

Upper Arkansas Region

Job Vacancy Survey

Summer 2003



See Colorado First

Arkansas Headwaters
Recreation Area
Photo: Martin G. Kleinsorge
Courtesy Colorado State Parks

Upper Arkansas Region Job Vacancy Survey



Conducted
June 16–23, 2003

State of Colorado
Bill Owens, *Governor*

**Colorado Department of
Labor & Employment**

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Executive Director

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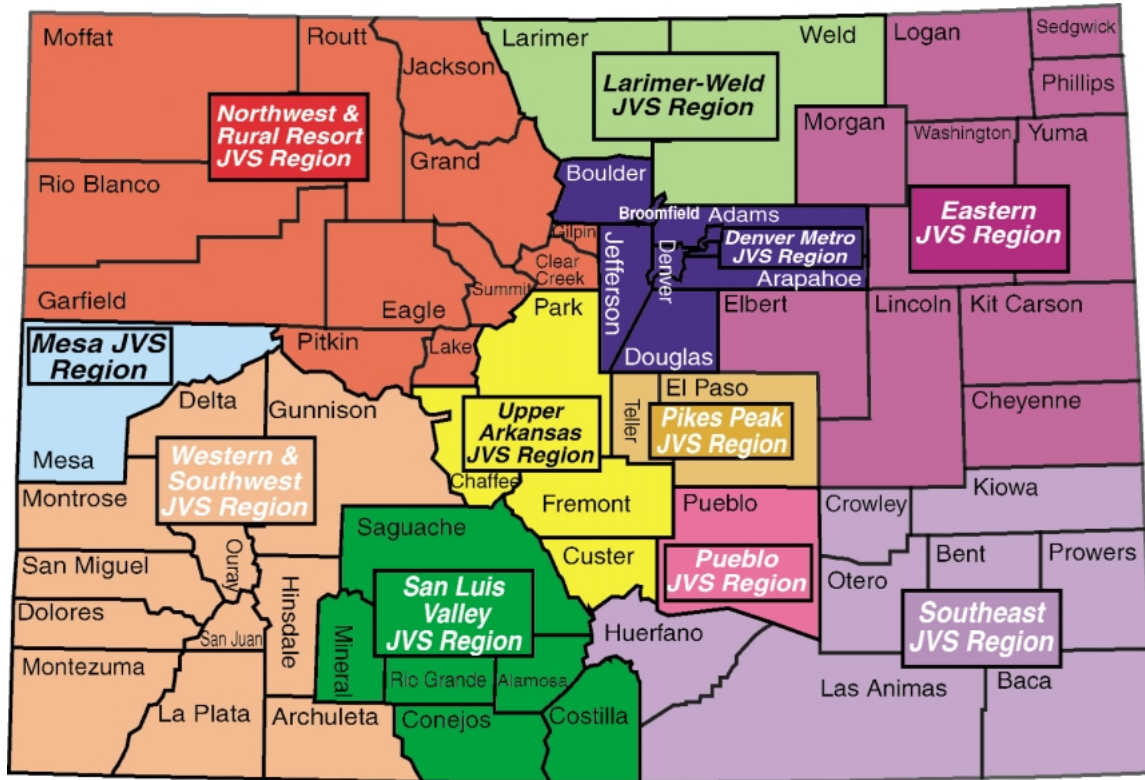
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Figure 1: Colorado Job Vacancy Survey Regions



Introduction to the Colorado Job Vacancy Survey

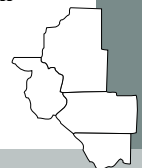
The unemployment rate, along with the level and growth rate of employment, has been used as an indicator of labor market conditions for decades. While this indicator provides information about changes in the supply and demand for labor, it reveals nothing about the skills most sought after by employers. 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 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.



Executive Summary

The summer 2003 Upper Arkansas Job Vacancy Survey was conducted from June 16th through 23rd, 2003. The goal of the survey is to provide current information on the demand for workers so that employers, job seekers, economic developers, educators, and workforce centers can make informed decisions in the 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 532 employers representing approximately 53% of the region's total employment responded to the survey. Out of these, 23 were large employers (75 employees or more), 58 were government employers, and 451 were from the small to mid-size category (five to 74 employees). The survey had an 80% response rate and a near perfect (99%) cooperation rate. The margin of sampling error for the overall vacancy estimate is plus or minus 5% or about 11 vacancies.

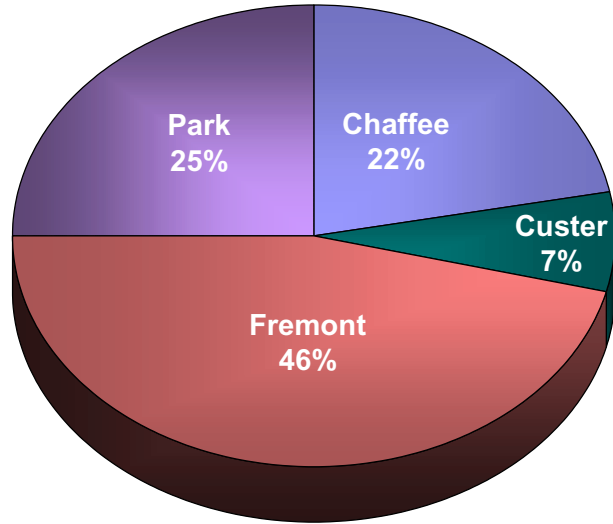
The major findings of the survey follow.

- ◆ It is estimated that a total of 213 jobs were open for hire in the Upper Arkansas Region during the survey period.Page 7
- ◆ Twelve percent of employers responding to the survey reported having at least one vacancy.Page 7
- ◆ Thirty-nine percent of the estimated job openings are in Leisure & Hospitality and 20% are in Education & Health Services.Page 7
- ◆ Sixty-nine percent of the estimated vacancies are offered by small to mid-size employers and 18% by large employers.Page 8
- ◆ Ninety-three percent of all reported vacancies are for permanent positions.Page 9
- ◆ Sixty-nine percent of the reported vacancies are for full-time positions compared to 76% a year ago.Page 9
- ◆ The overall average wage for all reported vacancies is \$9.40 per hour.Page 8
- ◆ Forty percent of all vacancies in this survey do not require high school completion while 27% require high school completion. Most vacancies that have educational requirements beyond high school require vocational training/certification.Page 10
- ◆ Thirty-three percent of all vacancies require post-secondary education. A year ago 53% of all vacancies required postsecondary education.Page 10
- ◆ Sixty-eight percent of all vacancies are considered not difficult to fill. This has changed dramatically from a year ago when only 25% of all vacancies were considered not difficult to fill.Page 12
- ◆ For this report, 51% of the reported vacancies are open for hire for less than 30 days, slighter higher than last year's report of 46%.Page 13

Upper Arkansas Region

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.

Figure 2: Employment by County, June 2003

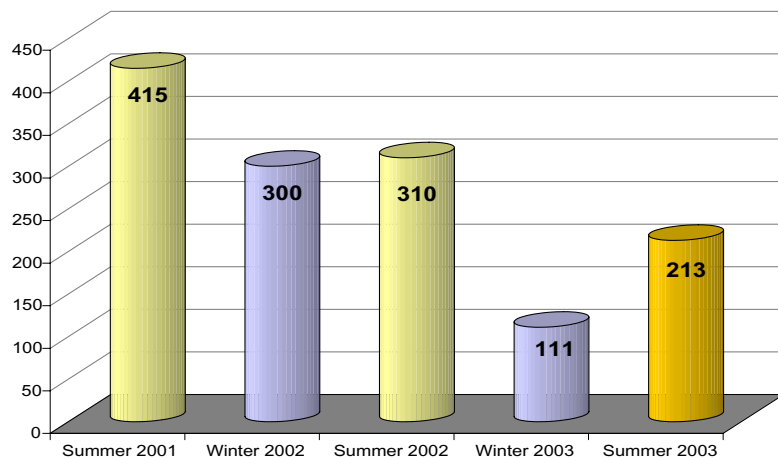


Source: CDLE, Local Area Unemployment Statistics, July 2003

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 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.

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).

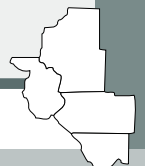
Figure 3: Historical Vacancies—Upper Arkansas Region



Although the 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. However, over the last three summer reports, the unemployment rate has edged up from 3.1% in the summer of 2001 report, to 3.9% in the summer 2002 report, and finally to 4.6% for this summer. This implies that although the employment levels are increasing, the labor force is increasing at a faster pace.

	Summer 2001	Winter 2002	Summer 2002	Winter 2003	Summer 2003
Vacancies	415	300	310	111	213
Employment	36,777	32,983	36,900	33,778	38,774
Unemployed	1,194	1,909	1,493	1,717	1,861
Unemployment Rate	3.1%	5.5%	3.9%	4.8%	4.6%

Source: CDLE, Local Area Unemployment Statistics, July 2003



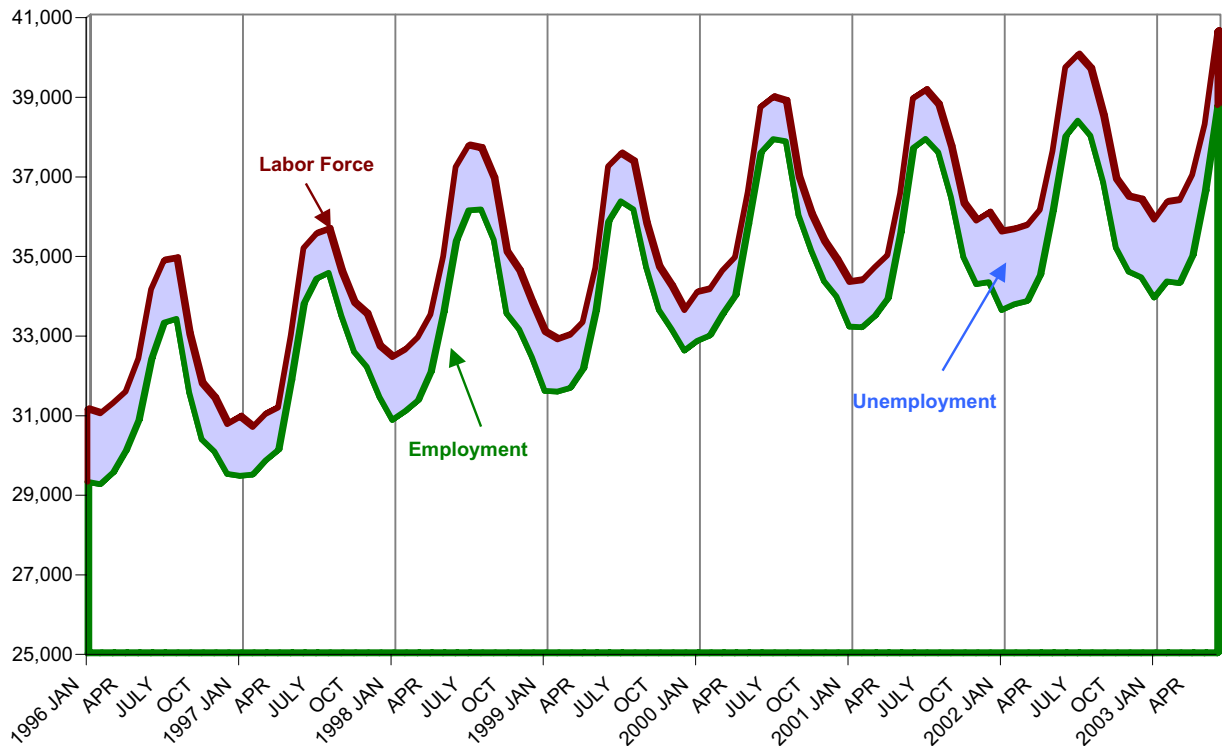
Upper Arkansas Region Job Vacancy Surveys are conducted semi-annually in the winter and summer months. The timing of the survey was developed with the intent of measuring demand for labor at intervals that provide the most useful information. Vacancies found in the winter represent demand for labor at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

Historically, the level of employment in the 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. This allowed the actual number of unemployed individuals to increase over the last half of 2001 and throughout most of 2002, as seen by the widening gap between the two series. This trend continued into 2003 until May when the number of unemployed individuals finally decreased.

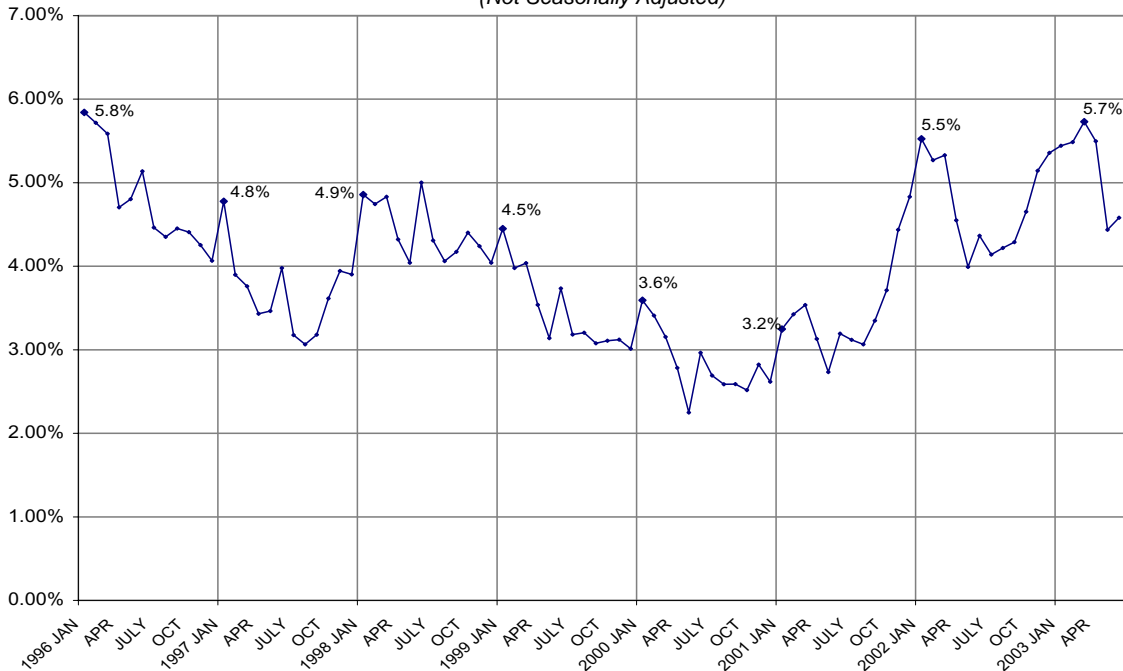
After steadily decreasing throughout the late 90s, the region's unemployment rate followed the state and national trends of persistent increases since mid-2000 (*Figure 5*). The unemployment rate reached a high of 5.5% in January 2002 (the highest rate since January of 1996) after which the local economy showed promising signs of increasing summertime employment. Actual unemployment levels increased as well, though, due to an increasing labor force which has helped keep the unemployment somewhat elevated. Following a short dip in unemployment in the spring of 2002, the region's unemployment rate increased to 5.7% this spring before subsiding once again.

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



Source: CDLE, Local Area Unemployment Statistics, July 2003

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

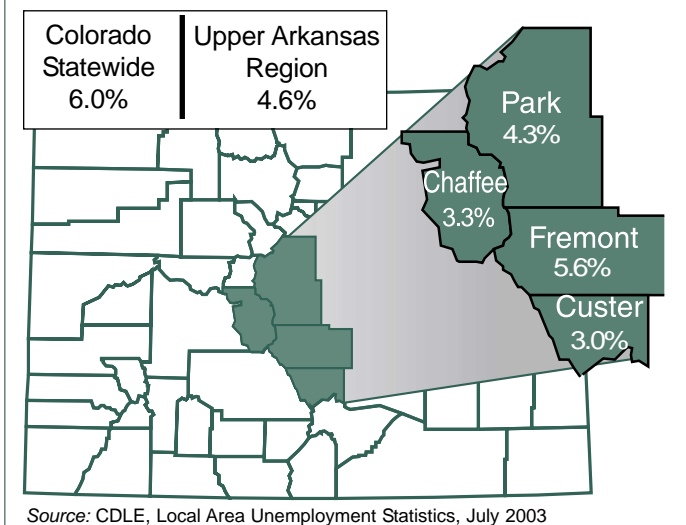


Source: CDLE, Local Area Unemployment Statistics, July 2003

Figure 6 shows the most current unemployment statistics for the individual counties of the Upper Arkansas Region. Custer County had the lowest unemployment rate in June. Chaffee County, “Home of the Fourteeners,” followed with a rate of 3.3%. 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 and national unemployment rates of 6.0% and 6.4% respectively.

Figure 6: Unemployment Rates for June 2003
(Not Seasonally Adjusted)



Source: CDLE, Local Area Unemployment Statistics, July 2003

Park County’s unemployment rate is 4.3%; lower 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—popular enough that the Colorado Department of Transportation has continued expansion projects in that area.

All counties were affected by last year’s wildfires. While Park County was hit the hardest, the national attention to Colorado wildfires put a damper on tourism in general, with rafting companies and dude ranches suffering the greatest losses. This year the slow economic recovery may have put a damper on some rafting companies but due to close to average winter and spring precipitation, recreation has picked up allowing many of these companies to hire for the summer season.

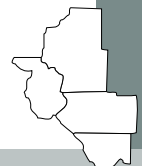
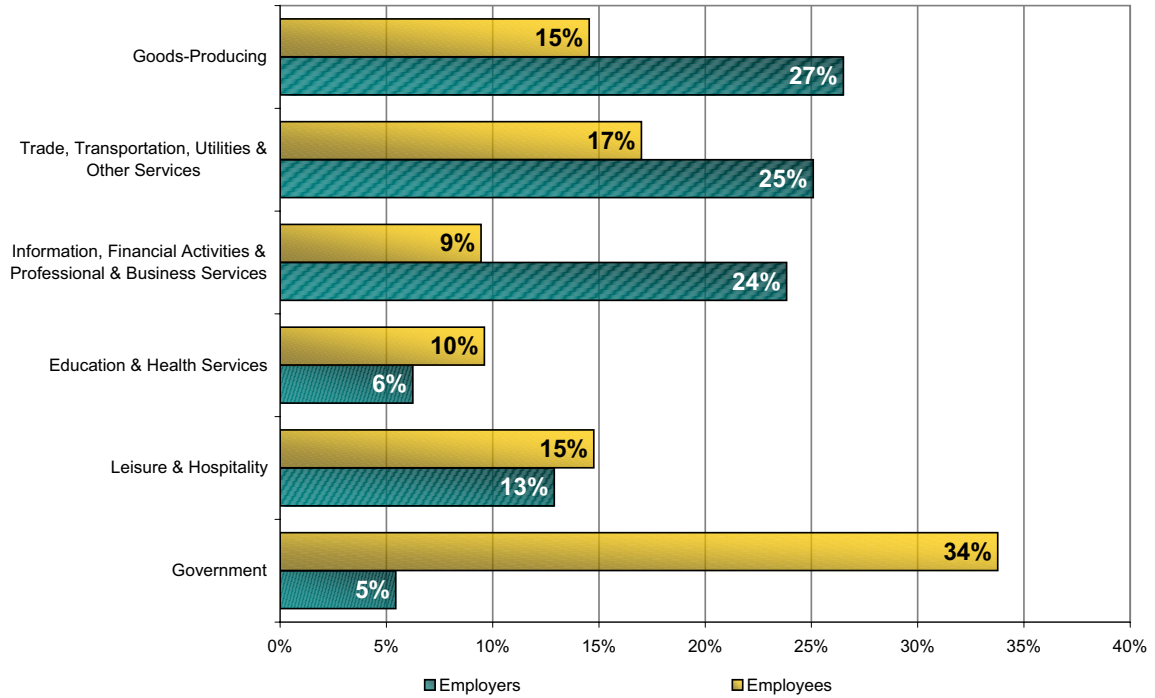


Figure 7: Upper Arkansas Region Employers and Employees, 2nd Quarter, 2002



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

Figure 7 shows the employment breakdown for each of the JVS sectors during the second quarter of 2002. 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

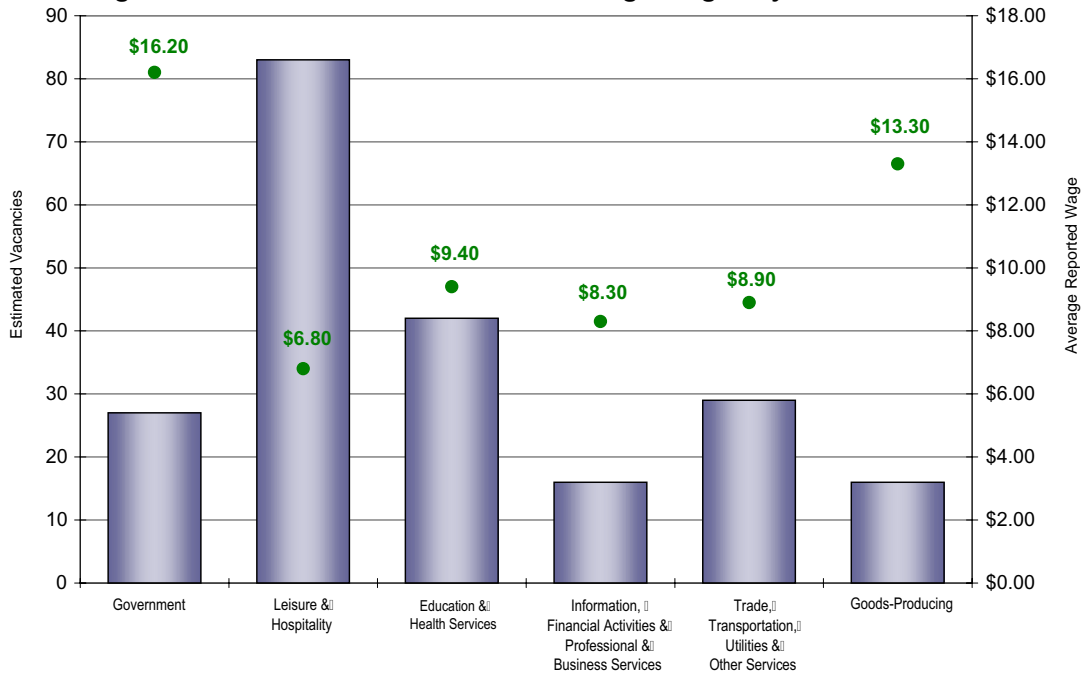
sector. These are businesses that are indicative of the “new economy” such as Information, Financial Activities, & Professional & Business Services. Education & Health Services are also separate from other service industries allowing greater level of detail than previously available.

The Government sector remains similar to past years—a small percentage of area employers with a large percentage (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 employers. There is still a significant share of employers among the now separate service categories like Information, Financial Activities, and Professional & Business Services.

Estimated Vacancies

JVS Sectors and Employer Size

Figure 8: Estimated Vacancies and Average Wages by JVS Sectors



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).

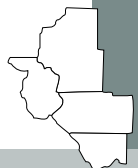
During the survey period, an estimated 213 vacancies were open for immediate hire in the Upper Arkansas Region. The region’s estimated vacancy rate is 1%, meaning that, overall, there are approximately 10 vacancies for every 1,000 positions. Last summer’s report showed a 1.5% vacancy rate, implying there were 15 vacancies for every 1,000 positions in the region. While job vacancies this summer are offered at a slightly slower pace than this time last year, it is an improvement from the recent winter conditions where the vacancy rate was only .5%.

Twelve percent of employers responding to the survey reported having at least one vacancy. This is only slightly less than last summer’s report where 15% of the responding employers reported the same. Furthermore, 5% of all responding employers reported having more than one vacancy.

For this survey there are fewer than 20 positions in each of the Goods-Producing and Information, Financial

Activities, Professional & Business Services JVS sectors. Within the Goods-Producing sector, most of the job vacancies include construction positions as roofers and general laborers. A few vacancies are also reported in manufacturing, such as machinists and cabinet makers. Even fewer are reported in agriculture, mostly as delivery of agricultural products. There are no vacancies reported in mining. While more vacancies might have been expected in construction as well as hoped for in manufacturing, the low reporting of both 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, customer service and sales representatives.

Among the vacancies in the Education & Health Services sector, 75% of the vacancies are in Health Services as registered and licensed practical nurses as well as therapists and certified nursing assistants. Primary and secondary teachers make up most of the remaining vacancies in this sector. Thirty-nine percent of all vacancies for this report are in the Leisure & Hospitality JVS sector, and more specifically, the vacancies here are concentrated in Accommodation & Food Services occupations such as cooks, wait staff and hotel personnel.



Wages reported for this study represent those offered by employers for current vacancies over the survey period. While the overall average wage for the summer report is \$9.40 per hour, the highest average wage is found in the Government sector due to a number of vacancies for attorneys and computer support specialists. 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, Government and Trade, Transportation, Utilities & Other Services sectors.

Figure 9: Reported Average Wage Ranges by JVS Sectors

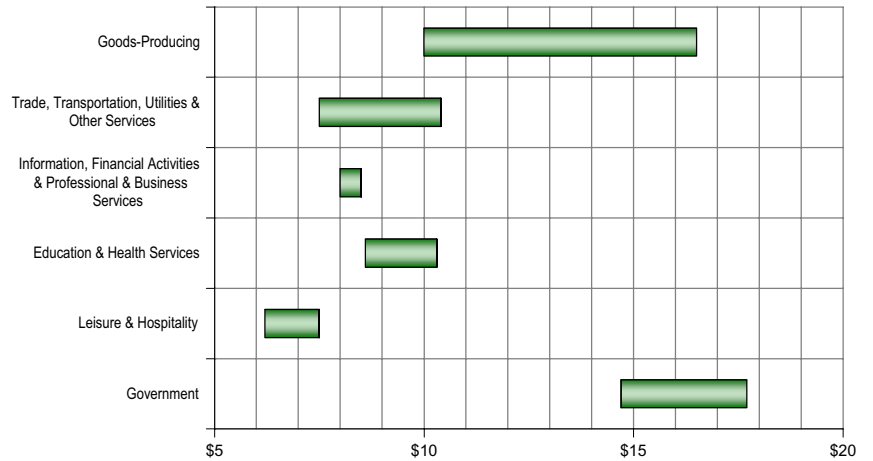


Figure 10: Estimated Vacancies and Average Wages by Employer Size

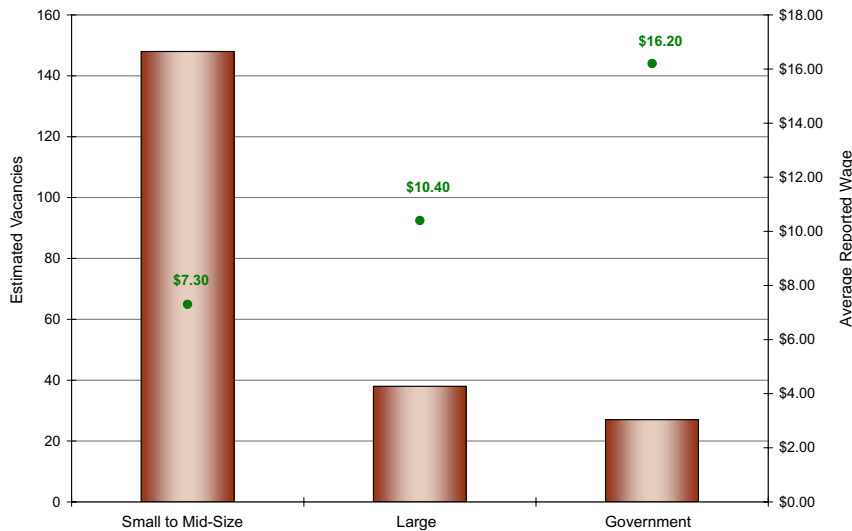
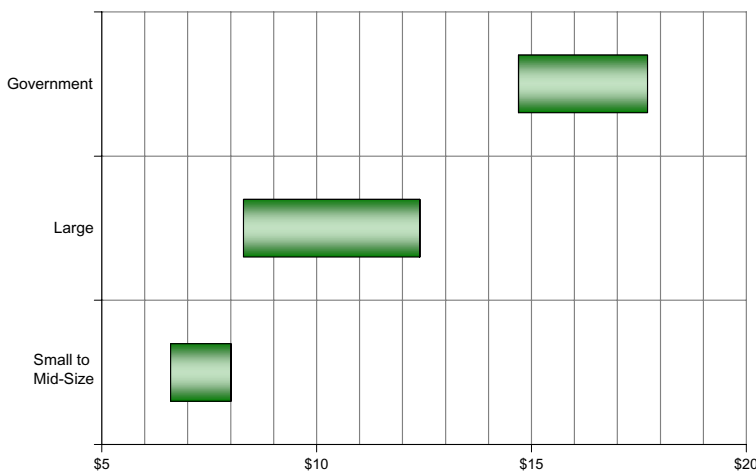


Figure 11: Reported Average Wage Ranges by Employer Size



Small to mid-size firms account for 69% of total vacancies (Figure 10) in the Upper Arkansas Region. Eighteen percent are estimated for large companies and Government agencies have 13% of all vacancies. The highest concentration of vacancies within the large company category is found among health care occupations followed by teaching positions in the government sector. High levels of vacancies are also found among various restaurant positions in the Leisure & Hospitality sector.

According to the survey, Government offers the highest average wage. Vacancies in this sector include public defenders and computer specialists who are typically paid higher wages. Most of these positions require only a bachelor's degree though some (attorneys) require advanced degrees. Large companies offer an average of \$10.40 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. These wage characteristics are similar to wages reported in the summer 2002 Job Vacancy Survey.

Vacancies

Employment Status, Education and Experience Requirements

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 summer survey, only 64% of the reported vacancies are for full-time permanent positions (Figure 12) while 29% are reported to be part-time permanent. Last year at this time 73% 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. However, this is the first time there has been a decline in full-time opportunities and an increase in part-time opportunities of such magnitudes. 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.

Figure 12: Vacancies by Employment Status

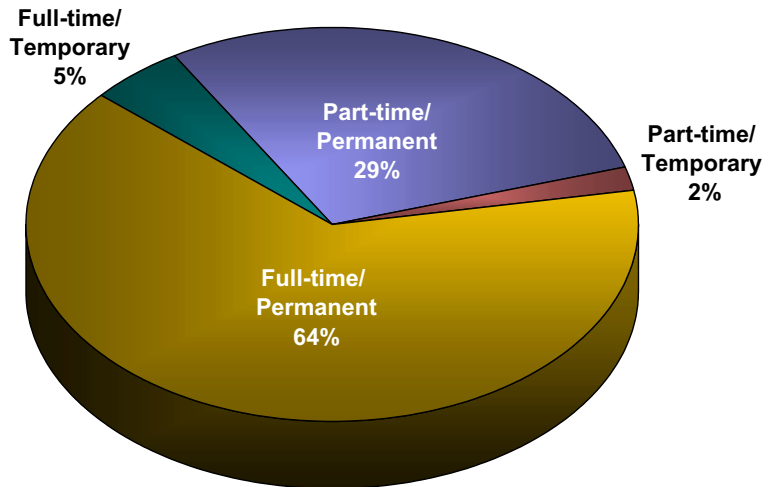
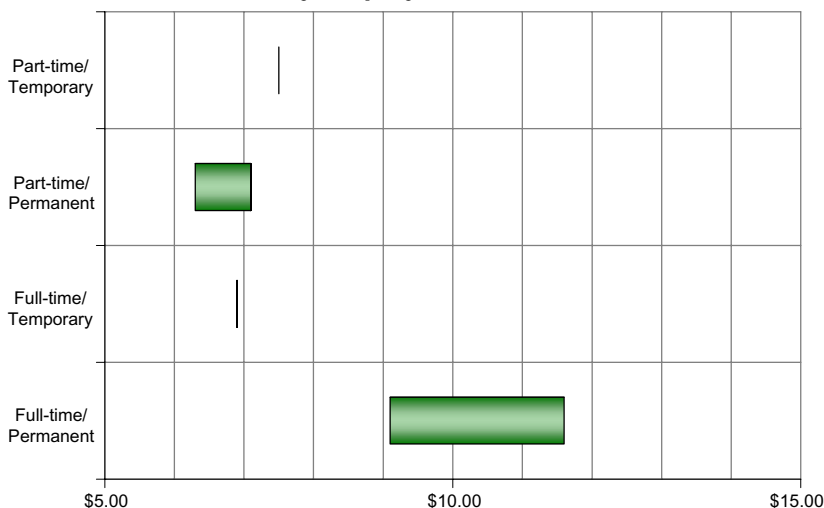
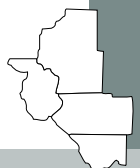


Figure 13: Reported Average Wage Ranges by Employment Status

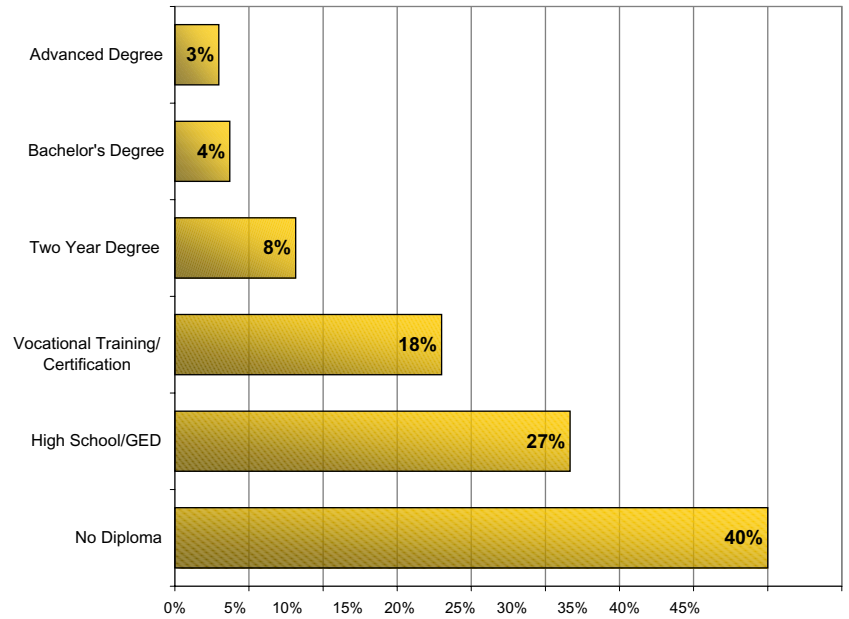


In general, full-time positions pay more than part-time and temporary positions. While past reports had deviated from this, the current report shows that wages offered have fallen in line with predictable trends. In this survey, full-time positions offer wages higher than the overall average of \$9.40 per hour.



Employers were asked what level of education is required of an applicant in order to be considered for a particular vacancy. Only 33% of the positions reported by employers in the Upper Arkansas Region require education beyond high school (*Figure 14*). Twenty-seven percent of all vacancies require a high school degree or GED equivalency while 40% do not require high school completion. This is due, in part, to the fact that a high proportion of the region's vacancies are for unskilled occupations. 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.

Figure 14: Vacancies by Education

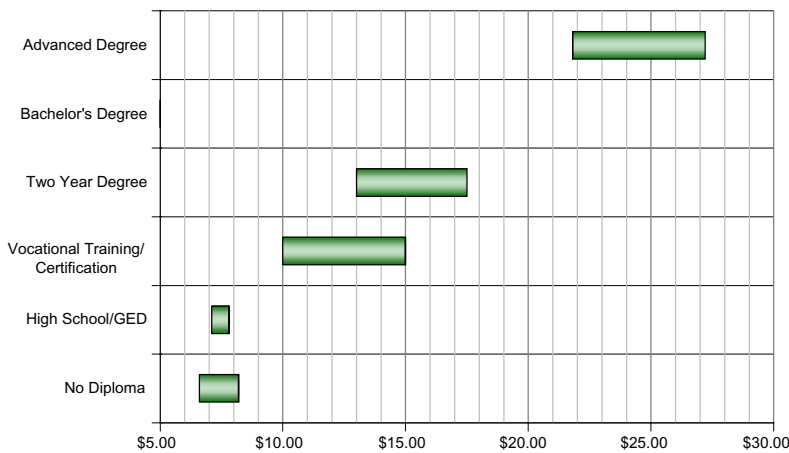


While the nature of the open position plays a significant role in the education and experience demanded, the availability of workers also has an effect on employers' demands. Only 4% of all vacancies require a bachelor's degree or higher. Most of the area's vacancies are occupations requiring no formal education but rely, instead, on on-the-job training. While many of the restaurant positions require the applicant to have some experience in the occupation, most employers in Leisure & Hospitality will offer the

position to those without, and still fill the position in a timely manner.

Only 7% of the positions that are available require a bachelor's degree or other advanced levels of education. These vacancies include positions such as registered nurses, mechanical engineers and lawyers which typically require specialized formal training.

Figure 15: Reported Average Wage Ranges by Education



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

Employers require the applicant to have experience in a related field or in the occupation for 51% of all vacancies. However, 40% of all vacancies do not require experience at all. This is primarily due to the high number of Leisure & Hospitality vacancies, which include many restaurant and hotel employers willing to offer entry level positions. Many vacancies not requiring experience are more skilled positions such as lawyers, registered nurses, occupational therapists and secretaries. Some of these vacancies are filled quickly, others are simply always open for hire. Last year at this time, 63% of all vacancies required experience in a related field or within the occupation while only 23% did not ask for any experience at all.

Figure 16: Vacancies by Experience

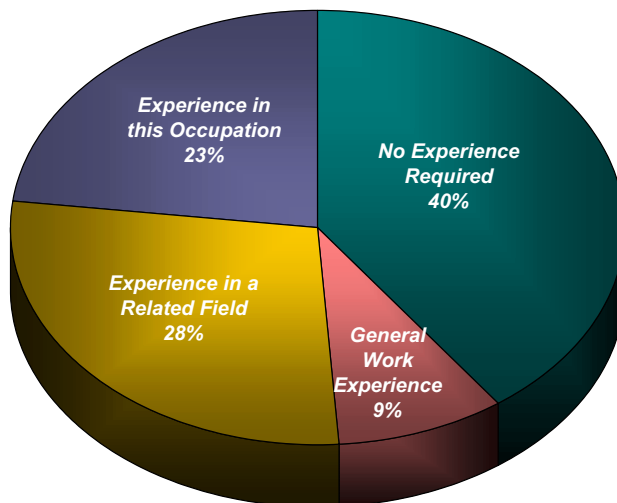
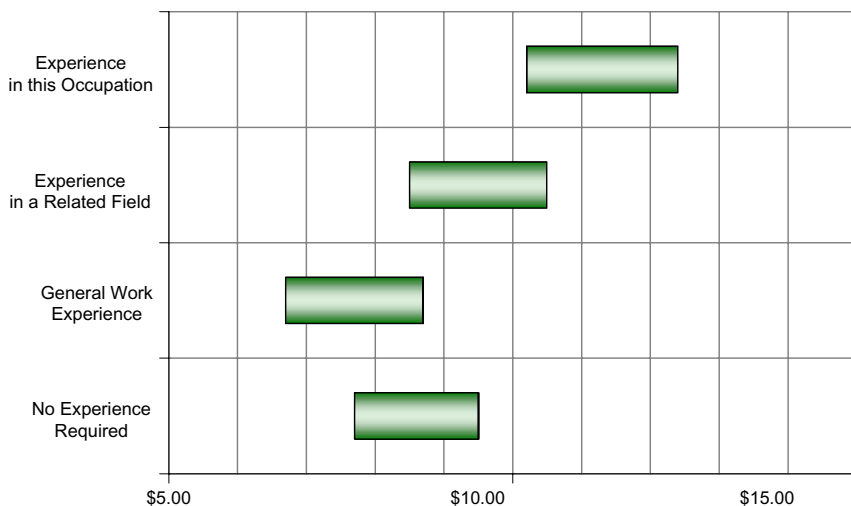
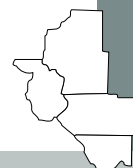


Figure 17: Reported Average Wage Ranges by Experience



As with increasing levels of education, employers are willing to pay higher wages for added skills. Vacancies requiring no experience, the category most sought after by employers, are offered with an average minimum wage of \$7.70 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. This year, however, the average wages offered to each experience category are lower than corresponding average wages from last year.



Vacancies

Difficulty to Fill and Time Open for Hire

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. Sixty-eight percent of the responding employers report that open positions are not difficult to fill, indicating the availability of workers have helped make the hiring process easier for employers (Figure 18). In fact, employers report that only 16% of all vacancies are somewhat difficult to fill and another 16% are very difficult to fill – a total of 32% associated with some level of hiring difficulty. This contrasts last summer's report when 75% 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 as well as experienced restaurant personnel (cooks and wait staff).

Vacancies considered somewhat difficult to fill are those that require specific levels of post secondary education such as engineers, teachers, and glaziers. 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 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, another employer may consider a similar vacancy not difficult to fill given the same time frame. 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. The characteristics of the time open for hire category have not changed much from last year. While there is a lower percentage of vacancies that are open 30 or more days, only slight changes are seen compared to last summer's report (Figure 19).

Figure 18: Vacancies by Difficulty to Fill

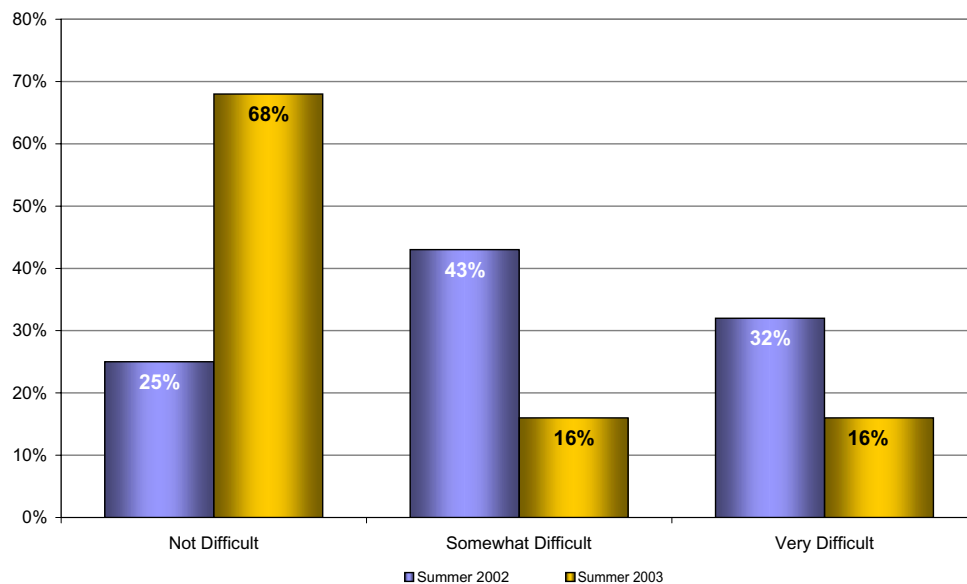
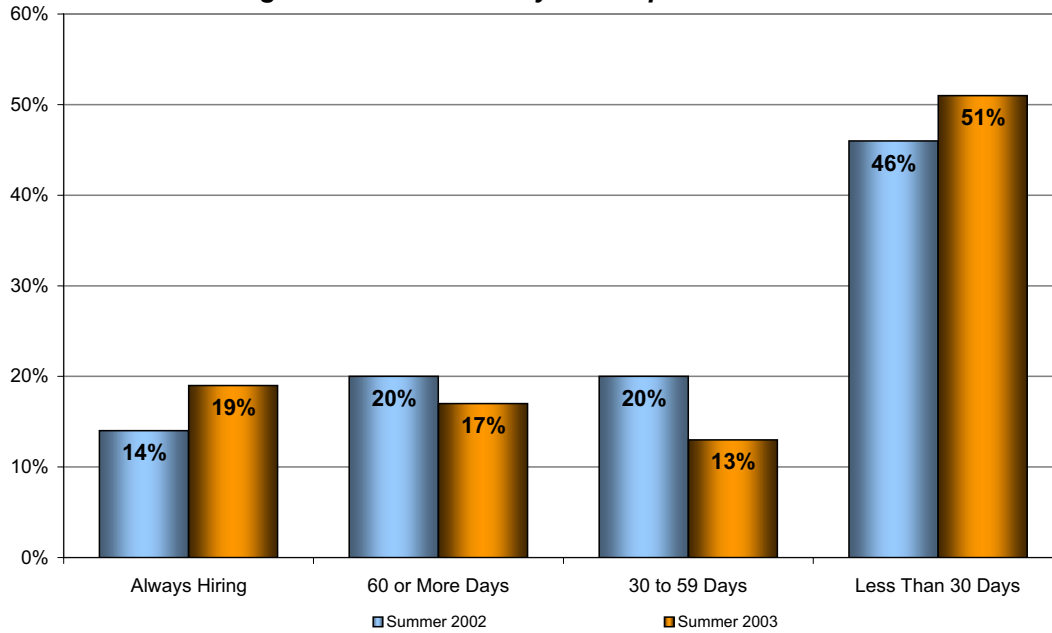


Figure 19: Vacancies by Time Open for Hire

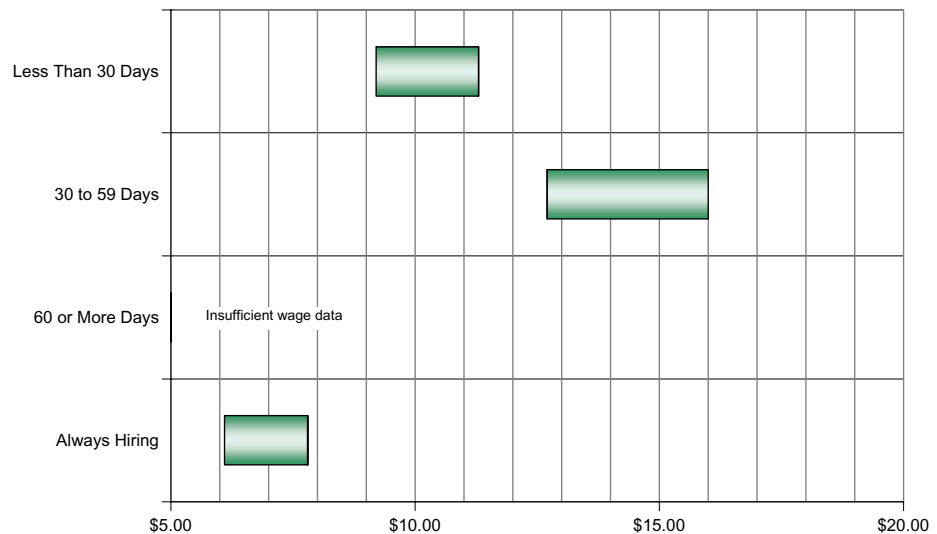


Only 17% of the vacancies are reported as open for 60 days or more. For this survey, these positions are registered nurses, respiratory therapists, and other health care positions that require the applicant to have a minimum of vocational training/certification or a two-year degree and experience in the occupation. Among the 13% of the vacancies that are open for 30 to 59 days, most are teaching positions.

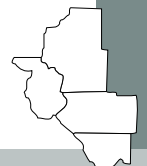
Vacancies considered not difficult to fill as well as those that are very difficult to fill are offered with average wages close to or less than the overall average of \$9.40 per hour. Positions perceived to be somewhat difficult to fill add approximately \$4 to the average minimum wage offered. In all cases the occupations are associated with varying levels of education, experience, employment status, time open, and firm size. Occupations that are considered somewhat difficult to fill are primary and secondary teachers, registered nurses, licensed practical nurses, cooks, carpenters, and chauffeurs.

Whereas traditionally, higher wages are offered as the time a vacancy takes to fill increases, survey results show

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



an unpredictable pattern. The lowest wages are offered to vacancies that are always open for hire 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 primary education teachers, engineers, truck drivers, power plant operators, carpenters, auto mechanics, cooks, and wait staff.



Vacancies

Additional Compensation

Medical Insurance

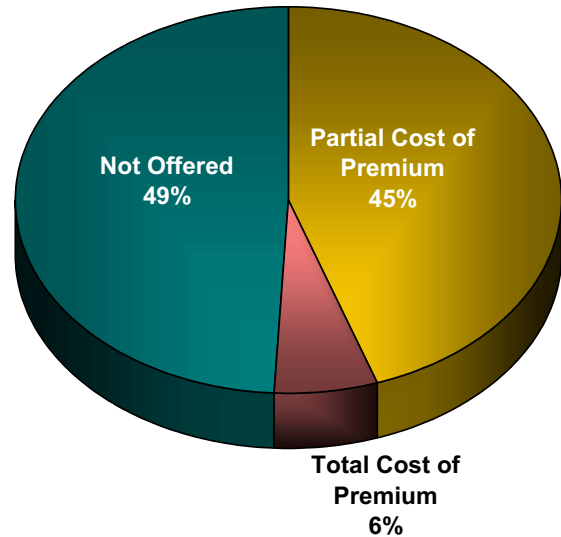
Only about half of all vacancies include some form of medical insurance. This is down from last summer's report where almost all (93%) of the vacancies were offered with some form of medical insurance. Vacancies associated with no medical plans are, for the most part, low-education and low-skilled positions and are usually filled without difficulty. A few vacancies that do require postsecondary education and experience and are not offered with health insurance benefits are part-time positions as teachers, registered nurses, and other various medical technicians.

The average wage range offered for vacancies where the employer pays partial cost of the premium is \$11.40 to \$14.30 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. Employers willing to pay the total cost of the premium but offering lower average wage ranges include select positions as teachers, delivery drivers, information clerks, and cooks.

Sign-On Bonus

For this survey, only one percent of all vacancies are offered with a sign-on bonus. This type of compensation is usually offered during a tight labor market when

Figure 21: Employers' Contribution to Medical Insurance



employers are using a variety of methods to attract potential applicants.

Occupations

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 17 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 a change from this trend. The highest proportion of vacancies is found in Food Preparation & Serving Related, with the second highest proportion of vacancies in the Healthcare Practitioners & Technical occupational group. Education, Training, & Library, Transportation & Material Moving, and Office & Administrative Support remain among the top five occupational groups most in demand. The least in demand occupations are found in Management, Computer & Mathematical, Community & Social Services, and Architecture & Engineering. 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—Legal—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.

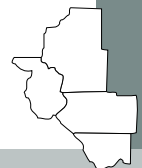
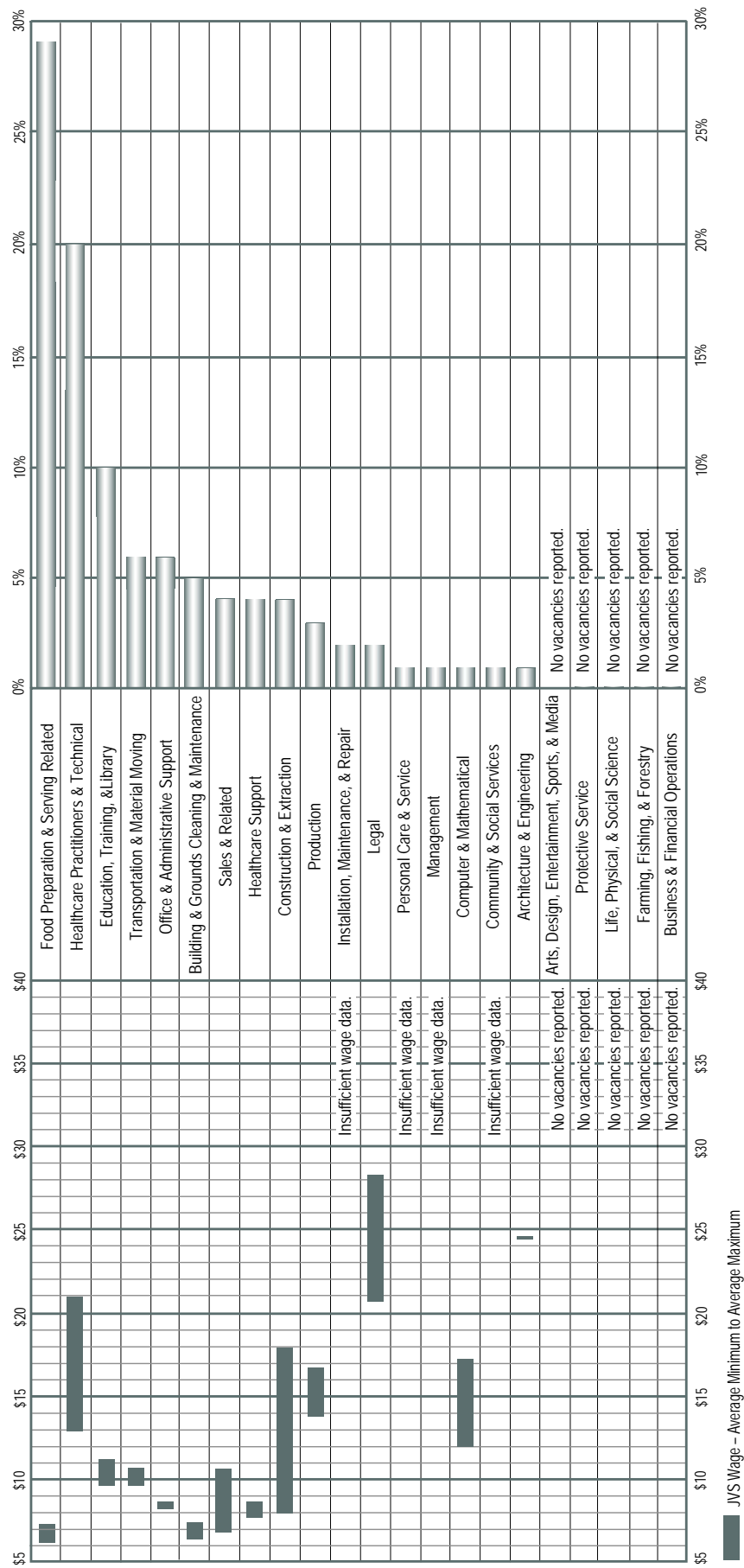


Figure 22: Vacancies and Reported Average Wage Ranges by Major Occupational Groups



Occupational 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 only 44% 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 the Upper Arkansas Region when available and statewide otherwise. It was collected in 2001 and aged to 2002 using the Employment Cost Index (ECI). Complete descriptions of the OES survey and the ECI are available on the Internet at: <http://www.bls.gov/>.

While the Job Vacancy Survey average wages reflect what 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.



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	16	13	†	\$17.13	\$21.91	\$24.29	\$15.39	\$18.89	\$21.74	\$25.31	\$28.55		
35-3022	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	12	10	\$5.40	\$5.98	\$6.06	\$6.10	\$5.45	\$5.71	\$6.14	\$6.57	\$6.83		
35-2014	Cooks, Restaurant	12	10	\$8.50	\$6.39	\$8.26	\$9.20	\$5.91	\$6.86	\$7.86	\$8.72	\$11.04		
35-3031	Waiters and Waitresses	10	8	\$5.20	\$6.01	\$6.24	\$6.37	\$5.50	\$5.76	\$6.22	\$6.67	\$7.07		
25-3099	Teachers and Instructors, All Other	7	1	†	†	†	†	†	†	†	†	†		
37-2012	Maids and Housekeeping Cleaners	6	4	†	\$6.38	\$7.81	\$8.53	\$5.93	\$6.86	\$7.84	\$8.82	\$10.07		
43-3071	Tellers	6	2	†	\$7.87	\$8.64	\$9.03	\$7.36	\$7.79	\$8.51	\$9.40	\$10.54		
43-4081	Hotel, Motel, and Resort Desk Clerks	6	2	†	\$5.98	\$7.95	\$8.93	\$5.74	\$6.43	\$8.03	\$9.61	\$10.45		
41-2011	Cashiers	6	2	†	\$6.09	\$8.04	\$9.02	\$5.82	\$6.46	\$7.59	\$8.77	\$11.34		
41-2031	Retail Salespersons	6	2	†	\$6.14	\$9.37	\$10.98	\$5.75	\$6.22	\$7.01	\$9.26	\$14.42		
25-9041	Teacher Assistants	5	5	†	\$14,125	\$18,388	\$20,518	\$13,005	\$15,243	\$17,759	\$21,655	\$24,998		
* 29-2054	Respiratory Therapy Technicians	5	5	†	\$9.91	\$15.12	\$17.73	\$8.56	\$11.68	\$15.44	\$17.97	\$21.37		
35-2021	Food Preparation Workers	5	4	\$7.20	\$6.36	\$7.67	\$8.33	\$6.03	\$6.80	\$7.59	\$8.50	\$9.76		
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	4	3	†	\$6.21	\$9.07	\$10.50	\$5.87	\$6.70	\$9.00	\$11.18	\$12.99		
53-3033	Truck Drivers, Light or Delivery Services	4	3	†	\$9.27	\$14.10	\$16.50	\$8.78	\$10.47	\$12.85	\$14.69	\$24.68		
47-2061	Construction Laborers	4	2	†	\$9.41	\$11.88	\$13.13	\$8.95	\$10.51	\$12.01	\$13.23	\$14.76		
* 47-2181	Roofers	4	2	†	\$10.92	\$14.48	\$16.26	\$9.97	\$11.98	\$14.49	\$16.75	\$19.38		
25-2022	Middle School Teachers, Except Special and Vocational Education	4	4	\$9.40	\$27,254	\$36,374	\$40,933	\$25,733	\$28,851	\$35,093	\$43,050	\$50,920		
* 29-1122	Occupational Therapists	4	4	†	\$18.40	\$23.69	\$26.34	\$17.38	\$20.10	\$23.67	\$26.79	\$29.08		
31-1011	Home Health Aides	4	2	†	\$8.14	\$8.55	\$8.76	\$7.58	\$7.90	\$8.45	\$9.02	\$9.55		

* OES wages reported for Colorado statewide

† Insufficient Wage Data Available

Table 2: Occupations with Fewer than Four Estimated Vacancies

		Occupational Employment Statistics Wage Data (2002)									
SOC Code	SOC Occupational Title	Average Wages			Percentile Distribution						
		Entry- level	Overall	Experi-enced	10th	25th	50th	75th	90th		
49-3023	Automotive Service Technicians and Mechanics	\$7.20	\$12.45	\$15.07	\$6.25	\$8.31	\$10.54	\$15.96	\$21.85		
51-7011	Cabinetmakers and Bench Carpenters	\$7.91	\$11.93	\$13.94	\$6.73	\$9.19	\$12.02	\$14.65	\$16.90		
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	\$5.98	\$6.90	\$7.35	\$5.53	\$5.90	\$6.51	\$7.43	\$8.40		
* 15-1099	Computer Specialists, All Other	\$18.58	\$29.68	\$35.23	\$15.85	\$22.44	\$29.03	\$36.39	\$44.71		
43-4051	Customer Service Representatives	\$8.56	\$11.01	\$12.24	\$7.97	\$9.09	\$10.63	\$12.80	\$15.05		
35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	\$6.00	\$6.37	\$6.55	\$5.49	\$5.78	\$6.26	\$6.74	\$7.80		
35-9021	Dishwashers	\$6.00	\$6.87	\$7.30	\$5.59	\$6.03	\$6.73	\$7.80	\$8.52		
53-3031	Driver/Sales Workers	\$6.69	\$11.01	\$13.18	\$6.01	\$7.60	\$10.42	\$13.23	\$16.27		
25-2021	Elementary School Teachers, Except Special Education	\$26,665	\$35,967	\$40,618	\$25,338	\$28,525	\$34,421	\$43,142	\$51,339		
29-2041	Emergency Medical Technicians and Paramedics	†	†	†	†	†	†	†	†		
43-6011	Executive Secretaries and Administrative Assistants	\$12.91	\$16.92	\$18.93	\$12.11	\$14.02	\$16.79	\$19.77	\$22.31		
43-1011	First-Line Supervisors/Managers of Office and Administrative Support Workers	\$10.63	\$16.72	\$19.76	\$9.41	\$12.19	\$15.76	\$20.26	\$26.10		
51-1011	First-Line Supervisors/Managers of Production and Operating Workers	\$12.81	\$18.11	\$20.75	\$12.16	\$14.01	\$18.19	\$21.22	\$25.53		
39-9031	Fitness Trainers and Aerobics Instructors	\$6.04	\$8.28	\$9.40	\$5.77	\$6.54	\$7.97	\$9.47	\$10.48		
35-9099	Food Preparation and Serving Related Workers, All Other	\$6.54	\$8.19	\$9.01	\$5.95	\$7.17	\$8.01	\$8.84	\$10.67		
* 47-2121	Glaziers	\$12.79	\$19.43	\$22.75	\$10.84	\$15.22	\$20.26	\$24.56	\$27.09		
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	\$6.01	\$6.99	\$7.48	\$5.58	\$5.97	\$6.63	\$7.97	\$9.16		
43-4199	Information and Record Clerks, All Other	†	†	†	†	†	†	†	†		
49-9099	Installation, Maintenance, and Repair Workers, All Other	\$10.38	\$16.05	\$18.88	\$9.01	\$12.19	\$17.56	\$19.98	\$21.44		
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$6.62	\$8.79	\$9.88	\$6.11	\$7.20	\$9.11	\$10.33	\$11.11		

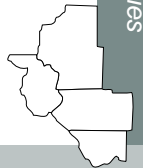


Table 2: Occupations with Fewer than Four Estimated Vacancies — Page 2

SOC Code	SOC Occupational Title	Occupational Employment Statistics Wage Data (2002)									
		Average Wages			Percentile Distribution						
		Entry-level	Overall	Experienced	10th	25th	50th	75th	90th		
23-1011	Lawyers	\$19.34	\$21.41	\$22.44	\$17.86	\$18.77	\$20.30	\$21.82	\$29.12		
25-4031	Library Technicians	\$7.15	\$11.33	\$13.42	\$6.43	\$7.59	\$8.65	\$14.19	\$20.58		
29-2061	Licensed Practical and Licensed Vocational Nurses	\$11.23	\$14.57	\$16.24	\$10.65	\$12.05	\$14.77	\$16.77	\$19.04		
51-4041	Machinists	\$6.35	\$11.47	\$14.01	\$5.95	\$6.35	\$7.03	\$13.52	\$28.73		
17-2141	Mechanical Engineers	\$11.68	\$26.68	\$34.19	\$6.35	\$17.88	\$24.46	\$36.40	\$50.10		
* 29-2012	Medical and Clinical Laboratory Technicians	\$11.01	\$15.47	\$17.71	\$10.14	\$11.94	\$14.76	\$18.60	\$21.65		
11-9111	Medical and Health Services Managers	\$23.32	\$31.13	\$35.03	\$22.62	\$25.30	\$30.11	\$35.35	\$45.31		
31-1012	Nursing Aides, Orderlies, and Attendants	\$7.02	\$9.08	\$10.12	\$6.41	\$7.66	\$8.99	\$10.56	\$12.39		
* 31-2021	Physical Therapist Assistants	\$11.57	\$15.29	\$17.15	\$10.39	\$13.36	\$15.52	\$17.34	\$20.04		
* 51-8013	Power Plant Operators	\$17.79	\$23.49	\$26.34	\$16.14	\$20.24	\$24.64	\$27.41	\$29.21		
25-2011	Preschool Teachers, Except Special Education	\$6.07	\$8.75	\$10.09	\$5.75	\$6.55	\$7.83	\$10.33	\$13.14		
* 29-1124	Radiation Therapists	\$23.15	\$26.98	\$28.90	\$21.92	\$24.05	\$26.78	\$30.42	\$34.35		
* 41-9021	Real Estate Brokers	\$11.67	\$26.57	\$34.01	\$11.48	\$12.75	\$18.11	\$39.19	\$57.96		
41-9022	Real Estate Sales Agents	\$9.83	\$23.46	\$30.28	\$6.62	\$13.90	\$17.47	\$25.06	†		
43-6014	Secretaries, Except Legal, Medical, and Executive	\$6.72	\$10.62	\$12.57	\$6.25	\$7.36	\$9.82	\$12.96	\$17.35		
21-1093	Social and Human Service Assistants	\$9.56	\$12.25	\$13.60	\$9.07	\$9.94	\$11.71	\$14.39	\$16.58		
25-2041	Special Education Teachers, Preschool, Kindergarten, and Elementary School	\$30,516	\$39,249	\$43,615	\$28,568	\$32,633	\$39,123	\$45,804	\$52,638		
53-3041	Taxi Drivers and Chauffeurs	\$6.19	\$7.92	\$8.79	\$5.78	\$6.24	\$7.00	\$10.07	\$10.88		
* 49-3093	Tire Repairers and Changers	\$8.13	\$9.74	\$10.54	\$7.63	\$8.65	\$9.74	\$10.69	\$11.49		
53-3032	Truck Drivers, Heavy and Tractor-Trailer	\$10.98	\$15.07	\$17.11	\$10.18	\$12.52	\$15.42	\$17.67	\$20.10		

* OES wages reported for Colorado statewide

† Insufficient Wage Data Available

Leisure & Hospitality JVS Sector

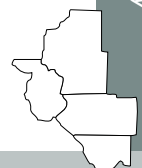
The Upper Arkansas Region is on the rebound from last year's wildfires. Over 4,400 acres burned in Fremont County in the summer of 2002 including approximately 100 houses in addition to other structures in the Iron Mountain fire. Both Fremont and Custer counties were affected by the evacuation of residential areas and popular attractions such as the Royal Gorge Park. Park County was hit by five significant fires, the Hayman fire being Colorado's largest, burning 137,000 acres (in Park, Jefferson and Douglas counties) and costing \$30 million. Wildfires could be found throughout Colorado's mountainous regions, yet less than one percent of the state was affected. Still, national attention to Colorado's wildfires slowed tourism in general. The closure of Pike National Forest all but halted recreation in the Upper Arkansas Region where, besides the general store lost in the Iron Mountain fire, all rafting companies suffered from the decrease in tourism.

Leisure and Hospitality is the second largest employment sector in the state—second only to Retail Trade—and Colorado remains one of the top destinations for outdoor tourism. After taking a hit from last year's wildfires, the Colorado tourism bureau has stepped up efforts to market Colorado's attractions, not just to visitors, but to residents as well. The Colorado Office of Economic Development and International Trade—Colorado Tourism Office (CTO) provides an internet link to Colorado.com, Colorado's official Travel and Tourism Website. The easy-to-follow links take the adventurer through Colorado's attractions. In the Upper Arkansas Region, summer specials have drawn in guests who have been waiting for bargain prices. The Royal

Gorge Bridge always draws in a crowd to Fremont County, and the daring new Skycoaster ride will surely bring visitors back to the park.

Tourism in 2003 began strong with the ski season and by June, most of the hiring in Colorado was seen in the leisure and hospitality sector according to the Colorado Department of Labor and Employment. The 2003 July Press Release for Colorado Labor Force Developments shows the division added 15,300 jobs throughout the state. Although some small rafting companies could not survive the simultaneous fires-drought-recession, those that did saw at least some of their business return this year. Furthermore, while the Upper Arkansas Region is well known for rafting, many tourists arrive for other outdoor activities such as camping, jeep and helicopter tours, golf on the banana belt, or hiking adventures up 14,000 mountains.

The physical nature of all outdoor recreation results in exhausted travelers looking for food and accommodations. For this survey, 83 estimated vacancies (out of 213) are in the Leisure & Hospitality JVS sector. More specifically, these vacancies are found in the Accommodation and Food Services & Drinking Places sub-sectors. Most of these positions are in restaurant or concession positions as cooks, food and/or beverage preparation, and food servers. Other vacancies include Hotel, Motel, and Resort Desk Clerks as well as Maids and Housekeeping Cleaners. While these positions do not require postsecondary education, over one-third require experience in a related field or experience in the occupation.



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...

- ◆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. Projections highlight growing as well as declining occupations. Public officials, educational institutions, and Government agencies can use this survey information to effectively apply resources to education, training, and job placement programs. Investments in the workforce can be directed toward occupations or industries that continuously contribute to the local economy or to those where there is a constant need for workers.

Economic Developers

Economic development professionals can use the Job Vacancy Survey to track the labor situation in key industries and evaluate the area's labor needs. The survey results help determine where bottle-

necks may occur should current vacancies persist. Economic developers can also generate a comprehensive picture of the region by determining where labor demand stands today, as identified by the survey, and

where the local market is trending using Labor Market Information's employment projections.

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 39% 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

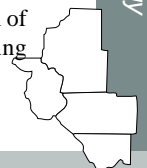
The Job Vacancy Survey was designed to accurately estimate the number of job vacancies for firms employing five or more people. The secondary purpose of the survey is to obtain and report significant vacancy characteristics.

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 39% of the employment in the region is found in large and government employers that make up only 1%-2% of the total number of firms. Conducting a census of these entities allows us to cover a large portion of the region's employment while contacting relatively few entities.



Survey Sample

The Upper Arkansas Region Survey was conducted from June 16th through 23rd, 2003. 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 53% 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 41% of the employment in the sample frame, while private industry employers make up the remaining 59%. Large firms account for 32% 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 68% of private industry employment.

The margin of error for the overall vacancy estimate is plus or minus 5% or about 11 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 202 and 204 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 80%. 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 25*.

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

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 purposes¹. 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 Committee². Government agencies from the United States, Mexico and Canada³ 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.

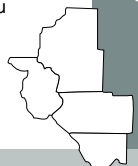
Relevant—NAICS recognizes hundreds of new businesses in the economy with 20 broad industry sectors, up from SIC's 10. Some new industry categories include an Information sector and a Health Care & Social Assistance sector formerly lumped into Services under SIC.

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

¹Executive 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

²ECPC 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

³Specifically, Mexico's Instituto Nacional de Estadística, Geografía e Informática (INEGI) and Statistics Canada



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
Wholesale Trade		Transportation & Warehousing
Retail Trade		Wholesale Trade
Finance, Insurance & Real Estate		Retail Trade
Services		Accommodation & Food Services
		Finance & Insurance
		Real Estate & Rental & Leasing
		Information
		Professional, Scientific & Technical Services
		Administrative & Support & Waste Management & Remediation Services
		Educational Services
		Health Care & Social Assistance
		Arts, Entertainment, & Recreation
Public Administration (parts of all divisions)		Other Services (except Public Administration)
		Public Administration
		Management of Companies & Enterprises

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

Glossary

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

Average Maximum Wage

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

Average Minimum Wage

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

Computer Assisted Telephone Interviewing (CATI)

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

Cooperation Rate

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

Educational Attainment

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

Effective Response Rate

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

Employed Persons (Employment)

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

- a) did any work at all (at least 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*.

Not Seasonally Adjusted

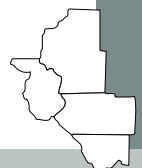
This term is used to describe data series not subject to the seasonal adjustment process. In other words, the effects of regular, or seasonal, patterns have not been removed from these series.

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 ES-202 while private companies come from the ALMIS (America's Labor Market Information System) database.

Seasonally Adjusted

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

Service Producing Industries (NAICS)

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

Sign-on Bonus

An additional financial incentive offered by a firm to a potential new employee to influence his/her decision to agree to 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.

Tourism and our State Parks are important parts of Colorado's economy.

We urge you to

See
COLORADO
first

Eleven Mile State park



Photo—Dave Hause, Courtesy Colorado State Parks

State Parks to explore

in the **UpperArkansas** Region

Arkansas Headwaters Recreation Area
<http://parks.state.co.us/arkansas/>

Eleven Mile State Park
http://parks.state.co.us/Eleven_Mile/

Spinney Mountain State Park
<http://parks.state.co.us/Spinney/>

Colorado State Parks
<http://parks.state.co.us/home>

UpperArkansas Region

WORKFORCE CENTERS IN THE UPPER ARKANSAS JOB VACANCY SURVEY REGION

Salida Workforce Center

141 E. 3rd Street
Salida, CO 81201

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

Canon City Workforce Center

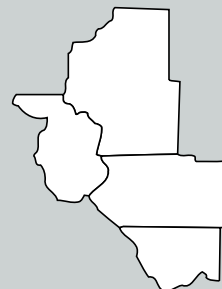
172 Justice Center Road, Ste B
Canon City, CO 81212

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

Fairplay Satellite Office

Department of Human
Services Building
824 Costello
Fairplay, CO 80440

Phone: (719) 836-6181
canoncity@cwfc.net



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

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

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