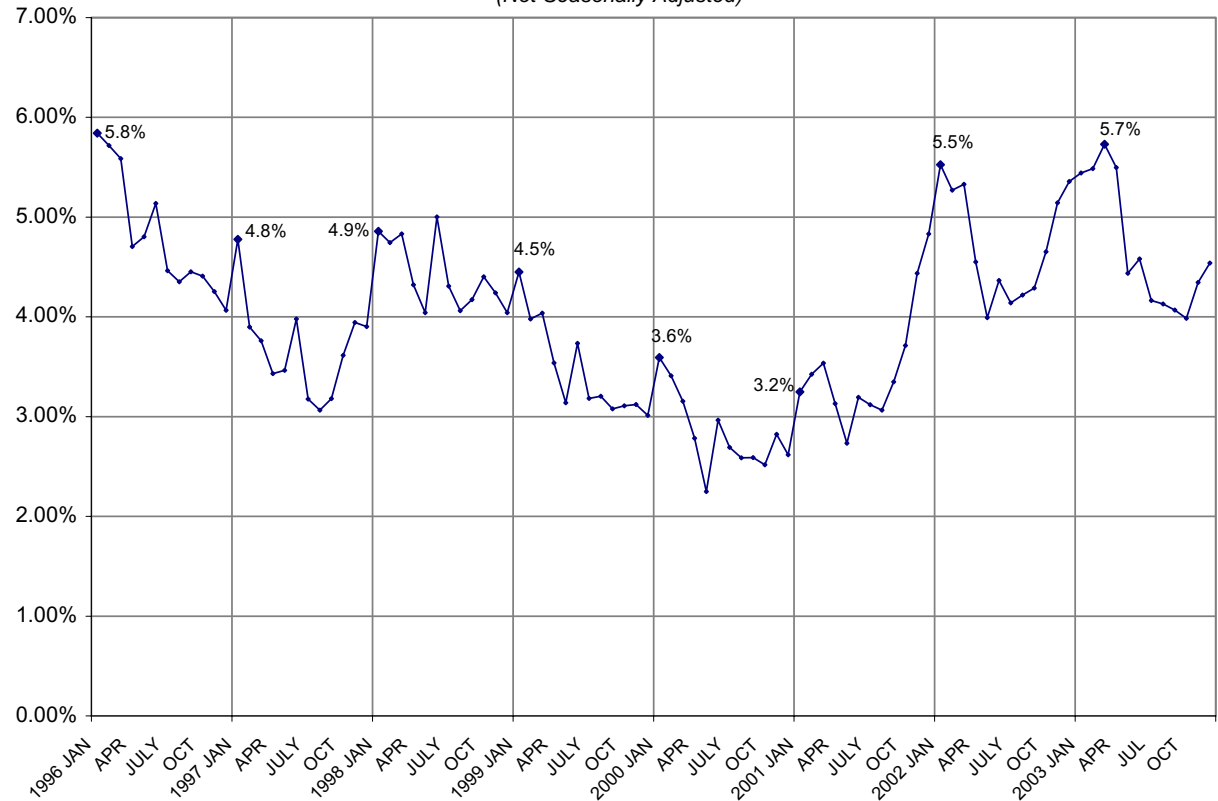
After steadily decreasing throughout the late 90s, the region's unemployment rate followed the state and national trends of persistent increases since mid-2000 (Figure 5). The unemployment rate reached a high of 5.7% in March 2003 (the highest rate since January of 1996) after which the local economy showed promising signs of increasing summertime employment.

Figure 6 shows the most current unemployment statistics for the individual counties of the Upper Arkansas Region. Custer, Park and Chaffee counties had unemployment rates significantly lower than Fremont County, which showed an unemployment rate of 5.2%. Chaffee County, "Home of the Fourteeners," followed with a rate of 4.0%. The cities of Salida and Buena Vista are Chaffee County's main business districts, with downtown Salida sporting the largest historic district in the state. Salida also features a mild climate considering its elevation. Many commute to Salida from Buena Vista since the cost of housing may be more preferable just north of the region's banana belt.

While Fremont County cannot claim title to an abundance of 14,000-foot mountain peaks, it can lay claim to the Royal Gorge Bridge—the world's highest suspension bridge hovering 1,053 feet over the Arkansas River. Outdoor activities are just as popular here as in neighboring counties. Cañon City is the primary business district with a metropolitan population of over 25,000. Fremont County's unemployment rate of 5.6% is higher than the region's, but is below the state's unemployment rate of 6.0%.

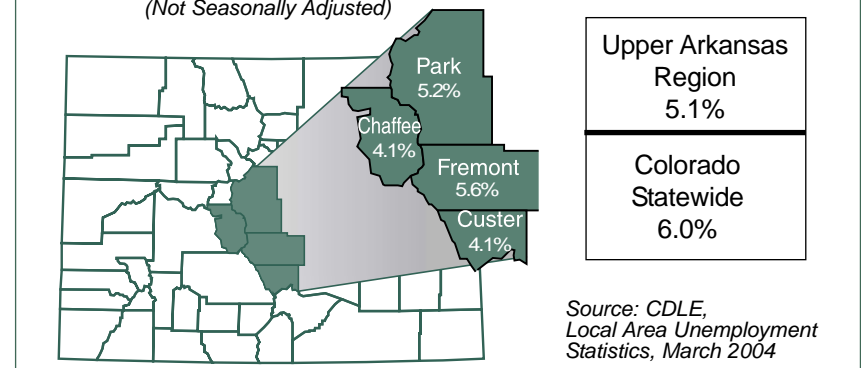
Park County's unemployment rate is 5.2%; higher than the region's average. Situated much closer to the Denver Metro area, residents often commute to Denver for employment opportunities. Bailey has proved to be a popular community for relocation out of the Denver Metro area.

**Figure 5: Upper Arkansas Region Unemployment Rate Trend**  
(Not Seasonally Adjusted)



Source: CDLE, Local Area Unemployment Statistics, January 2004

**Figure 6: Unemployment Rates for January 2004**  
(Not Seasonally Adjusted)



Source: CDLE, Local Area Unemployment Statistics, March 2004

## Regional Information —continued

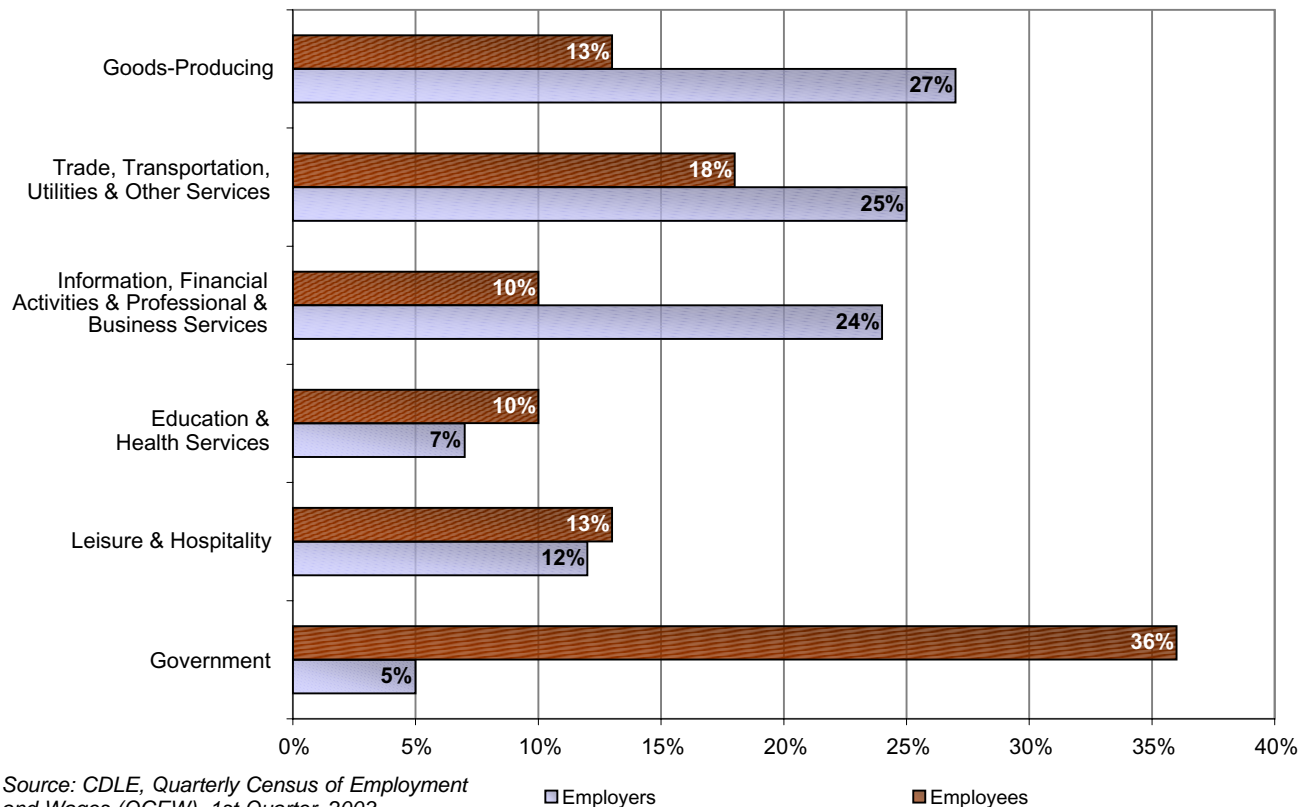
Figure 7 shows the employment breakdown for each of the JVS sectors during the first quarter of 2003. This serves as a useful reference for the time period in which the JVS was conducted. Shares of employment by industry in the Upper Arkansas Region have remained fairly constant over prior years, however, classification of industries has recently changed. The 60-year-old Standard Industrial Classification (SIC) system has been replaced with the North American Industry Classification System (NAICS). While some industries have remained in a similar classification category, others have largely changed. This is mostly due to the classification of establishments into detailed categories based on the production process they use. This reclassification has considerably changed the locations of many businesses in the classification structure.

NAICS recognizes hundreds of new businesses in the economy, especially those in the rapidly growing service sector. These are businesses that are indicative of the “new economy” such as Information, Financial Activities, & Professional & Business Services. Education & Health Services are also separate from other service industries allowing greater level of detail than previously available.

The Government sector remains similar to past years— a small percentage of area employers with a large percentage (over one-third) of the area’s employees. Among the top employers are the large correctional and health facilities. Goods-Producing companies are among the top three sectors in regard to both employment as well as employers.

Trade, Transportation, Utilities, & Other Services has one-fourth of the area’s employees. There is still a significant share of employers among the now separate service categories like Information, Financial Activities, & Professional & Business Services.

**Figure 7: Upper Arkansas Region Employers and Employees, 1st Quarter, 2003**



Source: CDLE, Quarterly Census of Employment and Wages (QCEW), 1st Quarter, 2003

□ Employers

■ Employees





# Survey Findings

## Estimated Vacancies: JVS Sectors and Employer Size

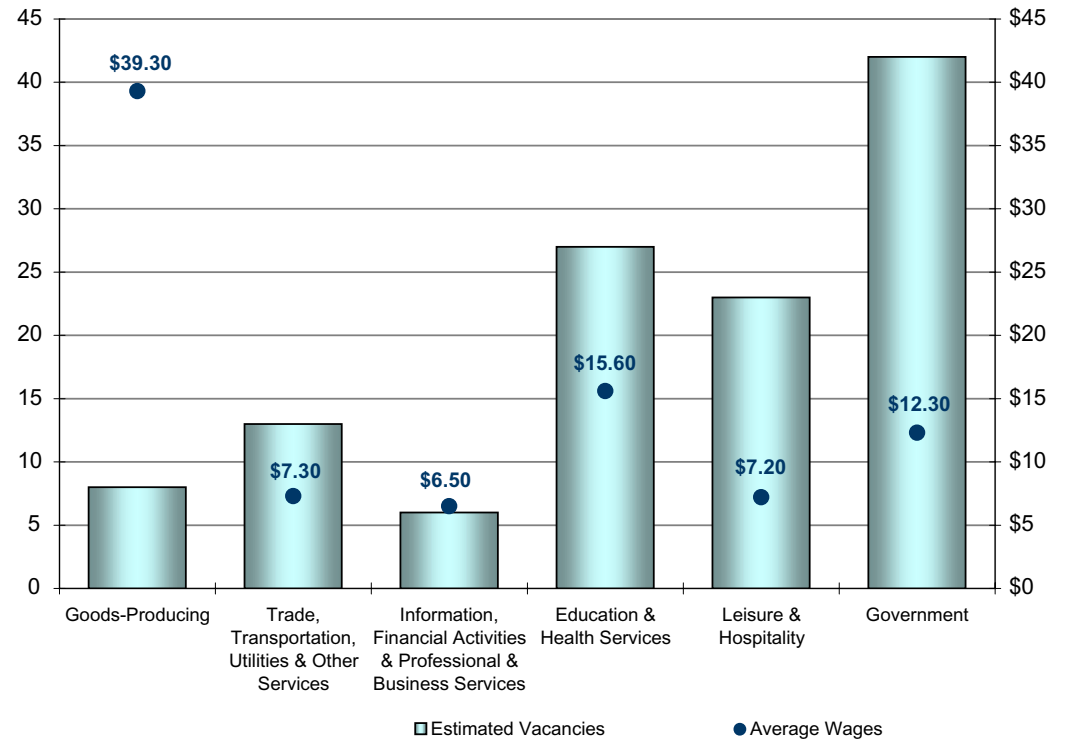
To complement the new NAICS structure, surveying has been expanded to collect data sufficient for reporting more details than prior reports. While results for the Goods-Producing JVS sector (Natural Resources & Mining, Construction, Manufacturing) remain combined, results for the previously Service-Producing industries are broken down into further detail (*Figure 8*).

During the survey period, an estimated 119 vacancies were open for immediate hire in the Upper Arkansas Region. A year ago 111 vacancies were estimated. Six percent of employers responding to the survey reported having at least one vacancy.

For this survey there are fewer than 20 positions in each of the Goods-Producing, Trade, Transportation, Utilities & Other Services, and Information, Financial Activities, Professional & Business Services JVS sectors. Within the Goods-Producing JVS sector, most of the job vacancies include construction positions as electricians and general laborers. A few vacancies are also reported in management and retail. There are no vacancies reported in mining or agriculture. While more vacancies might have been expected in manufacturing, the low reporting could be a result, in part, of random sampling as well as the continued reorganization efforts of local area firms. Vacancies in Information, Financial Activities, Professional & Business Services consist of tellers and accounts clerks.

Among the vacancies in the Education & Health Services JVS sector, almost 90% are in Health Services as registered and licensed practical nurses, therapists and certified nursing assistants. Receptionists and administrator positions make up most of the remaining vacancies in this JVS sector. Nineteen percent of all vacancies in this survey are in the Leisure & Hospitality JVS sector. These vacancies are concentrated in

**Figure 8: Estimated Vacancies and Average Wages by JVS Sectors**



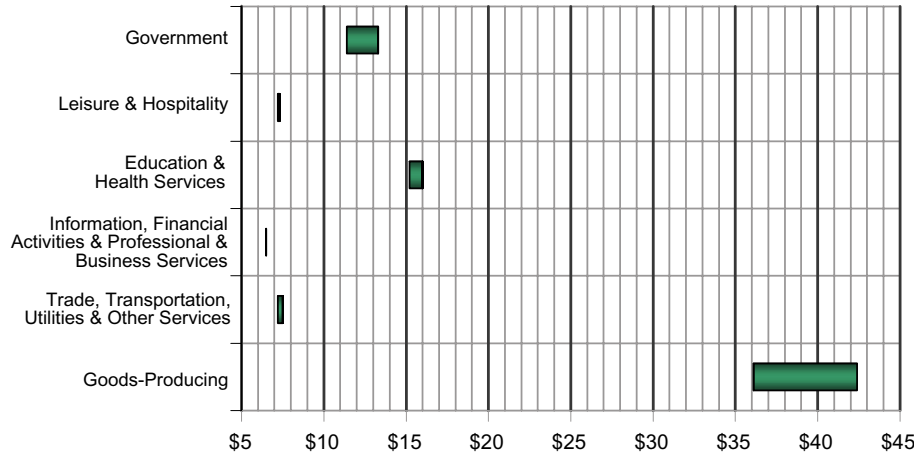
Accommodation & Food Services occupations such as cooks, wait staff and hotel personnel. Vacancies are also reported in the Personal Care & Service occupations for housekeepers and wranglers.

The highest number of vacancies is found in the Government sector within a variety of occupational categories including positions as managers, administrators, correctional officers, legal secretaries, cooks and construction equipment operators.

Wages reported for this study represent those offered by employers for current vacancies over the survey period. While the overall average wage for the winter report is \$14.50 per hour, the highest average wage is found in the Goods-Producing sector due to a number of vacancies for project managers

# Survey Findings *Estimated Vacancies: JVS Sectors and Employer Size –continued*

**Figure 9: Reported Average Wage Ranges by JVS Sectors**

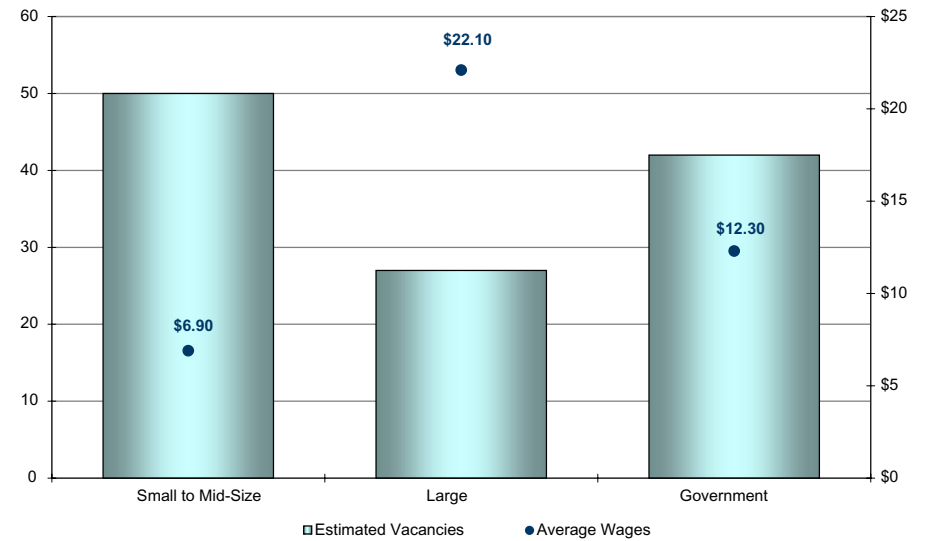


and cost estimators. Since wages offered vary according to the individual applicant’s qualifications, employers were asked to provide the range of wages offered for the vacancies (*Figure 9*). Wage ranges are more variable for occupations in the Goods-Producing and Government sectors.

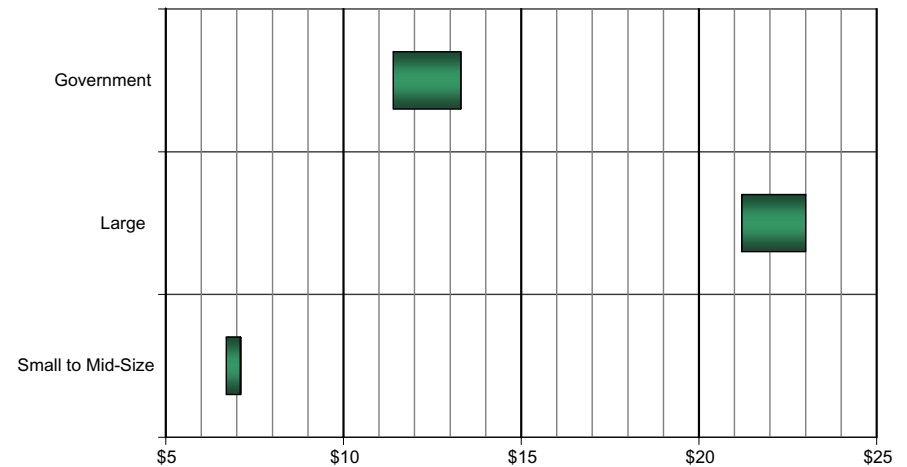
Small to mid-size firms account for 42% of total vacancies (*Figure 10*) in the Upper Arkansas Region. Twenty-three percent are estimated for large companies and Government agencies have 35% of all vacancies. The highest concentration of vacancies within the large company category is found among health care occupations for registered nurses and certified nursing assistants.

Also according to the survey, large companies offer the highest average wage. Vacancies for the health care related occupations typically offer higher wages when requiring postsecondary education. Most of these positions require a minimum of Vocational Training/Certification. Large companies offer an average of \$22.10 per hour—an amount higher than the Upper Arkansas Region’s overall average. *Figure 11* shows that vacancies in small to mid-size firms are offered at the lowest wages. The wage range for these vacancies is also limited.

**Figure 10: Estimated Vacancies and Average Wages by Employer Size**



**Figure 11: Reported Average Wage Ranges by Employer Size**



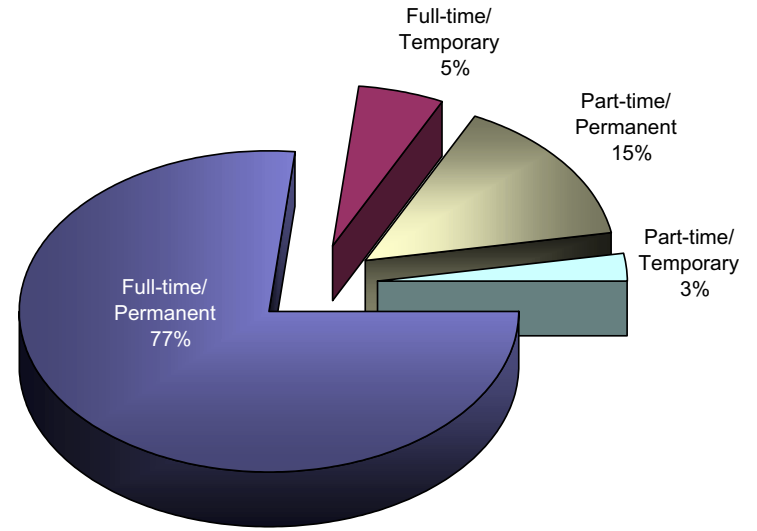
# Survey Findings

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

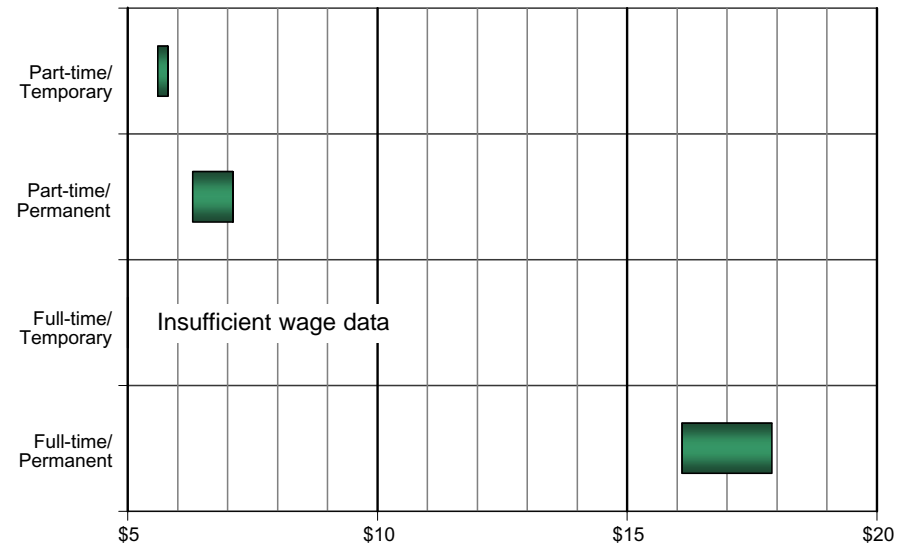
For this winter survey, 77% of the reported vacancies are for full-time permanent positions (*Figure 12*) while 15% are reported to be part-time permanent. Last year at this time 87% of the reported vacancies were full-time permanent. All Upper Arkansas Region Job Vacancy Surveys, summer and winter, have consistently shown a high percentage of permanent positions. For job seekers who prefer to work less than full-time, opportunities do exist. Both full-time and part-time positions include occupations in all JVS sectors. Half of all part-time vacancies are office related and the other half can be found in restaurants and hotels.

In general, full-time positions pay more than part-time and temporary positions. While past reports had deviated from this, the current report shows that wages offered have fallen in line with predictable trends. In this survey, full-time positions offer wages higher than the overall average of \$14.50 per hour.

**Figure 12: Vacancies by Employment Status**



**Figure 13: Reported Average Wage Ranges by Employment Status**



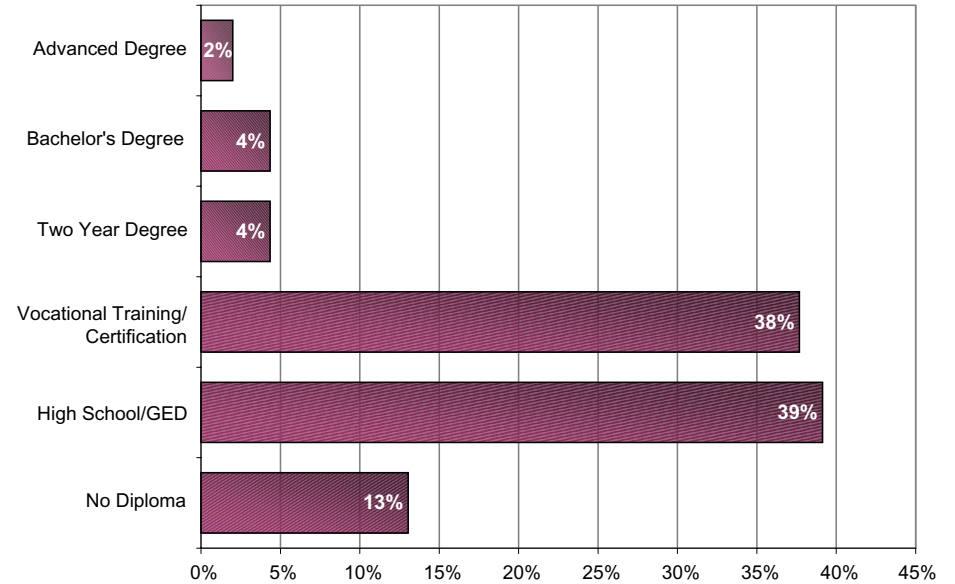
# Survey Findings *Vacancies: Employment Status, Education and Experience Requirements—continued*

Employers were asked what level of education is required of an applicant in order to be considered for a particular vacancy. Forty-eight percent of the positions reported by employers in the Upper Arkansas Region require education beyond high school (*Figure 14*). While 39% of all vacancies require a high school degree or GED equivalency, 13% do not require high school completion. Only two prior Upper Arkansas Region Job Vacancy Surveys show such low percentages for this category. In the summer of 2000, 17% of vacancies did not require high school completion and in the summer of 2001 this percentage was down to 9%. High School completion plays an important role in the employability of an individual though many firms in this region could look past this requirement. Last year at this time, employers reported that 53% of the open positions required the applicant to be educated beyond high school including 30% that required a bachelor’s degree.

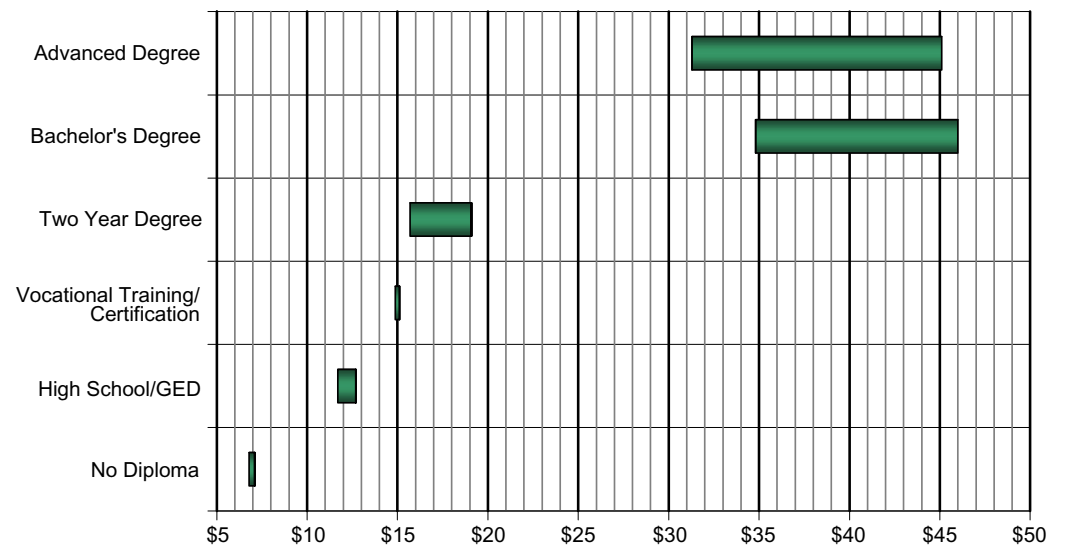
Only 6% of all vacancies require a bachelor’s degree or higher. Of these, most typically require specialized formal training; for example, school administrators and project managers in the construction arena. Vacancies include positions such as registered nurses, mechanical engineers and lawyers. Most of the area’s vacancies are for occupations requiring either high school completion or Vocational Training/Certification.

On average, employers add a premium to pay scales when requiring higher levels of education. Results from this survey follow the trend with the highest reported wages found within the Bachelor’s and Advanced Degree categories. Average wages offered decrease as educational requirements are relaxed (*Figure 15*).

**Figure 14: Vacancies by Education**

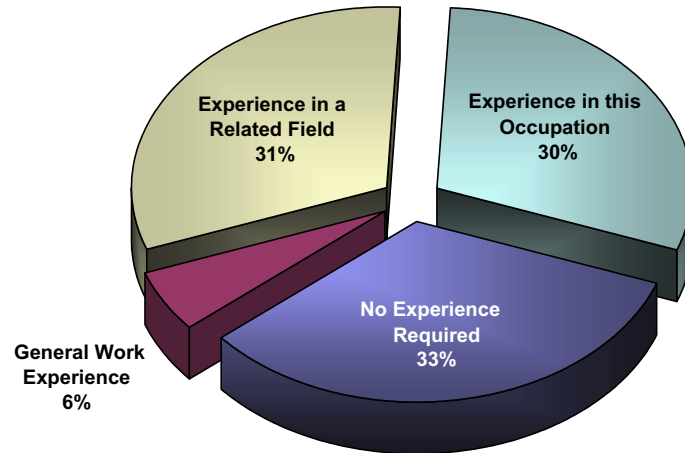


**Figure 15: Reported Average Wage Ranges by Education**



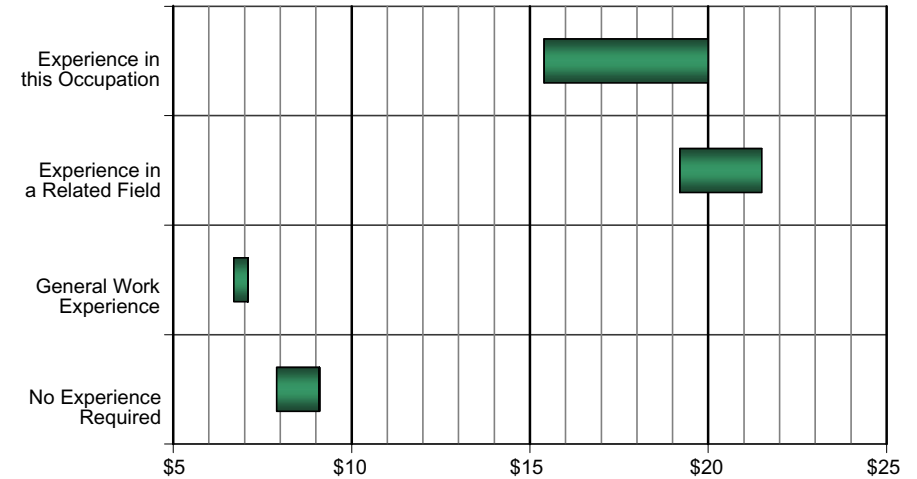
# Survey Findings *Vacancies: Employment Status, Education and Experience Requirements—continued*

**Figure 16: Vacancies by Experience**



Employers require the applicant to have experience in a related field or in the occupation for 61% of all vacancies. However, 33% of all vacancies do not require experience at all. Many vacancies requiring experience are for more skilled positions such as school administrators, occupational therapists, construction managers, and secretaries. Most of these vacancies are full-time positions and over half are open for less than 30 days. Last year at this time, 68% of all vacancies required experience in a related field or within the occupation while 24% did not require prior work experience.

**Figure 17: Reported Average Wage Ranges by Experience**



As with increasing levels of education, employers are willing to pay higher wages for added experience. Vacancies requiring no experience, the category most sought after by employers, are offered with an average minimum wage of \$7.90 per hour to start. This is comparable to last year's wages offered: lower wages offered with vacancies that do not require much experience, and higher wages offered to those with high levels of experience. For this survey, higher wages are offered to medical technicians, administrators and cooks providing they fulfill both education and experience requirements.

## Vacancies: Difficulty to Fill and Time Open for Hire

# Survey Findings

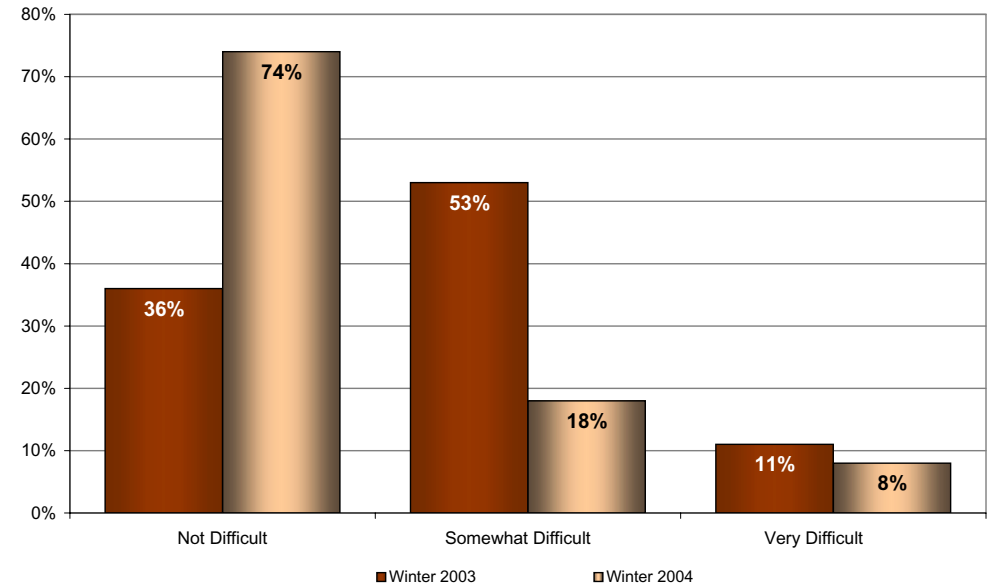
To measure the level of difficulty in filling vacancies, employers' perception of difficulty, as well as data on how long each position had been open at the time of the survey, were gathered.

Logically, with more individuals available for work, employers should find it a little easier to fill vacancies. Seventy-four percent of the responding employers report that open positions are not difficult to fill (*Figure 18*). Furthermore, employers report that 18% of all vacancies are somewhat difficult to fill and only 8% are very difficult to fill—a total of 26% associated with any level of hiring difficulty. This contrasts last winter's report where 64% of all vacancies were considered as being associated with at least some level of difficulty.

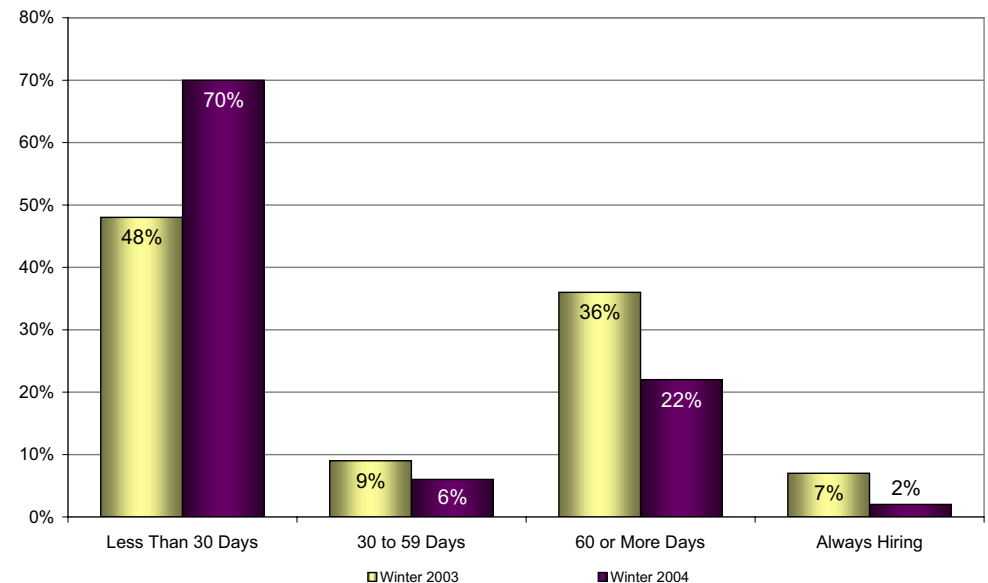
Based on this survey's data, most of the positions considered very difficult to fill are registered nurses and construction project managers. Vacancies considered somewhat difficult to fill are those that require specific levels of post secondary education such as administrators and financial advisors. Vacancies reported to be not difficult to fill are found among most occupations.

While it could be that the job seeker's skills do not match those required for the desired position, the vacancy duration could also be related to lower-than-expected wages or require a longer commute to work. The inconsistency in the perceptions of difficulty to fill adds to the challenge of interpreting hiring difficulty. While some employers may consider a vacancy to be difficult to fill when it has been open for 30 to 60 days, others may consider a similar vacancy not difficult to fill given the same time frame.

**Figure 18: Vacancies by Difficulty to Fill**



**Figure 19: Vacancies by Time Open for Hire**



# Survey Findings *Vacancies: Difficulty to Fill and Time Open for Hire —continued*

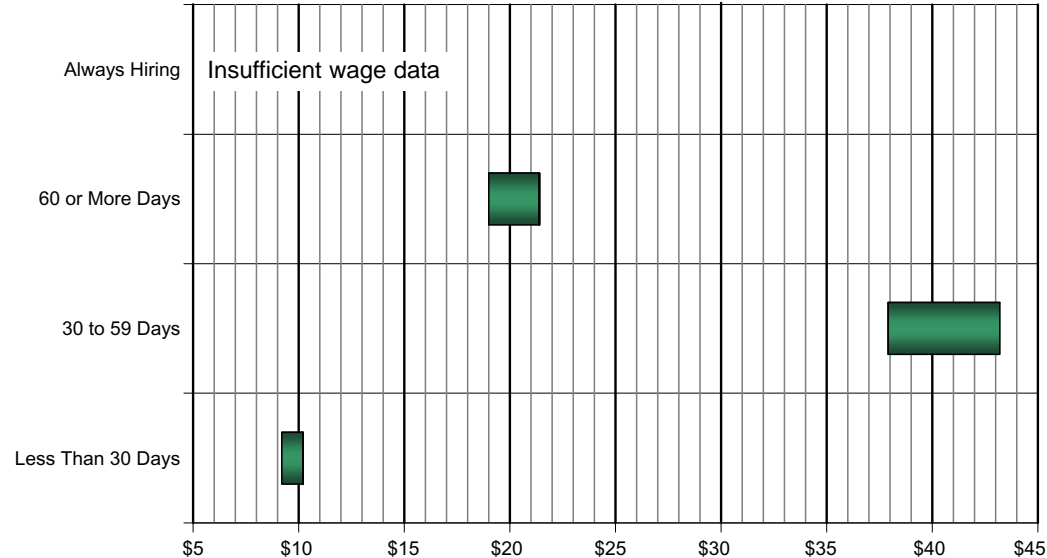
Knowing how long a position has been open helps better understand the response to the question about how difficult it is to fill a vacancy. Nearly three-fourths (70%) of all vacancies are open less than 30 days compared to last year at this time when only about half were open for the same amount of time. Only 22% of the vacancies are reported as open for 60 days or more. These include registered nurses, recreation workers and various office clerks and secretaries, with only the registered nurses requiring a minimum of vocational training/certification or a two-year degree and experience in the occupation.

Vacancies considered not difficult to fill are offered with average wages that are only half of the overall average of \$14.50 per hour.

Positions perceived to be somewhat difficult to fill add a significant premium of over \$17 to the average minimum wage offered. This is due, in part, to the additional education and experience requirements. The very difficult to fill positions are offering \$19 on top of the already elevated premium.

Whereas traditionally, higher wages are offered as the time a vacancy takes to fill increases, survey results show an unpredictable pattern. The lowest wages are offered to vacancies that are open less than 30 days while higher wages are offered for positions open for a moderate amount of time. The highest reported average wages for this survey are for positions that have been open for 30 to 59 days which include managers and financial advisors.

**Figure 20: Reported Average Wage Ranges by Time Open for Hire**



# Survey Findings

## Medical Insurance

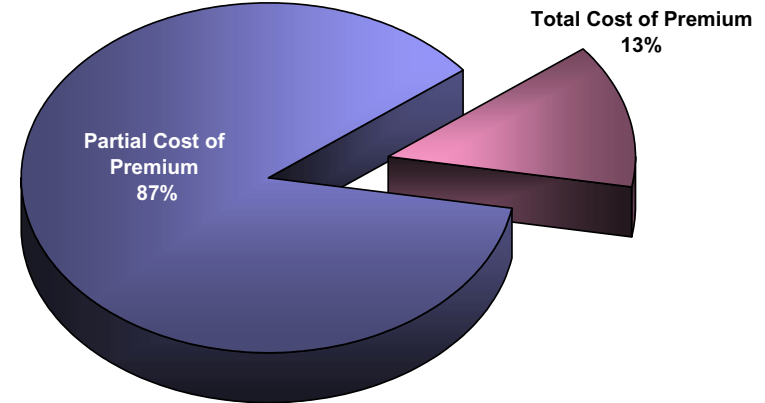
**At least 75% of all vacancies include some form of medical insurance.** Employers reporting the remaining 25% of the vacancies did not provide information on medical insurance. Of those reporting to offer medical insurance, 87% pay a partial cost of the premium while 13% pay the entire cost. Vacancies associated with the entire cost of the premium paid by the employer include positions in Firefighting & Prevention Workers, Utilities, Construction, and Food Preparation.

The average wage range offered for vacancies where the employer pays partial cost of the premium is \$17.10 to \$19.20 per hour, higher than the region's overall average for this survey. These vacancies are in a wide variety of occupations and are found across all levels of education and experience.

## Sign-On Bonus

**For this survey, no vacancies are offered with a sign-on bonus.** This type of compensation is usually offered during a tight labor market when employers are using a variety of methods to attract potential applicants.

**Figure 21: Employers' Contribution to Medical Insurance**







# Occupational Details

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Upper Arkansas Region JVS Report

## Introduction

**The information reported in the Job Vacancy Survey** is intended to provide job seekers and employers with useful and current information to help them make informed labor market decisions. Estimating the number of overall vacancies in a region and breaking those numbers down by categories such as industry and size provides a useful overview of the vacancy market, but when it comes down to filling a particular opening, the more detailed the information the better. Reporting vacancies at the individual

occupation level is the most detailed information the survey can provide without breaking confidentiality with those employers who participated in the survey.

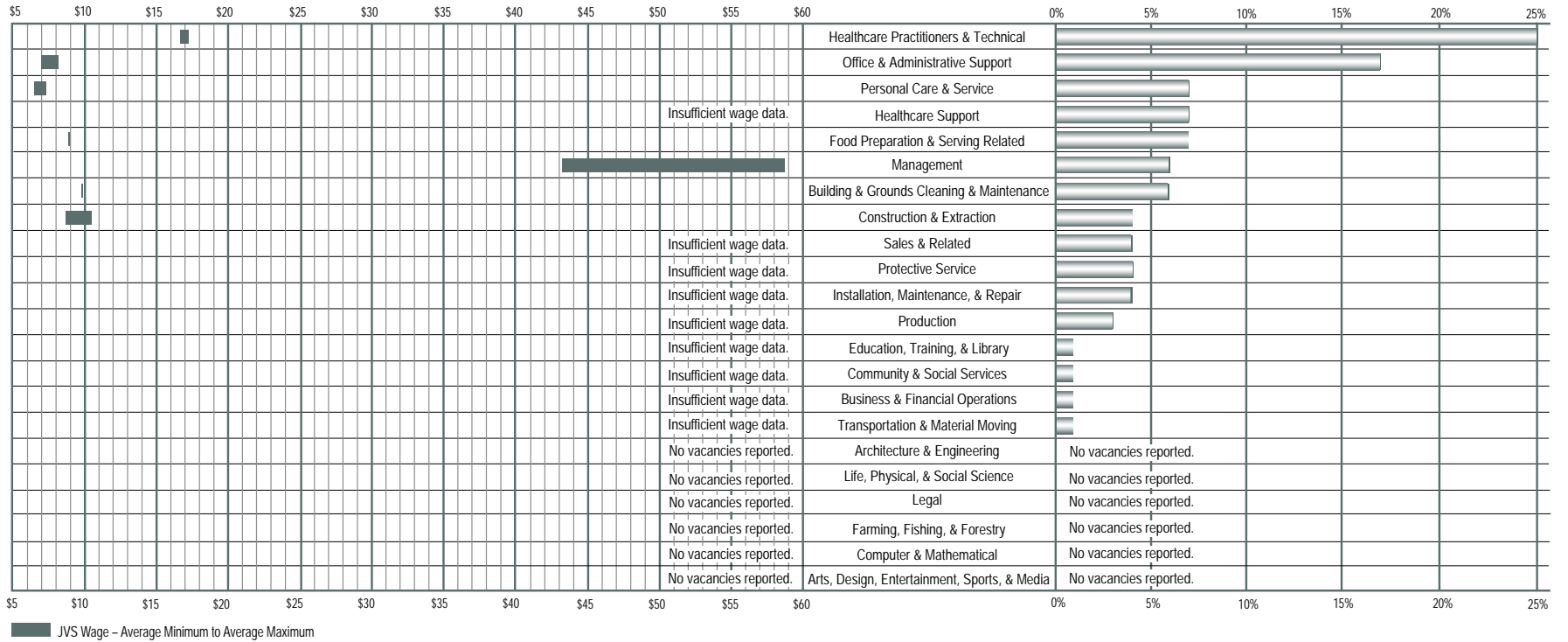
In order to help make comparisons between the results of this survey and other sources of employment statistics easier, all jobs reported are assigned an occupation code based on the *2000 Standard Occupational Classification Manual* published by the Executive Office of the President, Office of Management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

Vacancies found in this survey were coded into 16 of the 23 major occupation groups. For the past four surveys, the occupational group

reporting the greatest number of vacancies has been Healthcare Practitioners & Technical. This survey period shows the same trend with the second highest proportion of vacancies in the Office & Administrative Support occupational group. Personal Care & Service, Healthcare Support, and Food Preparation & Serving Related remain among the top five occupational groups most in demand. The least in demand occupations are found in Education, Training & Library, Community & Social Services, Business & Financial Operation, and Transportation & Material Moving. Proportions of vacancies found in popular occupational groups such as Construction & Extraction or Building & Grounds Cleaning & Maintenance increase/decrease depending upon circumstances at the time of the survey.

Survey results show that major occupational groups with the most vacancies are not necessarily the groups offered the highest wages. This indicates that vacancy characteristics other than the level of unfulfilled employer demand must influence wages. The occupational group offering the highest wages in this survey—Management—typically requires high levels of education and experience. Healthcare Practitioners and Technical occupations consistently offer higher wages throughout all surveys conducted in the Upper Arkansas Region.

**Figure 22: Vacancies and Reported Average Wage Ranges by Major Occupational Groups**



# Occupational Details *—continued*

## **Occupational Estimates**

**Tables 1 and 2 contain a list of all the detailed SOC job titles that were assigned to vacancies reported in this survey.** Because a census of large employers and Government agencies is conducted, the list contains titles for nearly all of the vacancies available at the time of the survey for those employers. Approximately one-third of all small to mid-size employers were contacted for the random sample, so the list also includes occupations reported by those employers. Given the large size of the random sample collected, the list of occupations should be fairly comprehensive; however, it is not exhaustive. Most likely, if a different random sample had been drawn there would be some differences in the job titles reported, but there would also be many of the same.

### **Estimated Vacancies**

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

### **Vacancies Found**

The number of vacancies by occupation found in the survey.

### **Average JVS Wage**

Average wages found in the survey are reported for each occupation. Reported averages are based solely on information provided by employers responding to this survey and do not reflect information from other sources or wages paid to currently filled positions. Wage information in this survey was provided for 69% of the reported vacancies.

### **Occupational Employment Statistics (OES) Wage Data**

Occupational Employment Statistics (OES) wage data are provided for each occupation. OES data are based on a national survey of employers and refer to filled positions, not vacancies. The data provided here are reported for Central Colorado when available and statewide otherwise. Central Colorado includes the counties: Gilpin, Clear Creek, Park, Chaffee, Teller, Fremont, and Custer. Wage data was collected in 2001 and aged to 2002 using the Employment Cost Index (ECI). Complete descriptions of the OES survey and the ECI are available on the Internet at: <http://www.bls.gov/>.

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

# Occupational Details *—continued*

**Table 1: Occupations with Four or More Estimated Vacancies**

SOC Code	SOC Occupational Title	Vacancies Estimated	Vacancies Found	Average JVS Wage	Occupational Employment Statistics Wage Data (2002)							
					Average Wages			Percentile Distribution				
					Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
29-1111	Registered Nurses	11	11	\$18.50	\$17.13	\$21.91	\$24.29	\$15.39	\$18.89	\$21.74	\$25.31	\$28.55
41-2011	Cashiers	5	2	†	\$6.09	\$8.04	\$9.02	\$5.82	\$6.46	\$7.59	\$8.77	\$11.34
39-9032	Recreation Workers	4	4	\$6.80	\$6.74	\$10.57	\$12.49	\$6.18	\$7.25	\$8.73	\$12.36	\$19.36
* 43-6012	Legal Secretaries	4	4	\$7.30	\$13.96	\$16.21	\$17.34	\$13.17	\$14.59	\$15.94	\$17.28	\$21.03
43-3071	Tellers	4	2	†	\$7.87	\$8.64	\$9.03	\$7.36	\$7.79	\$8.51	\$9.40	\$10.54

† Insufficient Wage Data Available

\* OES wages reported for Colorado statewide

# Occupational Details *—continued*

**Table 2: Occupations with Fewer than Four Estimated Vacancies**

SOC Code		SOC Occupational Title		Occupational Employment Statistics Wage Data (2002)					
				Average Wages			Percentile Distribution		
				Entry-Level	Overall	Experienced	10th	25th	50th
49-3023	Automotive Service Technicians and Mechanics	\$7.20	\$12.45	\$15.07	\$6.25	\$8.31	\$10.54	\$15.96	\$21.85
43-3011	Bill and Account Collectors	\$9.24	\$10.70	\$11.43	\$8.78	\$9.31	\$10.10	\$10.87	\$11.90
47-2061	Construction Laborers	\$9.41	\$11.88	\$13.13	\$8.95	\$10.51	\$12.01	\$13.23	\$14.76
11-9021	Construction Managers	\$16.40	\$24.66	\$28.78	\$15.32	\$17.32	\$22.75	\$31.98	\$36.76
35-2012	Cooks, Institution and Cafeteria	\$6.54	\$8.60	\$9.64	\$6.12	\$7.12	\$8.76	\$10.23	\$11.08
35-2014	Cooks, Restaurant	\$6.39	\$8.26	\$9.20	\$5.91	\$6.86	\$7.86	\$8.72	\$11.04
33-3012	Correctional Officers and Jailers	\$15.13	\$18.25	\$19.80	\$14.65	\$16.35	\$18.57	\$20.45	\$21.58
13-1051	Cost Estimators	\$12.62	\$17.87	\$20.50	\$11.99	\$13.66	\$18.41	\$20.42	\$21.61
* 43-4031	Court, Municipal, and License Clerks	\$11.48	\$14.94	\$16.68	\$11.04	\$12.37	\$14.43	\$17.56	\$20.50
35-9021	Dishwashers	\$6.00	\$6.87	\$7.30	\$5.59	\$6.03	\$6.73	\$7.80	\$8.52
11-9032	Education Administrators, Elementary and Secondary School	\$47,870	\$56,315	\$60,536	\$43,859	\$50,101	\$55,256	\$60,883	\$73,935
47-2111	Electricians	\$10.44	\$18.87	\$23.08	\$9.63	\$11.37	\$16.78	\$22.37	\$26.72
* 33-1021	First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	\$22.00	\$30.17	\$34.25	\$19.71	\$25.80	\$31.45	\$35.12	\$39.49
* 39-5012	Hairdressers, Hairstylists, and Cosmetologists	\$7.85	\$10.75	\$12.20	\$7.09	\$8.89	\$10.35	\$11.95	\$14.23
43-4081	Hotel, Motel, and Resort Desk Clerks	\$5.98	\$7.95	\$8.93	\$5.74	\$6.43	\$8.03	\$9.61	\$10.45
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	\$6.21	\$9.07	\$10.50	\$5.87	\$6.70	\$9.00	\$11.18	\$12.99
37-3011	Landscaping and Groundskeeping Workers	\$7.27	\$10.31	\$11.83	\$6.32	\$8.38	\$10.43	\$12.13	\$13.48
37-2012	Maids and Housekeeping Cleaners	\$6.38	\$7.81	\$8.53	\$5.93	\$6.86	\$7.84	\$8.82	\$10.07
49-9042	Maintenance and Repair Workers, General	\$8.58	\$12.74	\$14.80	\$6.98	\$9.90	\$12.49	\$15.81	\$17.93
11-9111	Medical and Health Services Managers	\$23.32	\$31.13	\$35.03	\$22.62	\$25.30	\$30.11	\$35.35	\$45.31
43-4141	New Accounts Clerks	\$6.51	\$10.81	\$12.96	\$5.93	\$6.77	\$10.74	\$13.83	\$16.59
31-1012	Nursing Aides, Orderlies, and Attendants	\$7.02	\$9.08	\$10.12	\$6.41	\$7.66	\$8.99	\$10.56	\$12.39
* 31-2011	Occupational Therapist Assistants	\$12.97	\$15.92	\$17.40	\$12.29	\$13.88	\$15.83	\$17.72	\$20.60
* 29-1122	Occupational Therapists	\$18.40	\$23.69	\$26.34	\$17.38	\$20.10	\$23.67	\$26.79	\$29.08

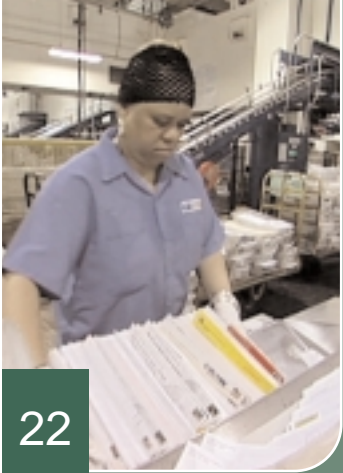
# Occupational Details *—continued*

**Table 2: Occupations with Fewer than Four Estimated Vacancies — Page 2**

SOC Code		SOC Occupational Title		Occupational Employment Statistics Wage Data (2002)							
				Average Wages			Percentile Distribution				
				Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
47-2073	Operating Engineers and Other Construction Equipment Operators	\$11.33	\$16.40	\$18.93	\$10.46	\$12.34	\$15.07	\$19.51	\$22.76		
* 31-2021	Physical Therapist Assistants	\$11.57	\$15.29	\$17.15	\$10.39	\$13.36	\$15.52	\$17.34	\$20.04		
29-1123	Physical Therapists	\$20.17	\$24.65	\$26.89	\$15.87	\$23.42	\$25.75	\$28.13	\$30.33		
29-2034	Radiologic Technologists and Technicians	\$14.37	\$17.62	\$19.24	\$13.27	\$15.06	\$16.88	\$20.53	\$23.19		
43-4171	Receptionists and Information Clerks	\$7.04	\$9.65	\$10.95	\$6.36	\$7.86	\$9.78	\$11.65	\$12.99		
* 29-2054	Respiratory Therapy Technicians	\$9.91	\$15.12	\$17.73	\$8.56	\$11.68	\$15.44	\$17.97	\$21.37		
41-2031	Retail Salespersons	\$6.14	\$9.37	\$10.98	\$5.75	\$6.22	\$7.01	\$9.26	\$14.42		
* 51-6031	Sewing Machine Operators	\$7.50	\$9.53	\$10.55	\$7.10	\$7.92	\$9.05	\$10.88	\$13.12		
* 21-1011	Substance Abuse and Behavioral Disorder Counselors	\$10.74	\$14.58	\$16.50	\$9.87	\$11.55	\$13.79	\$16.90	\$21.06		
* 29-2055	Surgical Technologists	\$11.50	\$14.98	\$16.72	\$10.54	\$12.35	\$14.54	\$17.31	\$20.47		
25-9041	Teacher Assistants	\$14,125	\$18,388	\$20,518	\$13,005	\$15,243	\$17,759	\$21,655	\$24,998		
53-3033	Truck Drivers, Light or Delivery Services	\$9.27	\$14.10	\$16.50	\$8.78	\$10.47	\$12.85	\$14.69	\$24.68		
35-3031	Waiters and Waitresses	\$6.01	\$6.24	\$6.37	\$5.50	\$5.76	\$6.22	\$6.67	\$7.07		

\* OES wages reported for Colorado statewide

# Sector Briefs



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Upper Arkansas Region JVS Report

## Government Sector

**Government agencies employ 36% of the** Upper Arkansas workforce, a larger share than any other JVS sector. In fact, the Trade, Transportation, Utilities & Other Services JVS sector employs the second largest share of the region's workers, and this is only half (18%) of the Government sector. For this winter survey, Government also ranks first in the number of vacancies, with 35% of the area's open positions at this time.

Since the Colorado Department of Labor & Employment began keeping track of employment information using the North American Industrial Classification System in 2001, state, local and federal Government has continually employed a large portion of the region's employment. One year ago at this time (first quarter) the Upper Arkansas Region showed the same high percentage (36%) of government

employees. In the first quarter of 2003 there were about 2,900 government employees working in Fremont County, with an additional 1,600 in Chaffee. Sixty-seven percent of all government employees in the region (all four counties) are in local government, which include city and county agencies. Twenty-four percent work in federal government while only 9% are in state government.

Large employers include the school districts, parks and recreation, and City & County offices in addition to correctional facilities. Due to the time of year, most of the positions within the school districts included administrators and teachers assistants rather than teaching positions. While vacancies currently exist for correctional officers, janitors, and various landscapers and groundskeepers, many of the government vacancies for this report are office-related and include positions such as legal secretaries, receptionists and various legal and information clerks. Vacancies are also found as operating engineers and maintenance and repair workers.



## How to Use This Report

# Appendix

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

- ◆ How many job openings are there?
- ◆ What industries are hiring?
- ◆ What skills are employers seeking?
- ◆ Are employers having difficulty filling positions?

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

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

## Employers

**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.

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

While this report is a picture of the area's current employment needs and historical seasonal patterns, other Labor Market Information products provide projections of occupational growth and anticipated openings. These can be accessed at [www.coworkforce.com/lmi/oeo/oeo.htm](http://www.coworkforce.com/lmi/oeo/oeo.htm). Projections highlight growing as well as declining occupations. Public officials, educational institutions, and Government agencies can use this survey information to effectively apply resources to education, training, and job placement programs. Investments in the workforce can be directed toward occupations or industries that continuously contribute to the local economy or to those where there is a constant need for workers.

## Economic Developers

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



# Appendix *—continued*

## Caveats

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

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

Non-sampling error occurs primarily from reporting, translating data to standard terms, and incorrect information about firms in our sample frame. Some examples include placing reported vacancies in the wrong occupational codes, inadequate data collection in a JVS sector due to non-response, and estimating errors. The majority of non-sampling errors are corrected in the Job Vacancy Survey's extensive review and validation process that takes place before estimates are published.

The study provides estimates of job openings for a point-in-time and does not attempt to project the level of vacancies into the future. Readers should be aware that events having occurred since the time period analyzed such as plant closings or the migration of people in and out of the area might significantly affect the vacancy status of some occupations. Job openings are very dynamic—current openings are being filled, new positions are being created, and some positions are being phased-out.

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

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

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

## Methodology

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

The number of vacancies—used to calculate the job vacancy rate—is an important measure of the unmet demand for labor. With this statistic, it is possible to paint a more complete picture of the regional labor market than by looking solely at the unemployment rate, a measure of the excess supply of labor.

## Survey Design

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

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

Stratifications containing small and medium sized private employers are randomly sampled. In order to report vacancy characteristics such as education and experience requirements demanded, the survey must contact more employers than would be necessary if the survey only estimated the total number of vacancies. For this reason all of the large employers and government agencies are contacted in the region. These employers provide the most cost effective means of obtaining large amounts of vacancy information. Approximately 40% of the employment in the region is found in large and government employers that make up only 2%-3% of the total number of firms. Conducting a census of these entities allows us to cover a large portion of the region's employment while contacting relatively few entities.

## Appendix: Methodology —continued

### Survey Sample

**The Upper Arkansas Region Survey was conducted from January 1st through 12th, 2004.** For the purpose of this report, private and government employers with five or more employees are referred to as the sample frame. Firms with fewer than five employees make up a very large portion of all employers in the region, but provide only a small proportion of the total employment. Employment in the sample frame accounts for 47% of the region's total employment.

The Job Vacancy Survey separates employers into either government or private industry. Private firms are then split into large and small to mid-size categories. Firms with at least 75 employees are considered large employers. Attempts are made to contact all government agencies and large firms in the sample frame. The remaining small to mid-size firms are split into JVS industry sectors.

The number of firms surveyed in each sector varies according to the number of employees and employers in the sector. In most JVS sectors half of all employers are contacted up to 200 employers. In JVS sectors with less than 1,000 employees, efforts are made to capture at least 500 employees in the sample. If less than 500 employees work in a sector then all employers are contacted. This sampling method insures that all the vacancy estimates are based on a sufficiently large sample size.

Government makes up 31% of the employment in the sample frame, while private industry employers make up the remaining 69%. Large firms account for 40% of private industry employment in the sample frame. Firms employing from five to 74 individuals are considered small to mid-size employers, and account for the remaining 60% of private industry employment.

The margin of error for the overall vacancy estimate is plus or minus 5% or about 6 vacancies at a .95 certainty level. In other words, in 95 out of 100 samples taken, the actual number of vacancies in the region will be between 113 and 125 in the survey period. Labor Market Information is confident that the estimates in this survey are accurate and that the survey was conducted according to recognized survey research standards.

The survey response rate is 87%. This measures the quality of the survey database, or the success experienced in contacting eligible employers. The cooperation rate is 99% and measures the success in obtaining data once an employer is contacted.

### JVS Sectors

**The new North American Industry Classification System increases the number of major groups to 20 from the Standard Industrial Classification System.** The new

coding system better reflects today's service based economy and allows comparison of industries in the United States, Mexico and Canada.

In the Upper Arkansas Region, the 20 NAICS sectors have been combined into 6 JVS sectors. These groupings are based on the NAICS sectors, but are somewhat unique to the Job Vacancy Survey. The new groupings allow the Job Vacancy Survey to study local Colorado labor markets in a more relevant and meaningful way.

For more information on the North American Industry Classification System see *Page 26*.

Upper Arkansas Region JVS Sectors	include →	NAICS Sectors
<b>Goods-Producing</b>		Agriculture, Forestry, Fishing & Hunting Mining Construction Manufacturing
<b>Trade, Transportation, Utilities &amp; Other Services</b>		Utilities Wholesale Trade Retail Trade Transportation & Warehousing Other Services (except Public Administration)
<b>Information, Financial Activities &amp; Professional &amp; Business Services</b>		Information Finance & Insurance Real Estate & Rental & Leasing Professional, Scientific & Technical Services Management of Companies & Enterprises Administrative & Support & Waste Management & Remediation Services
<b>Education &amp; Health Services</b>		Educational Services Health Care & Social Assistance
<b>Leisure &amp; Hospitality</b>		Accommodation & Food Services Arts, Entertainment & Recreation
<b>Government</b>		Public Administration

## Appendix: Methodology —continued

### North American Industry Classification System

#### Data Collection

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

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

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

#### Occupational Coding

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

#### 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.

#### Wage Conversion

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

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

### North American Industry Classification System (NAICS)

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

#### History of Process

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

#### Industrial Classification vs. Occupational Classification

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

#### Benefits

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

<sup>1</sup>Executive Office of the President Office of Management and Budget. *North American Industry Classification System*. White Plains, MD: Bernan and U.S. Department of Commerce, 2002

<sup>2</sup>ECPC is chaired by the Bureau of Economic Analysis, U.S. Department of Commerce, with representatives from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor

<sup>3</sup>Specifically, Mexico’s Instituto Nacional de Estadística, Geografía e Informática (INEGI) and Statistics Canada

# Appendix: NAICS —continued

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

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

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

Things to Consider

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

New Industries Reflected in NAICS

◆ NAICS heralds the creation of a new Information sector that pulls businesses from communications, publishing, motion picture and sound recording and online services to recognize an information-based economy.

◆ Formerly, under SIC, corporate headquarters were not distinguished from the

industry category of the product or service they produced. Now corporate headquarters are recognized in the new Management sector.

◆ Manufacturing is restructured to account for high-tech industries.

◆ An increase in the amount of detail overall accompanies the shift to NAICS including a further breakdown of SIC’s Services sector into nine new sectors.

◆ Eating and drinking places move out of Retail Trade into a new category called Accommodation & Food Services.

◆ The difference between Retail and Wholesale is now based on how each store conducts business. For example, many computer stores are reclassified from Wholesale to Retail.

## Comparison of NAICS and SIC Major Industry Groups

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

# Appendix

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

## **Average Maximum Wage**

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

## **Average Minimum Wage**

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

## **Computer Assisted Telephone Interviewing (CATI)**

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

## **Cooperation Rate**

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

## **Educational Attainment**

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

## **Effective Response Rate**

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

## **Employed Persons (Employment)**

Persons 16 years and over in the civilian non-institutional population who, during the reference period

- a) did any work at all (at least one hour) as paid employees, worked in their own business, profession, or on their own farm, or worked 15 hours or more as unpaid workers in an enterprise operated by a member of the family, and
- b) all those who were not working but who had jobs or businesses from which they were temporarily absent because of vacation, illness, bad weather, childcare problems, maternity or paternity leave, labor-management dispute, job training, or

other family or personal reasons, whether or not they were paid for the time off or were seeking other jobs.

## **Employer**

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

## **Full-time Employee**

Employees who usually work 35 hours per week or more.

## **Goods Producing Industries (NAICS)**

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

## **Industry**

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

## **Job Seeker**

A person actively looking for employment or researching career options.

## **Job Vacancy**

A specific position of employment at an establishment with the condition that there is work available for the position and the employer is actively recruiting for the position.

## **Job Vacancy Rate**

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

## **Labor Force**

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

## **Medical Insurance**

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

## **Medical Insurance Premium**

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

## **North American Industry Classification System (NAICS)**

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

## Appendix: Glossary —continued

### **Not Seasonally Adjusted**

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

### **Occupation**

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

### **Part-time Employee**

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

### **Percentile Wage Estimate**

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

### **Permanent Employment**

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

### **Sample**

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

### **Sample Frame**

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

### **Seasonally Adjusted**

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

### **Service Producing Industries (NAICS)**

Includes utilities; wholesale trade; retail trade; transportation and warehousing; information; finance and insurance; real estate and rental and leasing; professional,

scientific, and technical services; management of companies and enterprises; administrative and support and waste management and remediation services; educational services; health care and social assistance; arts, entertainment, and recreation; accommodation and food services; other services (except public administration); public administration.

### **Sign-on Bonus**

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

### **Standard Occupational Classification (SOC) System**

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

### **Temporary Employment**

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

### **Unemployed Persons**

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

### **Unemployment Rate**

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

### **Wages**

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

# Workforce Centers in the Upper Arkansas JVS Region



## **Salida Workforce Center**

141 E. 3rd Street  
Salida, CO 81201

719-539-6523  
Fax: 719-539-1173  
salida@cwfc.net

## **Cañon City Workforce Center**

172 Justice Center Road, Ste B  
Cañon City, CO 81212

719-275-7408  
Fax: 719-275-8189  
canoncity@cwfc.net

## **Buena Vista Workforce Center**

114 Linderman Ave.  
Buena Vista, CO 81211

(719) 539-6523

