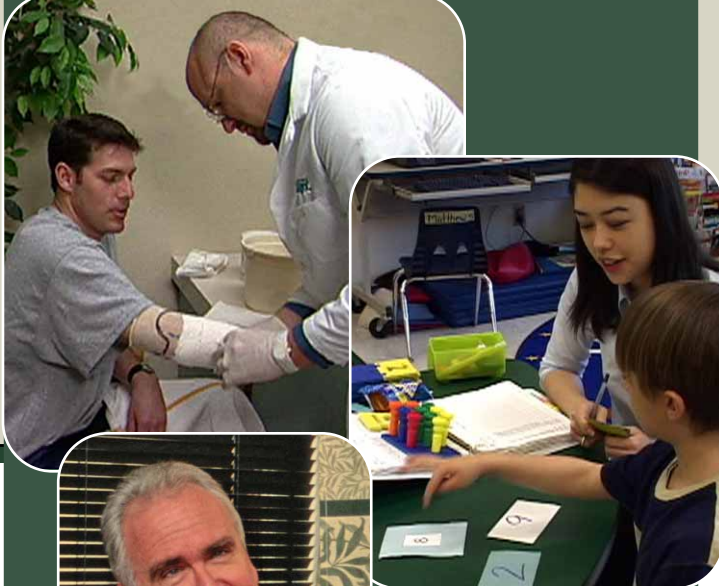


Upper Arkansas Region

Job Vacancy Survey

Summer 2004



Survey Conducted
June 3–14, 2004

Released
Summer 2004

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The Colorado Workforce Development Council*

This publication is a product of the Colorado Department of Labor and Employment's Labor Market Information Section and was prepared by members of the Workforce Research and Analysis unit.

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State of Colorado
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Introduction

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Upper Arkansas Region JVS Report

The Colorado Job Vacancy Survey

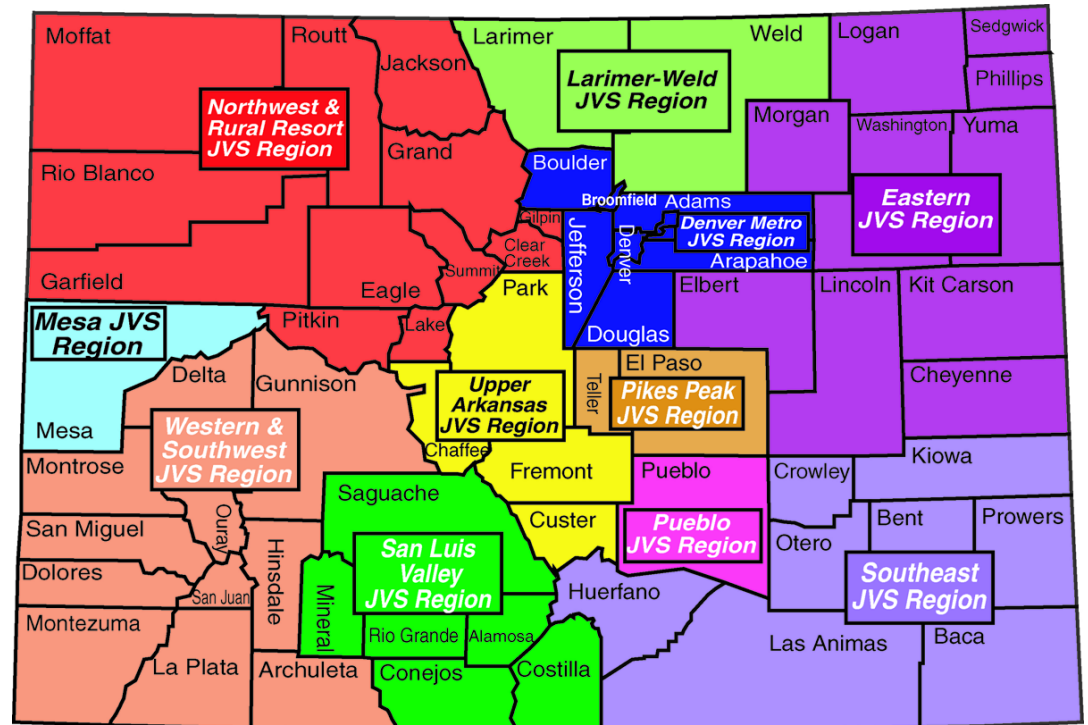
The unemployment rate, along with the level and growth rate of employment, has been used as an indicator of labor market conditions for decades. While this indicator provides information about changes in the supply and demand for labor, it reveals nothing about the skills most sought after by employers. 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 summer 2004 Upper Arkansas Job

Vacancy Survey was conducted from June 3rd through 14th, 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 493 employers, representing approximately 56% of the region's total employment, responded to the survey. Out of these, 26 were large employers (75 employees or more), 59 were Government employers, and 408 were from the small to mid-size category (5 to 74 employees). The survey has a response rate of 87% and a cooperation rate of 98%. The margin of sampling error for the overall vacancy estimate is plus or minus 5% or about 33 vacancies.

Major Findings of Survey:

- ◆ It is estimated that a total of 252 jobs were open for hire in the Upper Arkansas Region during the survey period.Page 8
- ◆ Seven percent of employers responding to the survey reported having at least one vacancy.Page 8
- ◆ The overall average wage for all reported vacancies is \$8.20 per hour.Page 9
- ◆ Fifty-six percent of the estimated job openings are in Leisure & Hospitality.Page 9
- ◆ Seventy-one percent of the estimated vacancies are offered by small to mid-size employers and 23% by large employers.Page 9
- ◆ Forty percent of all reported vacancies are for full-time/permanent positions and 30% are part-time permanent.Page 11
- ◆ Fifty-two percent of the reported vacancies are for full-time positions compared to 69% a year ago.Page 11
- ◆ Thirty-nine percent of all vacancies in this survey do not require high school completion while 24% require high school completion.Page 12
- ◆ Thirty-seven percent of all vacancies require post-secondary education.Page 12
- ◆ Eighty-seven percent of all vacancies are considered not difficult to fill. This has changed from a year ago when 68% of all vacancies were considered not difficult to fill.Page 14
- ◆ For this report, 71% of the reported vacancies were open for hire for less than 30 days.Page 14



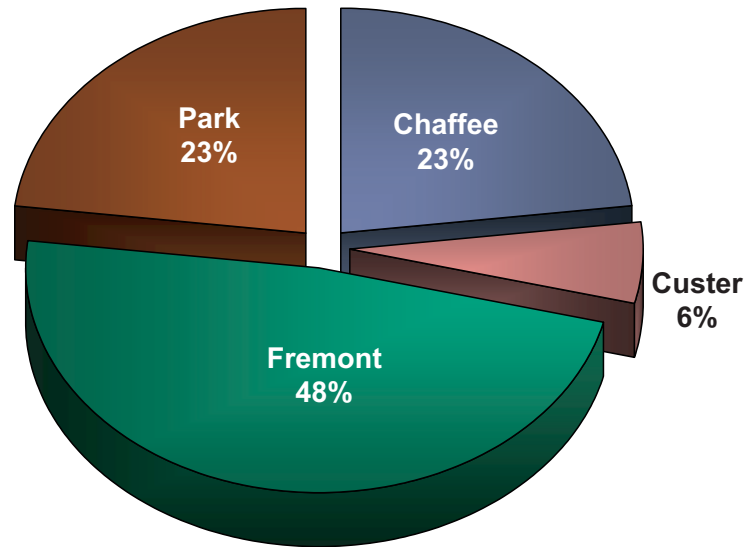
Regional Information

The Upper Arkansas Region includes Chaffee, Custer, Fremont and Park counties. The U.S. Census Bureau's Census updates for 2003 estimates the region's population to be nearly 85,000 people. Fremont County accounts for 56% of the population in the region. Chaffee County has 20% of the population while Park has 19%. Custer accounts for 5% of the population in the area. Population changes from July 1, 2002 to

July 1, 2003 have slowed in all four counties. Custer County showed the highest percent change of 4.7% and is among the top 100 fastest growing counties in the nation, ranking 55th out of 100.

Employment and population proportions in the area are comparable, with Fremont County recording nearly half of all employed individuals (*Figure 2*). Park and Chaffee Counties each make up 23% of the area's employment while Custer County accounts for 6% of the region's employment.

Figure 2: Employment by County, June 2004



Source: CDLE, Local Area Unemployment Statistics, July 2004

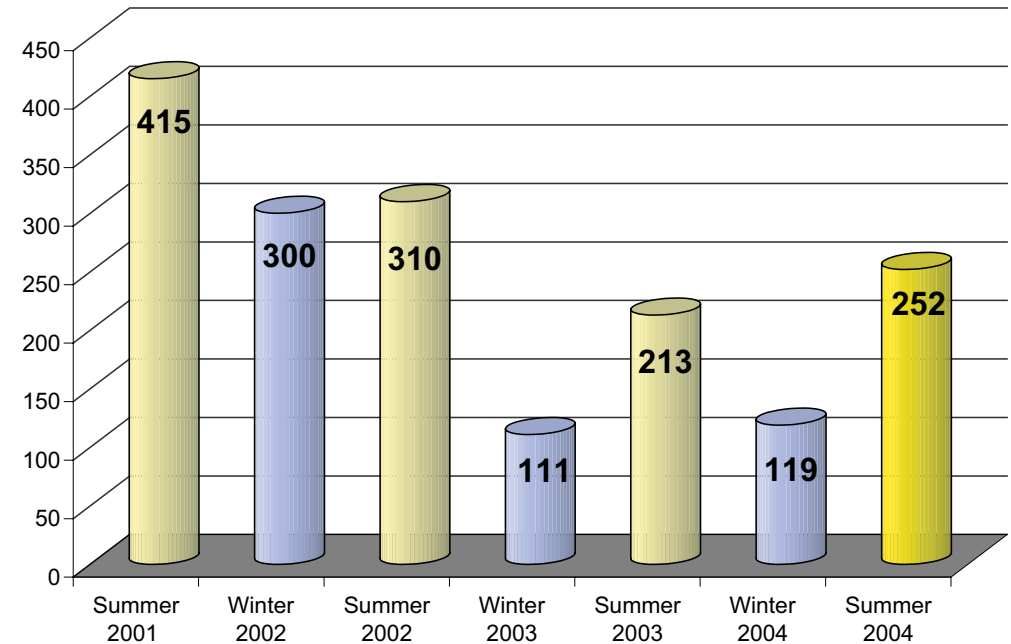
Regional Information —continued

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 seasons show more employment opportunities than the winter seasons 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. With the turning of the economy, in addition to continued population growth, the region has finally shown an increase in job vacancies as seen in this current survey (*Figure 3*).

Although the availability of job opportunities has declined over most of the last seven surveys, employment per season has increased. For example, not only has employment increased each summer, employment has also increased over each winter report. Over the last few years, the labor force has increased faster than the number of individuals becoming employed, resulting in increased unemployment rates. Recently however, the trend has changed and the region has experienced declining unemployment rates overall.

Upper Arkansas Region Job Vacancy Surveys are conducted semi-annually in the winter and summer months. The timing of the survey is 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.

Figure 3: Historical Vacancies—Upper Arkansas Region



	Summer 2001	Winter 2002	Summer 2002	Winter 2003	Summer 2003	Winter 2004	Summer 2004
Vacancies	415	300	310	111	213	119	252
Employment	37,698	33,631	37,994	33,943	38,774	35,773	38,975
Unemployed	1,244	1,967	1,734	1,954	1,861	1,625	1,685
Unemployment Rate	3.2%	5.5%	4.4%	5.4%	4.6%	4.3%	4.1%

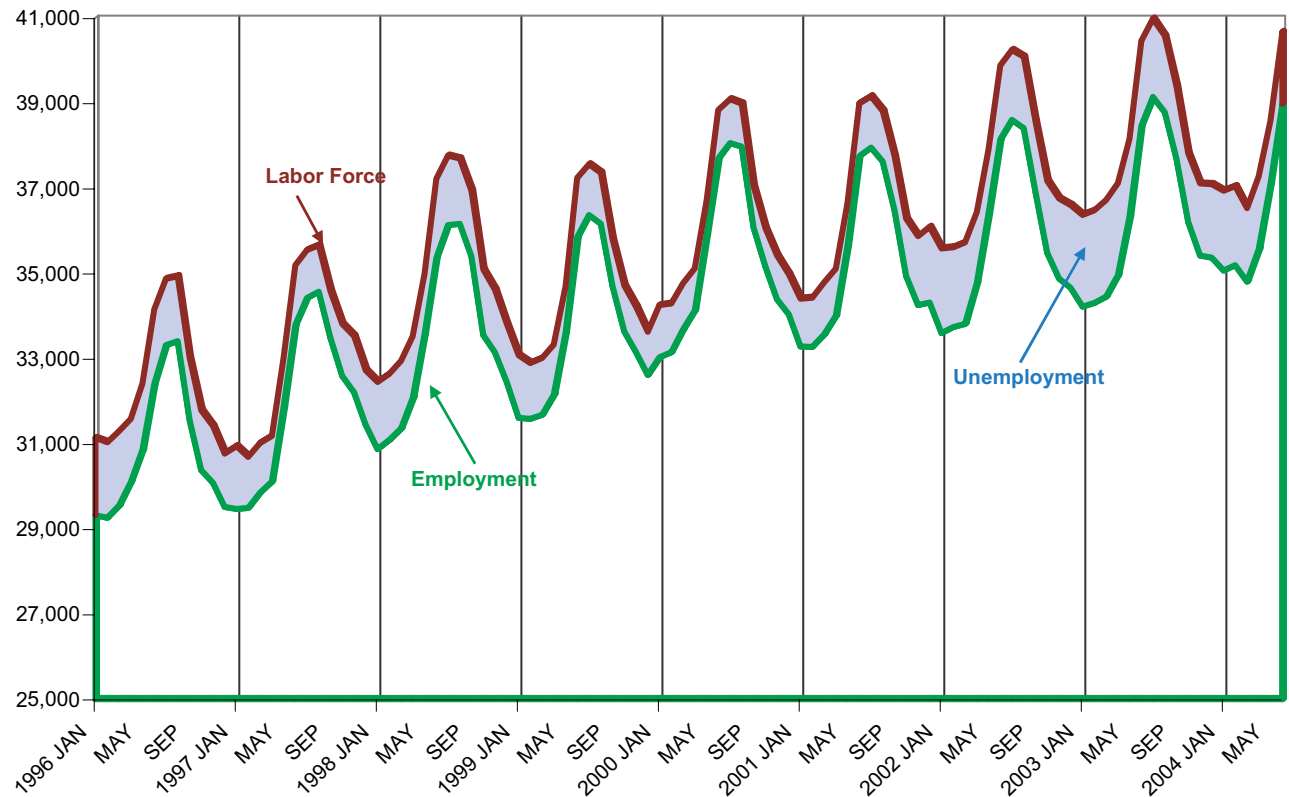
Source: CDLE, Local Area Unemployment Statistics, July 2004

Regional Information —continued

Historically, the level of employment in the Upper Arkansas Region peaks in or around the month of July. The labor force, which includes 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. By this summer's 2004 season, the unemployment rate dropped, not quite to the low rates experienced in the late 1990's and early 2000's, but to rates lower than those seen over the last few years.

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



Source: CDLE, Local Area Unemployment Statistics, July 2004

Regional Information —continued

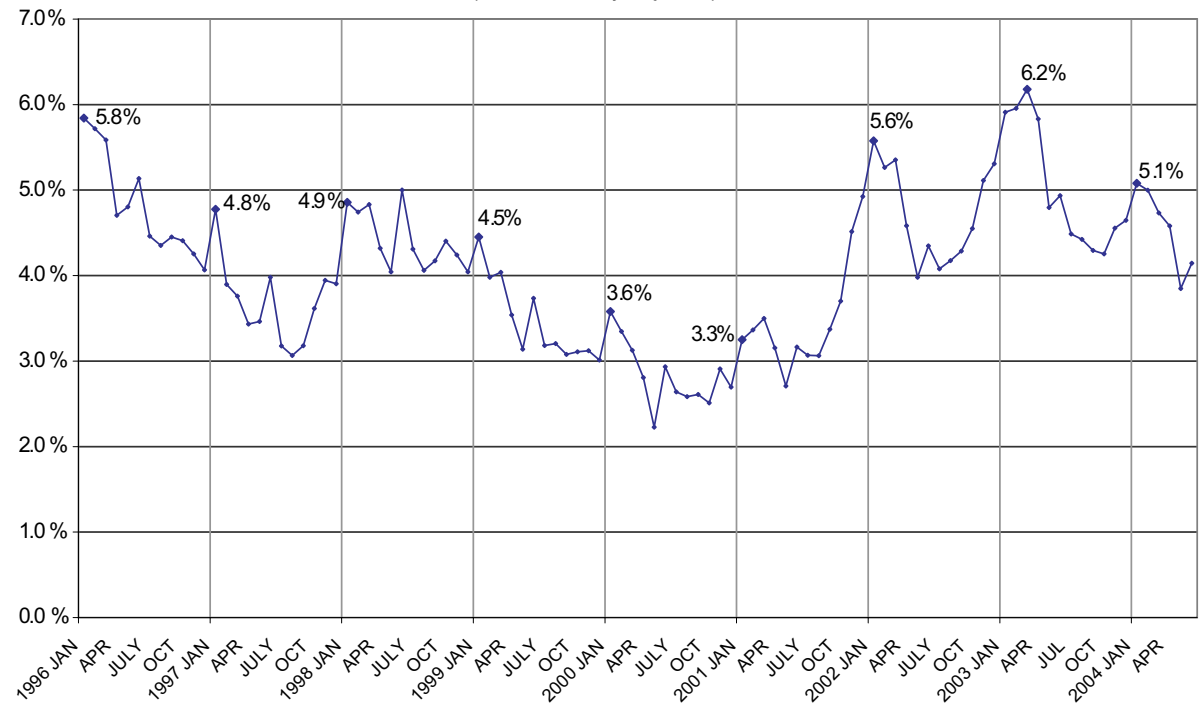
After steadily decreasing throughout the late 90s, the region's unemployment rate followed the state and national trends of persistent increases since mid-2000 (Figure 5). The unemployment rate reached a high of 6.2% in March, 2003 (the highest rate since January of 1996) after which the local economy showed promising signs of increasing summertime employment. Following a short dip in unemployment in the spring of 2004, the region's unemployment rate increased to 4.1% mostly attributed to the increase in population as well as the influx of the existing working-age population, previously not in the labor force, now reentering the labor force.

Figure 6 shows the most current unemployment statistics for the individual counties of the Upper Arkansas Region. Chaffee County has the lowest unemployment rate of 3.0% in June, followed closely by Custer County with a rate of 3.2%. 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.

Westcliffe is Custer County's main business district with over 250 businesses registered with the Chamber of Commerce. With the Sangre de Cristo wilderness nearby, Custer County is becoming a popular destination for residents and tourists.

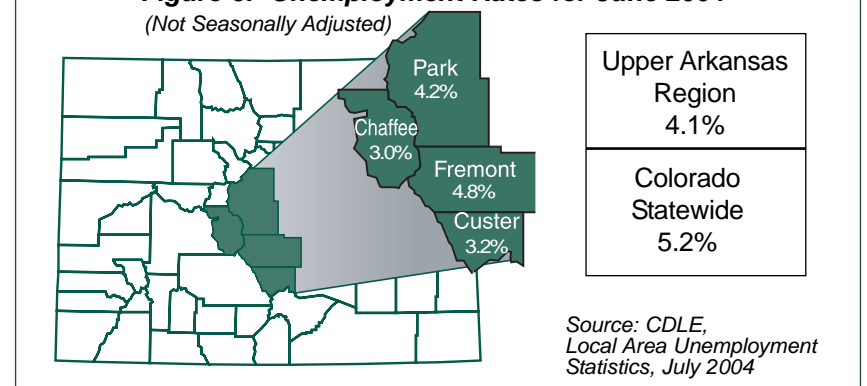
While Fremont County cannot claim title to an abundance of 14,000-foot mountain peaks, it can lay claim to the Royal Gorge Bridge—the world's highest suspension bridge hovering 1,053 feet over the Arkansas River. Outdoor activities are just as popular here as in neighboring counties. Cañon City is the primary business district with a metropolitan population of over 25,000. Fremont County's unemployment rate of 4.8% is higher than the region's, but is below the state's of 5.2%.

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



Source: CDLE, Local Area Unemployment Statistics, July 2004

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



Source: CDLE, Local Area Unemployment Statistics, July 2004

Regional Information —continued

Park County is one of Colorado's oldest counties, established in 1861. It is encompassed by Pike and San Isabelle National forests, but is most remembered for South Park – a lush valley of ranch and recreation land. Park County's unemployment rate is 4.2%, just slightly 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.

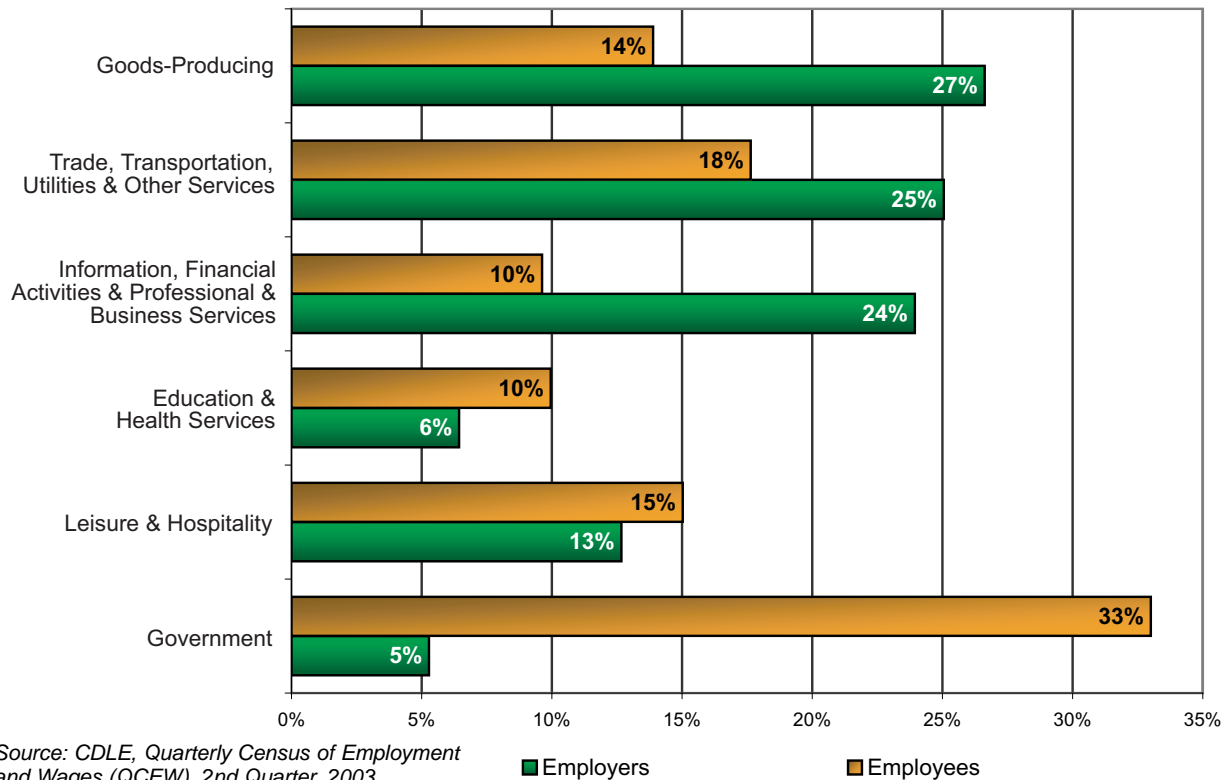
Park County's main business district is Fairplay, although Main Street in Bailey is a great spot for food, gifts, sundries, clothing, and all your camping and hunting supplies. Though one may feel as if the city has been left far behind, a café in Bailey offering high-speed internet connections for laptop computers may prove otherwise.

Figure 7 shows the employment breakdown for each of the JVS sectors during the second 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 (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. One-fourth of the area's employers are in the Trade, Transportation, Utilities, & Other Services sector. There is still a significant share of employers among the now separate service categories like Information, Financial Activities, and Professional & Business Services.

Figure 7: Upper Arkansas Region Employers and Employees, 2nd Quarter, 2003



Source: CDLE, Quarterly Census of Employment and Wages (QCEW), 2nd Quarter, 2003



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, and Manufacturing) remain combined, results for the previously Service-Producing industries are broken down into further detail (*Figure 8*).

During the survey period, an estimated 252 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% vacancy rate as well, implying there were about as many vacant 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 0.5%.

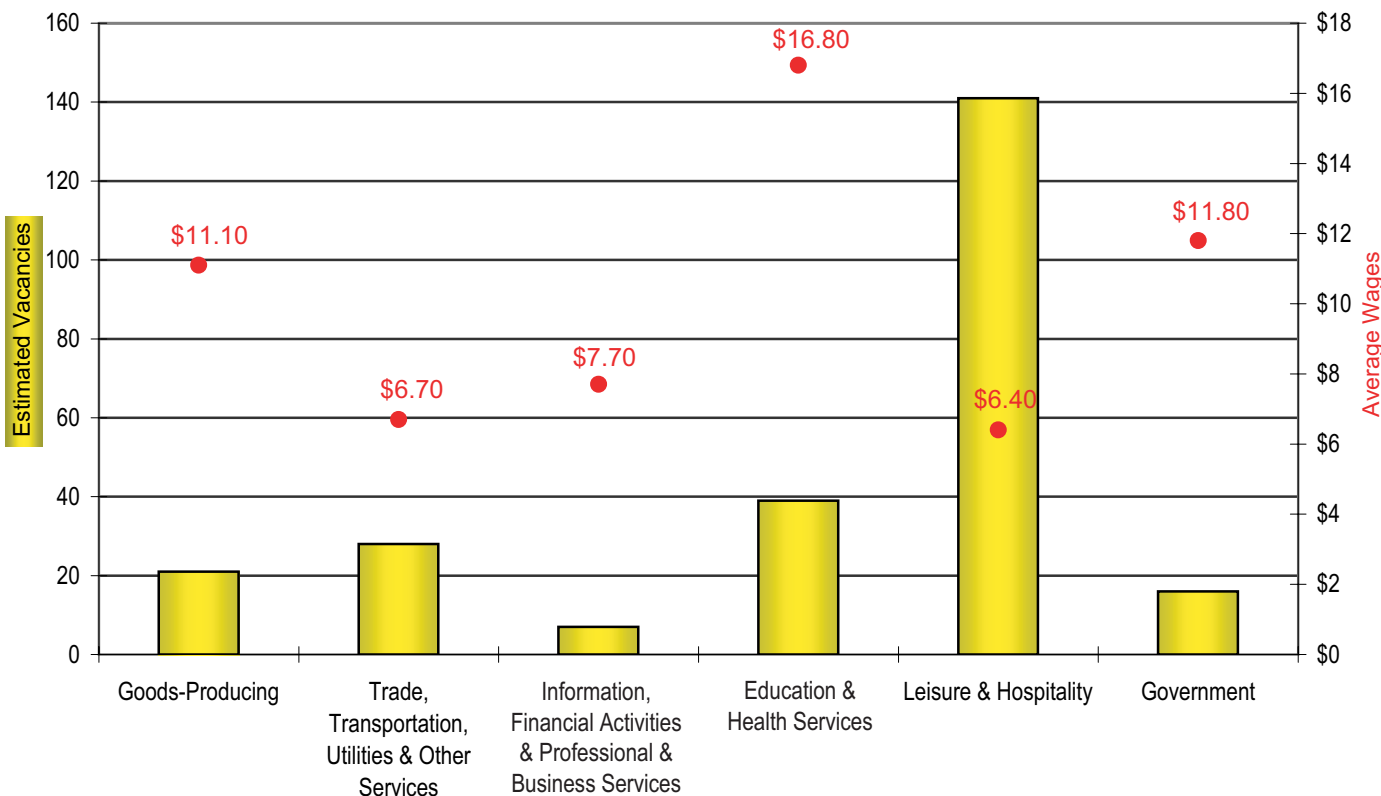
While it may seem as if there is little or no new activity according to this summer's vacancy rate, the economy has picked up and new and existing job opportunities are being filled prior to advertising—thanks to the efforts of the local Workforce Centers. In the Upper Arkansas Region, the Cañon City and the Salida Workforce Centers are the two main facilities offering employment

services to both firms and job seekers. Trained Labor Specialists help match job seekers and employers, maximizing employer job listing exposure and expanding employment opportunities to job seekers. With the efficiency of the local Workforce Centers, many job seekers are matched with firms prior to firms resorting to advertising.

Seven percent of employers responding to the survey report having at least one vacancy. This is less than last summer's report where 12% of the responding employers reported the same. Furthermore, 4% of all responding employers report having more than one vacancy.

For this survey, there are fewer than 20 vacancies in the Government and Information, Financial Activities, and Professional &

Figure 8: Estimated Vacancies and Average Wages by JVS Sectors



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

Business Services JVS sectors. Within the Government sector, most of the job vacancies include teachers, nurses, and clerical workers.

Among vacancies in Education & Health Services, 68% are in Health Services as registered and licensed practical nurses as well as therapists and certified nursing assistants. Primary and secondary school teachers make up most of the remaining vacancies. Fifty-six percent of all vacancies for this report are in the Leisure & Hospitality JVS sector, with a majority concentrated in Accommodation & Food Services occupations such as cooks and wait staff. There are nearly 20% more vacancies in Leisure & Hospitality compared to last year—a positive sign for travel and tourism and one of the initial signs of an expanding economy.

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 \$8.20 per hour, the highest average wage is found in the Education & Health Services sector due to a number of vacancies for specialized medical technicians. 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 sector. This includes a variety of jobs ranging from production workers, requiring little or no education beyond high school, to electricians and mechanics which require some degree of postsecondary education.

Small to mid-size firms account for 71% of total vacancies in the Upper Arkansas Region (*Figure 10*). Large companies have 23% and Government agencies have only 6% of all vacancies. The highest concentration of vacancies within the large company category is found among health care occupations followed by restaurant personnel in the Leisure & Hospitality JVS sector. High levels of vacancies are also found among various retail positions in the Trade, Transportation, Utilities & Other Services sector.

Figure 9: Reported Average Wage Ranges by JVS Sectors

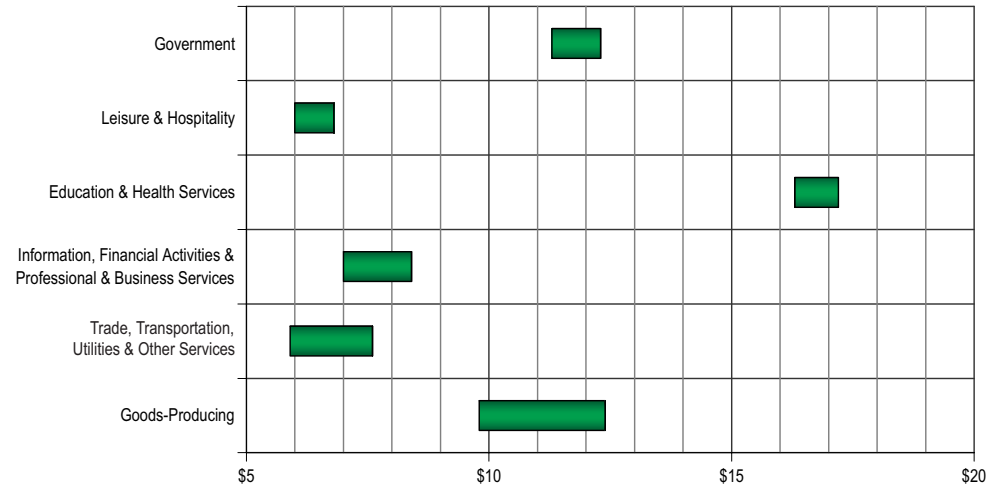
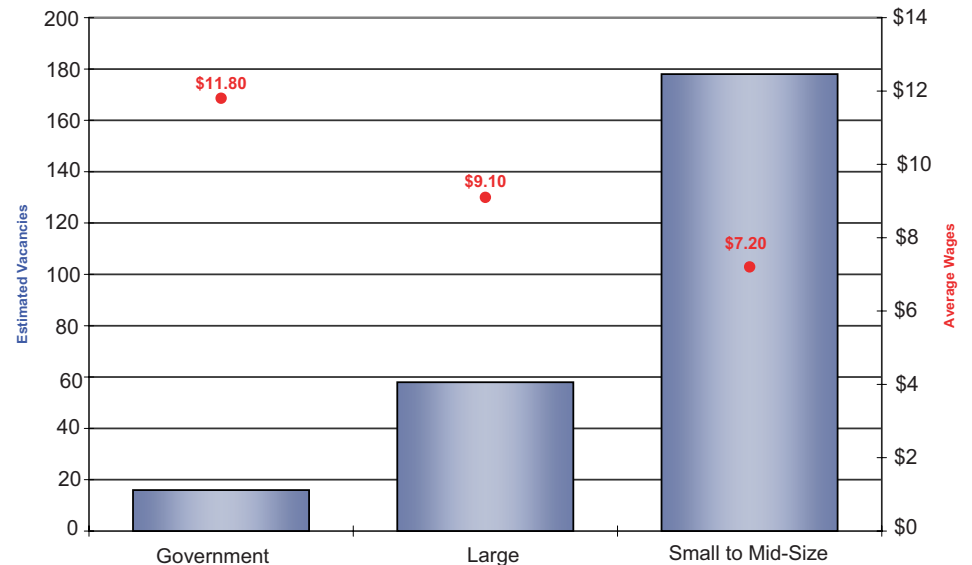


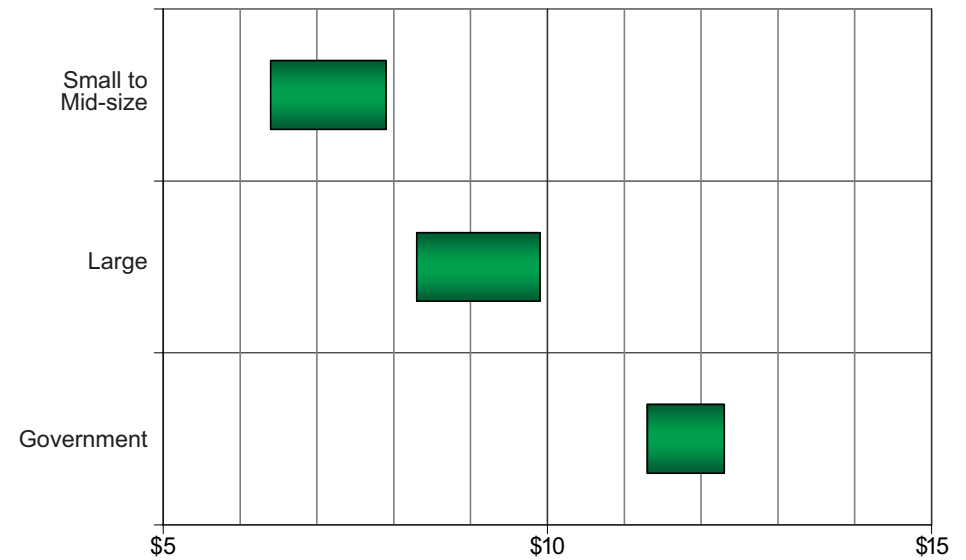
Figure 10: Estimated Vacancies and Average Wages by Employer Size



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

According to the survey, small to mid-size firms offer the lowest average wage. While many vacancies in this size category are low-wage jobs for unskilled applicants, others include medical personnel and skilled machine operators who are typically paid higher wages. The higher-paid positions require postsecondary education, ranging from vocational training/certification to a bachelor's degree. Large companies offer an average of \$9.10 per hour—an amount higher than the Upper Arkansas Region's overall average. *Figure 11* shows that vacancies in government establishments offer the highest wages. These are occupations such as secondary schoolteachers, emergency dispatchers, nurses, secretaries, and highway maintenance workers—all requiring postsecondary education.

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. 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, 40% of the reported vacancies are for full-time permanent positions (*Figure 12*) and 30% are reported to be part-time permanent. Last year at this time, 64% 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, over the last few surveys there has been a decline in full-time opportunities and an increase in part-time opportunities. 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.

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 \$8.20 per hour.

Figure 12: Vacancies by Employment Status

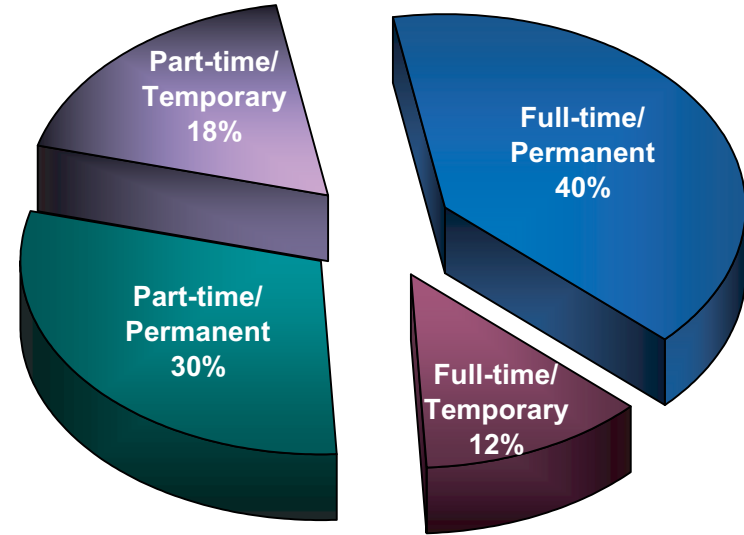
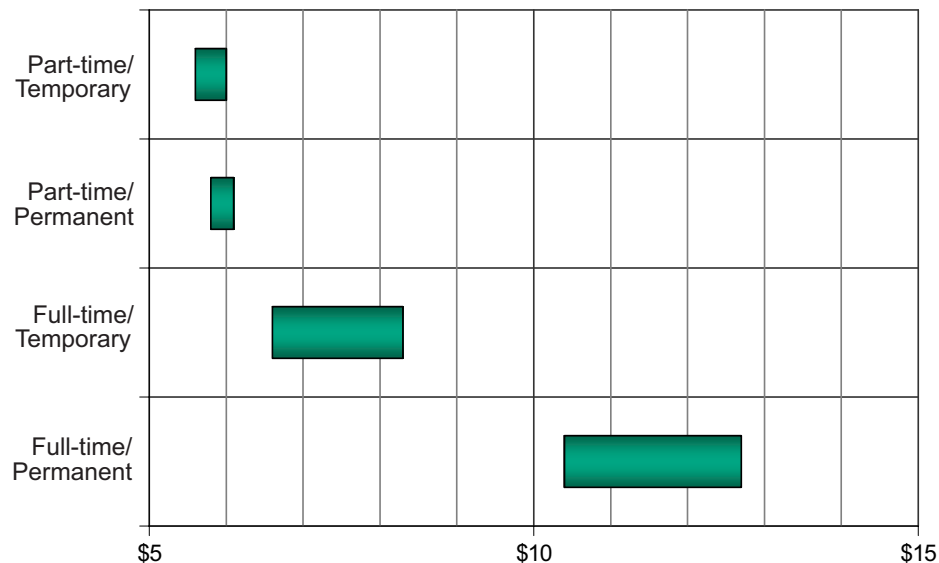


Figure 13: Reported Average Wage Ranges by Employment Status



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. Only 37% of the positions reported by employers in the Upper Arkansas Region require education beyond high school (*Figure 14*). Twenty-four percent of all vacancies require a high school degree or GED equivalency while 39% 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. Twenty-one percent of the vacancies require Vocational Training/Certification or a two-year degree and an additional 14% of the vacancies require a bachelor’s degree. Last year at this time, 33% of the open positions required the applicant to be educated beyond high school and only 4% required a bachelor’s degree. The summer of 2002 showed a different need; 53% of the vacancies required postsecondary education with 33% demanding a bachelor’s degree.

Most of the area’s vacancies require no formal education but instead, require on-the-job training. While many restaurant positions require applicants 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.

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*).

Figure 14: Vacancies by Education

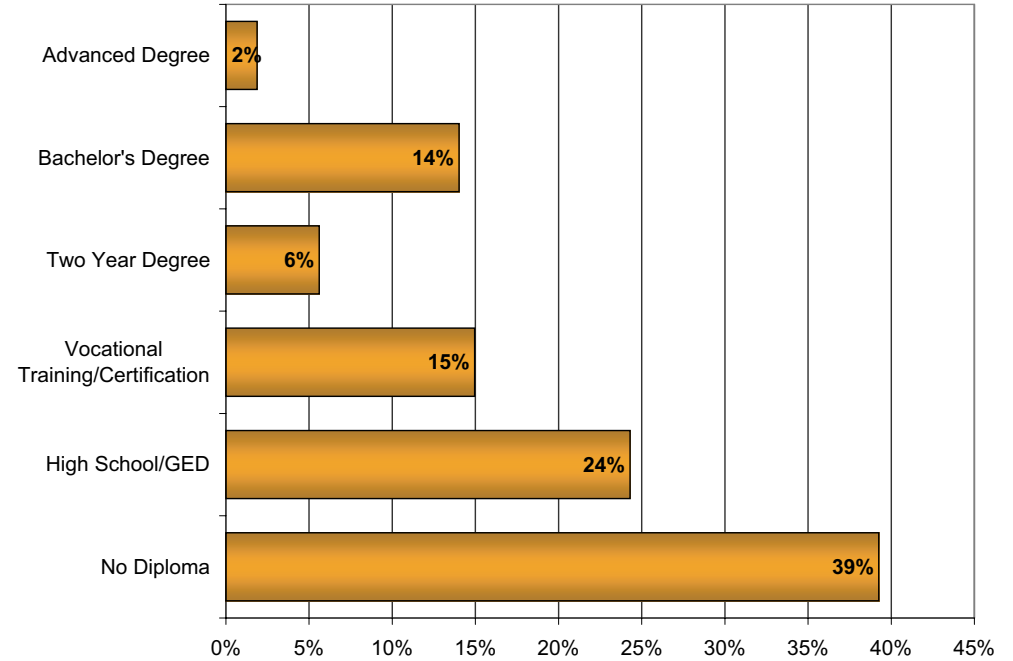
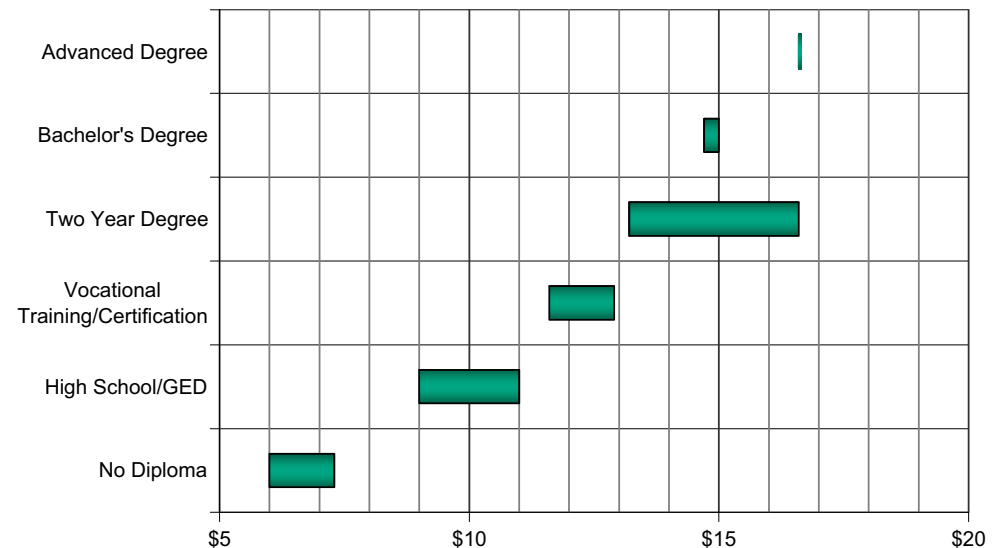
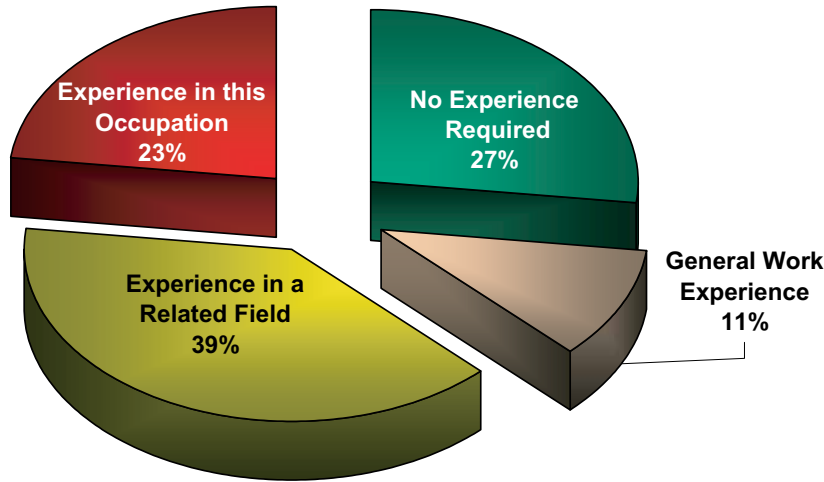


Figure 15: Reported Average Wage Ranges by Education



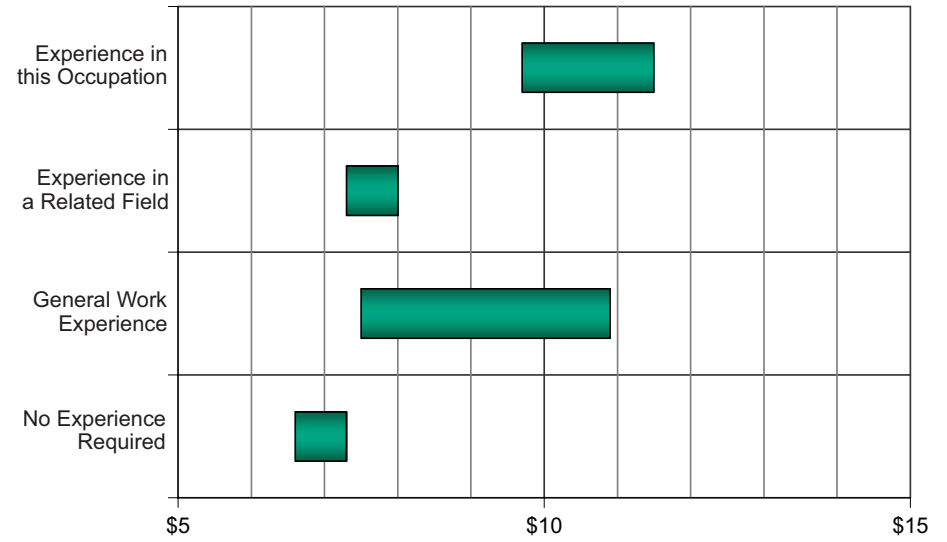
Survey Findings *Vacancies: Employment Status, Education and Experience Requirements—continued*

Figure 16: Vacancies by Experience



Employers require the applicant to have experience in a related field or in the occupation for 62% of all vacancies. However, 27% 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. Last year at this time, 51% of all vacancies required experience in a related field or within the occupation while 40% did not ask for any experience at all.

Figure 17: Reported Average Wage Ranges by Experience



As with increasing levels of education, employers are willing to pay higher wages for added proficiency. Vacancies requiring experience in a related field, 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 when lower wages were offered for vacancies not requiring much experience and higher wages were offered to those requiring high levels of experience.

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 has 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. Eighty-seven percent of the responding employers report that job vacancies are not difficult to fill, indicating the availability of workers has helped make the hiring process easier for employers (*Figure 18*). In fact, employers report that 12% of all vacancies are somewhat difficult to fill and only 1% are very difficult to fill – a total of only 13% associated with some level of hiring difficulty. This is similar to last summer's report although there are a much higher percentage of vacancies that are considered not difficult to fill and a much smaller percentage of vacancies considered difficult to fill.

Based on this survey's data, positions that are perceived as difficult or somewhat difficult to fill are nurses, and other medical occupations as well as electricians and mill operators, of which half have postsecondary educational requirements.

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. Some employers may consider a vacancy as difficult to fill when it has been open for 30 to 60 days, while 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. However, more vacancies are easier to fill, with 71% of the vacancies open for less than 30 days (*Figure 19*).

Figure 18: Vacancies by Difficulty to Fill

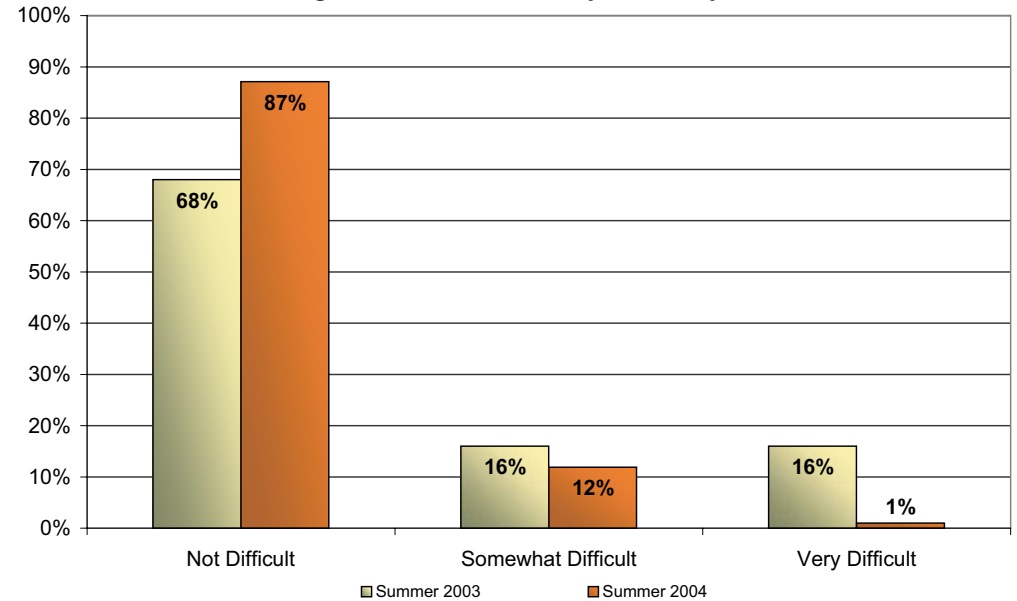
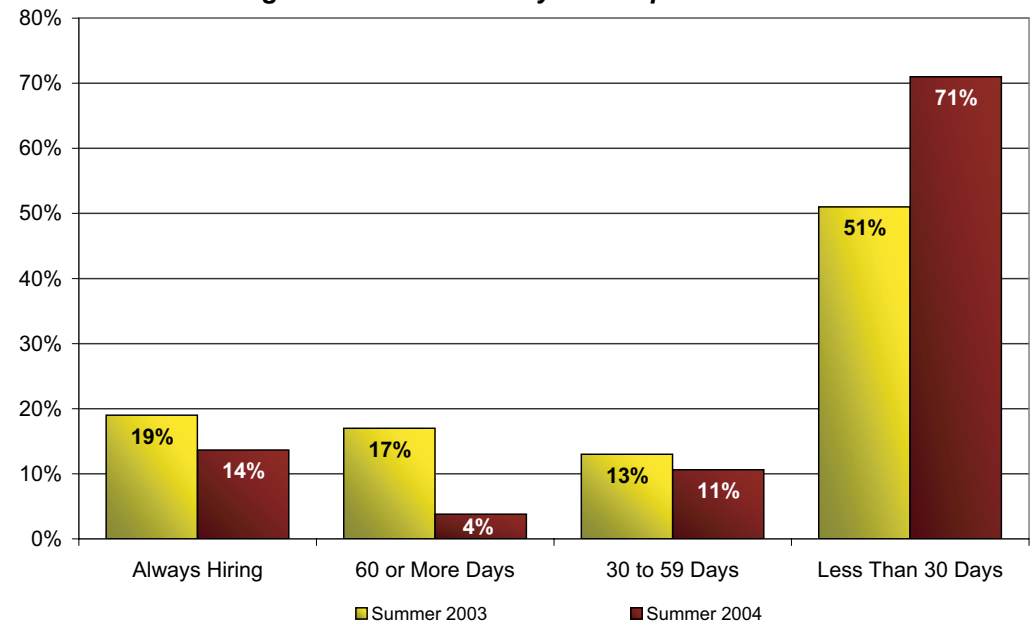


Figure 19: Vacancies by Time Open for Hire

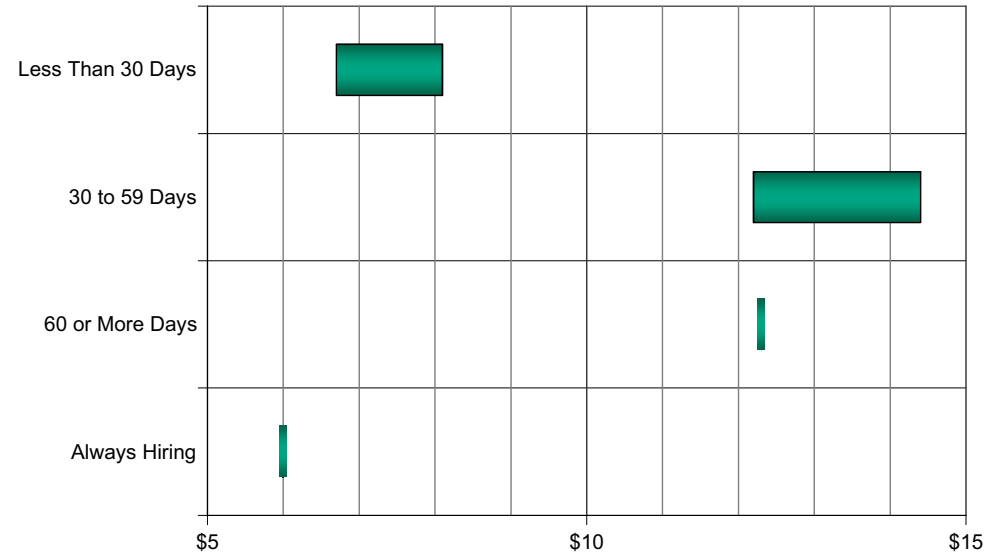


Survey Findings *Vacancies: Difficulty to Fill and Time Open for Hire —continued*

Only 4% of the vacancies are reported as open for 60 days or more, down from 17% last year at this time. These are medical, dental, and teaching positions that require the applicant to have a minimum of vocational training/certification or a bachelor's and experience in the occupation. Among the 11% of the vacancies that are open for 30 to 59 days, about half are college faculty positions that require a minimum of a bachelor's degree as well as experience, and others are for openings such as mill operators and mechanics—those requiring experience but do not demand high levels of education.

Vacancies considered not difficult to fill are offered with average wages close to or less than the overall average of \$8.20 per hour. Positions perceived to be somewhat difficult to fill add approximately \$4 to the average starting wage offered. 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 for vacancies that are always open for hire, while higher wages are offered for positions open for a moderate amount of time. Most of the positions that are filled quickly are in the Leisure & Hospitality JVS sector and pay lower wages. Still, vacancies do exist for jobs such as mechanics and ceramics production workers that are open less than 30 days yet pay \$9 to \$11 to start.

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



Survey Findings

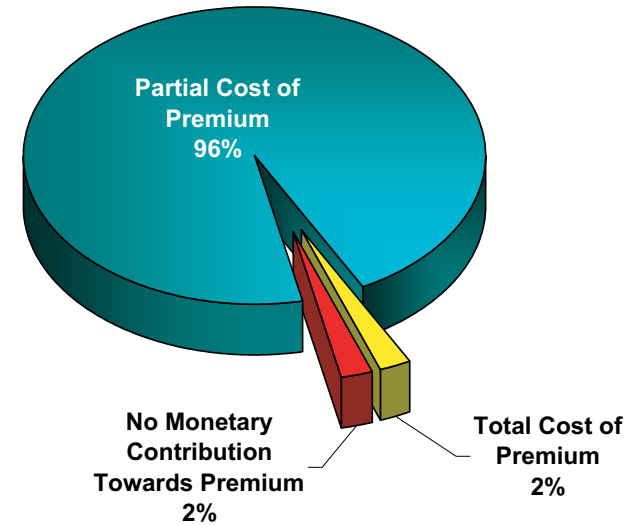
Medical Insurance

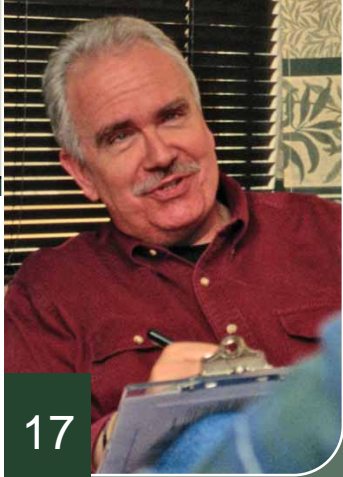
Of all the firms that responded to the survey, only about one-third offered information on medical insurance. Those that offer medical insurance usually pay a partial cost of the premium. Two percent do not contribute toward the premium, while two percent pay the total cost of the premium. The remaining vacancies are offered with the employer covering part of the cost. The average wage range offered for vacancies where the employer pays a partial cost of the premium is \$10.40 to \$12.60 per hour, higher than the region's overall average for this survey.

Sign-On Bonus

There are no sign-on bonuses reported for this survey. This type of compensation is usually used during times when employers are having difficulty attracting potential applicants.

Figure 21: Employers' Contribution to Medical Insurance





17

Upper Arkansas Region JVS Report

Introduction

Occupational Details

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. When it comes to filling a particular opening, the more detailed the information the better. Reporting vacancies at the individual occupation level is the most

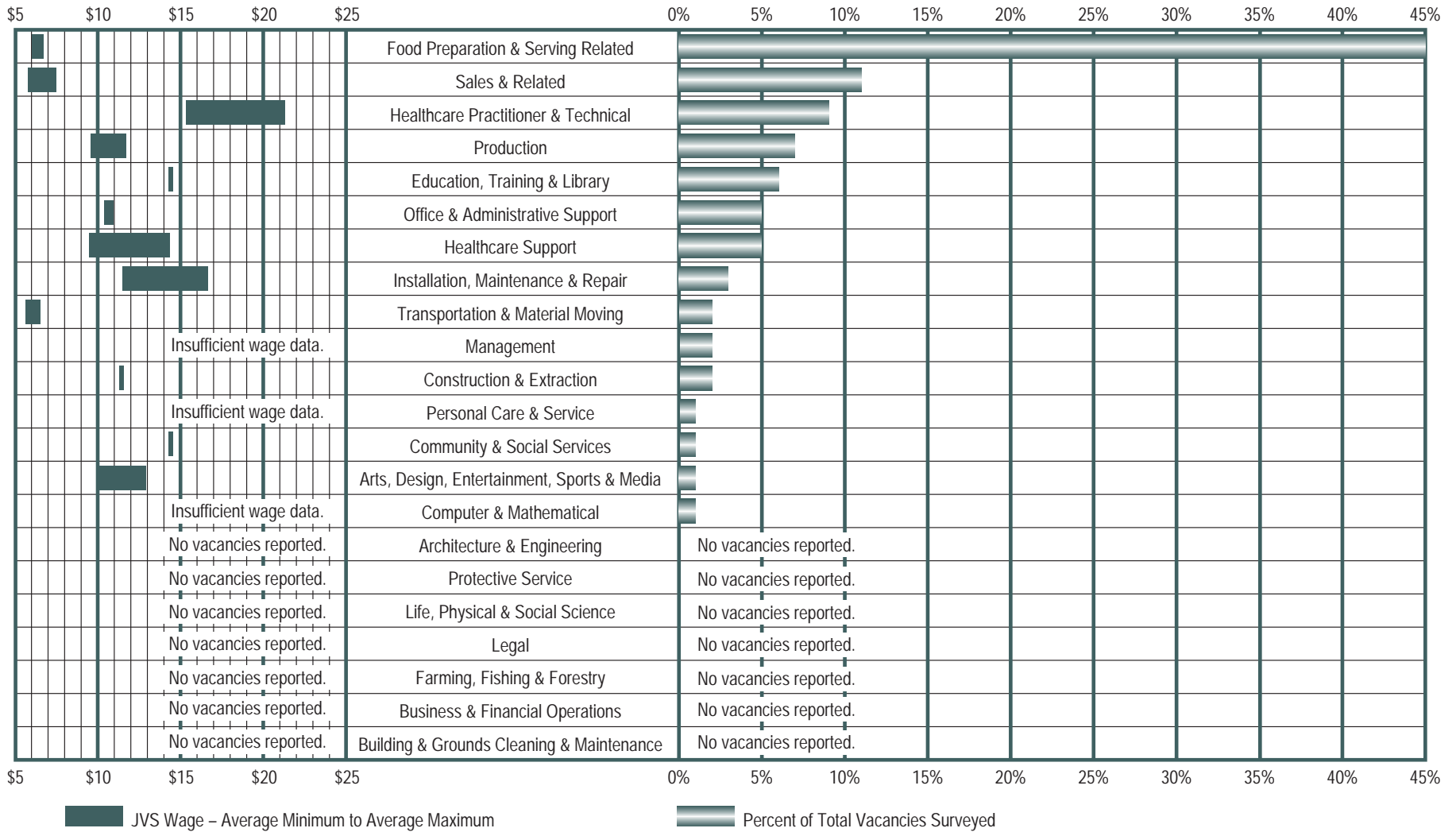
detailed information the survey can provide without breaking confidentiality with those employers who participated in the survey.

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 15 of the 23 major occupation groups. In past surveys, the occupational group reporting the greatest number of vacancies was Healthcare Practitioners & Technical. This survey period shows a change from this trend. The highest proportion of vacancies are found in Food Preparation & Serving Related, with the second highest in the Sales & Related occupational group. Healthcare Practitioner & Technical occupations are still in high demand, keeping this group among the top five occupational groups. This change in the demand for labor is an indication that the economy is more favorable than in the past. With easy-to-fill jobs in the number one spot and more technical job vacancies dropping, the nature of unemployment could be converting from cyclical and structural to frictional and seasonal. The least in demand occupations are found in Computer & Mathematical; Arts, Design, Entertainment, Sports & Media; and Community & Social Services.

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—Healthcare Practitioner & Technical—typically requires high levels of education and experience.

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 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.

Vacancies estimated and reported along with wages offered are displayed in *Table 1* for those occupations where at least four vacancies are estimated.

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. However, in addition to the number found, vacancies are estimated for occupations reported by small to mid-size private firms. The estimated vacancies are calculated per the current mix of occupations filled in the region at the major occupational group level. Estimated vacancies by major occupational group are then proportionally distributed among the specific detailed occupations reported in the survey.

Vacancies Found

The number of vacancies by occupation found in the survey.

Average JVS Wage Offered

The average of any and all wages reported in the survey is given for each occupation. The average JVS wage is based solely on information provided by employers reporting vacancies in this survey, and does not reflect information from other sources or wages paid for currently filled positions.

Average OES Wage Paid

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. Data are collected for the three-year rolling OES panels, concluding in May 2003. A complete description of the OES survey is available on the Internet at: <http://www.bls.gov/>.

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

Table 1: Occupations with Four or More Estimated Vacancies

					Occupational Employment Statistics Wage Data (2003)							
					Average Wages			Percentile Distribution				
SOC Code	SOC Occupational Table	Vacancies Estimated	Vacancies Found	Average JVS Wage	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
35-3031	Waiters and Waitresses	31	26	\$5.20	\$6.06	\$6.36	\$6.52	\$5.53	\$5.81	\$6.26	\$6.72	\$7.02
35-2014	Cooks, Restaurant	19	16	\$8.30	\$6.03	\$7.94	\$8.90	\$5.81	\$6.54	\$7.70	\$8.67	\$11.43
41-2011	Cashiers	17	5	\$8.50	\$6.13	\$8.08	\$9.05	\$5.87	\$6.57	\$7.68	\$8.77	\$11.09
35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	15	13	\$6.00	\$6.06	\$6.07	\$6.07	\$5.52	\$5.77	\$6.19	\$6.60	\$6.85
47-2111	Electricians	12	2	†	\$10.61	\$19.75	\$24.33	\$9.79	\$11.37	\$15.75	\$22.10	\$26.46
41-2031	Retail Salespersons	12	12	†	\$6.20	\$9.84	\$11.65	\$5.89	\$6.50	\$7.68	\$10.15	\$15.23
29-1111	Registered Nurses	9	9	†	\$17.05	\$22.30	\$24.92	\$15.49	\$18.68	\$22.22	\$25.87	\$29.07
43-9061	Office Clerks, General	9	2	†	\$6.20	\$9.89	\$11.73	\$5.92	\$6.71	\$9.07	\$11.90	\$15.71
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	8	7	\$6.70	\$6.08	\$6.71	\$7.02	\$5.58	\$5.90	\$6.44	\$6.97	\$8.98
43-3071	Tellers	8	1	†	\$8.03	\$8.84	\$9.25	\$7.53	\$7.97	\$8.72	\$9.65	\$10.78
* 43-9199	Office and Administrative Support Workers, All Other	8	1	†	†	†	†	†	†	†	†	†
53-3031	Driver/Sales Workers	7	3	†	\$6.10	\$10.02	\$11.97	\$5.82	\$6.47	\$8.82	\$11.58	\$15.85
31-1012	Nursing Aides, Orderlies, and Attendants	7	7	†	\$6.99	\$9.33	\$10.51	\$6.41	\$7.71	\$9.42	\$10.87	\$12.63
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	5	2	†	\$13.24	\$17.47	\$19.58	\$12.27	\$13.97	\$16.28	\$19.57	\$26.55
* 29-2021	Dental Hygienists	5	1	†	\$22.00	\$32.00	\$37.00	\$17.00	\$29.00	\$35.00	\$40.00	\$43.00
* 25-1022	Mathematical Science Teachers, Postsecondary	5	2	†	\$33,030	\$52,410	\$62,100	\$30,340	\$37,090	\$45,830	\$63,190	\$84,760
* 25-1071	Health Specialties Teachers, Postsecondary	5	2	†	†	†	†	†	†	†	†	†
* 51-4035	Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	5	5	†	\$10.00	\$15.00	\$17.00	\$10.00	\$11.00	\$14.00	\$17.00	\$21.00

† Insufficient wage data available

* OES wages reported for Colorado statewide

Occupational Details *—continued*

Table 2: Occupations with Fewer than Four Estimated Vacancies

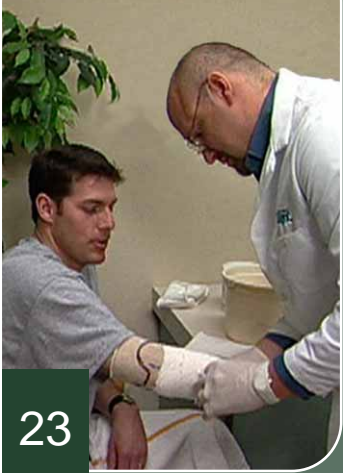
		Occupational Employment Statistics Wage Data (2003)							
		Average Wages			Percentile Distribution				
SOC Code	SOC Occupational Table	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
* 51-2099	Assemblers and Fabricators, All Other	\$8.00	\$11.00	\$12.00	\$7.00	\$9.00	\$10.00	\$12.00	\$14.00
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	\$6.07	\$7.40	\$8.06	\$5.69	\$6.18	\$6.96	\$8.57	\$10.04
11-9021	Construction Managers	\$17.55	\$23.79	\$26.91	\$16.14	\$18.53	\$21.74	\$26.82	\$35.60
35-2011	Cooks, Fast Food	\$5.90	\$6.99	\$7.53	\$5.57	\$6.06	\$7.02	\$8.02	\$8.62
35-2012	Cooks, Institution and Cafeteria	\$6.77	\$9.25	\$10.49	\$6.18	\$7.39	\$9.26	\$10.83	\$12.65
41-2021	Counter and Rental Clerks	\$6.08	\$8.21	\$9.27	\$5.83	\$6.54	\$7.85	\$9.66	\$11.40
35-9021	Dishwashers	\$6.05	\$6.85	\$7.25	\$5.63	\$6.07	\$6.80	\$7.82	\$8.45
* 11-9039	Education Administrators, All Other	†	†	†	†	†	†	†	†
11-9032	Education Administrators, Elementary and Secondary School	\$49,055	\$57,402	\$61,576	\$45,268	\$51,023	\$56,849	\$62,704	\$73,750
21-1012	Educational, Vocational, and School Counselors	\$16.91	\$21.16	\$23.28	\$15.88	\$17.78	\$21.48	\$24.66	\$26.78
35-2021	Food Preparation Workers	\$6.67	\$8.06	\$8.75	\$6.17	\$7.12	\$8.00	\$8.89	\$10.32
* 11-9051	Food Service Managers	\$15.00	\$24.00	\$29.00	\$14.00	\$17.00	\$21.00	\$28.00	\$41.00
* 25-1124	Foreign Language and Literature Teachers, Postsecondary	\$33,320	\$50,060	\$58,430	\$29,940	\$37,890	\$47,910	\$57,650	\$75,160
* 29-2099	Healthcare Practitioner and Technical Workers, All Other	†	†	†	†	†	†	†	†
* 47-4051	Highway Maintenance Workers	\$12.00	\$16.00	\$18.00	\$12.00	\$14.00	\$17.00	\$20.00	\$21.00
* 25-1125	History Teachers, Postsecondary	\$36,300	\$54,760	\$64,000	\$33,600	\$40,520	\$50,880	\$65,490	\$84,880
* 49-9041	Industrial Machinery Mechanics	\$14.00	\$19.00	\$22.00	\$12.00	\$16.00	\$19.00	\$23.00	\$27.00
* 43-4199	Information and Record Clerks, All Other	†	†	†	†	†	†	†	†
29-2061	Licensed Practical and Licensed Vocational Nurses	\$11.60	\$14.02	\$15.23	\$11.15	\$12.16	\$13.86	\$16.07	\$17.39
* 15-1071	Network and Computer Systems Administrators	\$21.00	\$31.00	\$36.00	\$19.00	\$24.00	\$30.00	\$38.00	\$45.00
* 29-1122	Occupational Therapists	\$18.00	\$24.00	\$27.00	\$18.00	\$20.00	\$24.00	\$27.00	\$32.00
* 51-9123	Painting, Coating, and Decorating Workers	\$9.00	\$12.00	\$14.00	\$8.00	\$9.00	\$11.00	\$14.00	\$17.00

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

		Occupational Employment Statistics Wage Data (2003)							
		Average Wages			Percentile Distribution				
SOC Code	SOC Occupational Table	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
* 31-2021	Physical Therapist Assistants	\$11.00	\$16.00	\$18.00	\$9.00	\$14.00	\$16.00	\$18.00	\$21.00
* 43-5031	Police, Fire, and Ambulance Dispatchers	\$12.00	\$17.00	\$19.00	\$11.00	\$14.00	\$17.00	\$20.00	\$22.00
* 29-2034	Radiologic Technologists and Technicians	\$15.00	\$20.00	\$22.00	\$14.00	\$17.00	\$20.00	\$23.00	\$26.00
39-9032	Recreation Workers	\$6.84	\$10.82	\$12.81	\$6.28	\$7.29	\$8.52	\$12.38	\$21.69
* 27-3022	Reporters and Correspondents	†	†	†	†	†	†	†	†
25-2031	Secondary School Teachers, Except Special and Vocational Education	\$28,483	\$36,486	\$40,487	\$26,079	\$30,203	\$35,294	\$43,300	\$49,709
43-6014	Secretaries, Except Legal, Medical, and Executive	\$7.49	\$11.51	\$13.53	\$6.91	\$8.37	\$10.90	\$13.77	\$18.07
53-3033	Truck Drivers, Light or Delivery Services	\$9.28	\$15.98	\$19.33	\$9.03	\$10.09	\$12.79	\$24.33	\$26.79
25-2032	Vocational Education Teachers, Secondary School	\$29,988	\$39,608	\$44,417	\$28,531	\$31,443	\$38,218	\$49,019	\$53,799

† Insufficient wage data available

* OES wages reported for Colorado statewide



Education & Healthcare

Sector Briefs

Education & Healthcare firms represent 9% of the region's employers and 12% of the Upper Arkansas workforce. Sixteen percent of the area's vacancies are in this JVS sector.

Under the former Standard Industrial Classification (SIC), Education & Health Services were classified under Services and inseparable from other types of service industries. Since the Colorado Department of Labor & Employment began keeping track of employment information using the North American Industrial Classification System (NAICS) in 2001, more detailed information has been available on this industry group. In the Upper Arkansas Region, 23% of the firms in this

JVS sector are in Educational Services and 77% are in Healthcare & Social Assistance.

Ten percent of these firms are classified as large employers (75 or more employees) and the remaining 90% are small to mid-size firms. Over 3,000 individuals work in these firms: 35% of the workers are concentrated among the large firms, while 65% can be found among smaller firms.

For this survey, vacancies in Educational Services include college faculty occupations; professors in math, history, Spanish, and nursing. The majority of vacancies in Healthcare & Social Assistance are for registered nurses, occupational therapists and certified nursing assistants. Additional vacancies in healthcare-related establishments are for occupations such as cooks and office assistants.



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. 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 30% 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 30% of the employment in the region is found in large and government employers that make up only 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.

Appendix: Methodology —continued

Survey Sample

The Upper Arkansas Region survey was conducted from June 3rd through 14th, 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 56% 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 almost 41% of the employment in the sample frame, while private industry employers make up the remaining 59%. Large firms account for 36% 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 64% of private industry employment.

The margin of sampling error for the overall vacancy estimate is plus or minus 13.2% meaning that in 95 out of 100 surveys the number of vacancies in the region would be between 219 and 285. 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 98% 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 27.

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

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 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

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

Appendix: NAICS —continued

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.

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

- ◆ 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 seven 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.

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

