

# Colorado

# Upper Arkansas Region

## Job Vacancy Survey Summer 2005

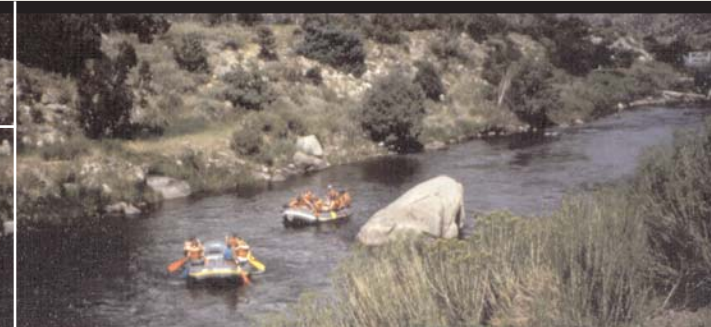


Photo Courtesy Colorado State Parks

Arkansas Headwaters Recreation Area

Survey Conducted May 30–June 10, 2005  
Released Summer 2005



Funding Provided in Part by  
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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**The unemployment rate and the level and growth rate of employment have been used as indicators of labor market conditions for decades.** While these indicators provide information about changes in the supply and demand for labor, they reveal 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.

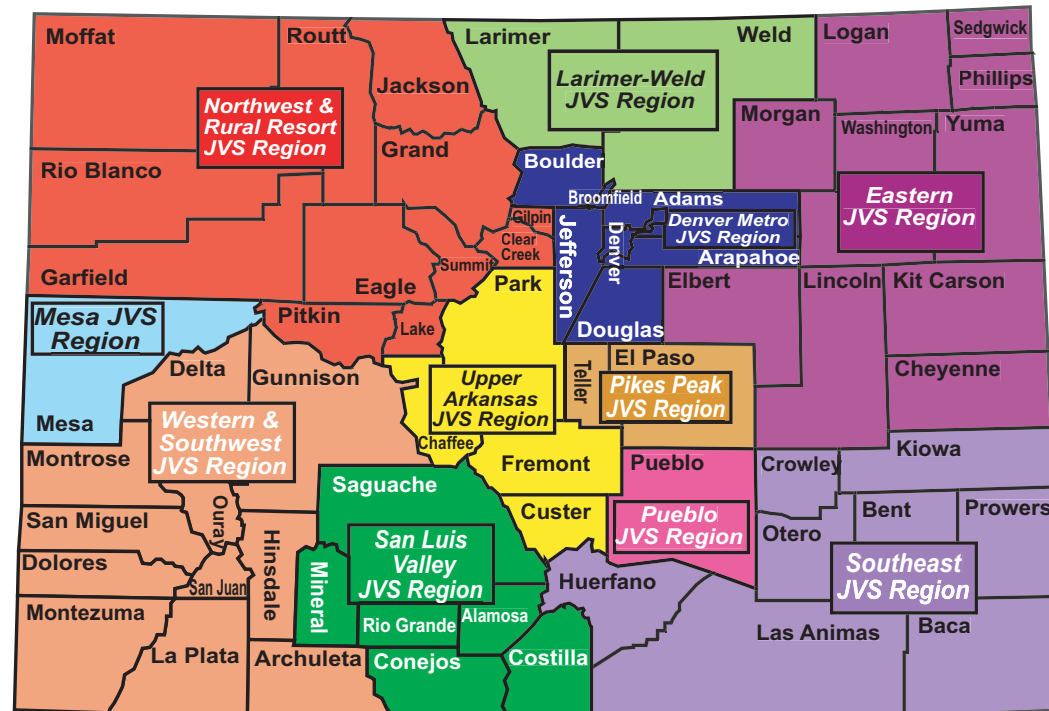
Job seekers and employers, as well as Workforce Centers and economic developers, need more than a measure of demand for workers at a specific point in time. They also need a measure of where in the economy that demand is located and what education and experience levels are most preferred. The Colorado 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 Workforce Research and Analysis staff would like to extend sincerest gratitude to all employers who participated. The analysis in this document would not be possible without their help.*

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.

**Figure 1: Colorado Job Vacancy Survey Regions**



**T**he summer 2005 Upper Arkansas Job Vacancy Survey was conducted from May 30th through June 10th, 2005. 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 512 employers, representing approximately 58% of the region's total employment, responded to the survey. Out of these, 26 were large employers (75 employees or more), 62 were Government employers, and 424 were from the small to mid-size category (five to 74 employees). The survey has a response rate of 81% and a cooperation rate of 99%. The margin of sampling error for the overall vacancy estimate is plus or minus 5.5%, or about 24 vacancies.

### Major Findings of the Survey:

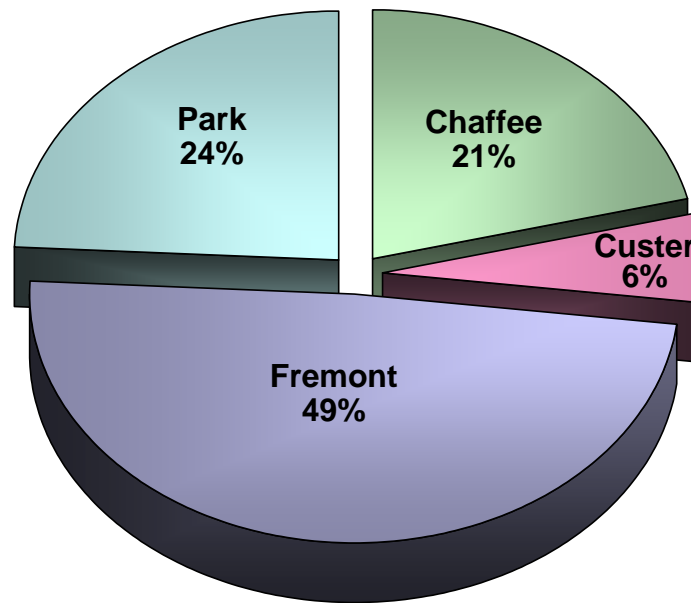
- ◆ It is estimated that a total of 218 jobs were open for hire in the Upper Arkansas Region during the survey period. ....Page 8
- ◆ Eleven percent of employers responding to the survey reported having at least one vacancy. ....Page 8
- ◆ The overall average wage for all reported vacancies is \$12.60 per hour. ....Page 9
- ◆ Thirty-seven percent of the estimated job openings are in Government and 27% are in Trade, Transportation, Utilities & Other Services. ....Page 10
- ◆ Forty-seven percent of the estimated vacancies are offered by small to mid-size employers and 16% by large employers. ....Page 10
- ◆ Three-fourths of all reported vacancies are for full-time/permanent positions and 16% are part-time permanent. ....Page 11
- ◆ Eighty-three percent of the reported vacancies are for full-time positions compared to 52% a year ago. ....Page 11
- ◆ One-third of all vacancies in this survey do not require high school completion while 29% require high school completion. ....Page 12
- ◆ Thirty-eight percent of all vacancies require post-secondary education. ....Page 12
- ◆ Sixty percent of all vacancies are considered not difficult to fill. This has changed significantly from a year ago when 87% of all vacancies were considered not difficult to fill. ....Page 14
- ◆ For this report, just over one-half of the reported vacancies were open for hire for less than 30 days. ....Page 15

**T**he Upper Arkansas Region includes Chaffee, Custer, Fremont and Park counties. The U.S. Census Bureau estimates the Region's 2004 population to be 85,035 people. Fremont County accounts for 55% of the population in the region. Chaffee and Park counties each have 20% of the population while Custer accounts for only 5% of the area's population. Population grew at a faster pace in Chaffee County between 2003 and 2004

than any of the Region's other counties; the number of persons living in Fremont County fell slightly over this period.

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 make up 24% and 21% of the area's employment, respectively, while Custer County accounts for 6% of the region's employment.

**Figure 2: Employment by County, June 2005**

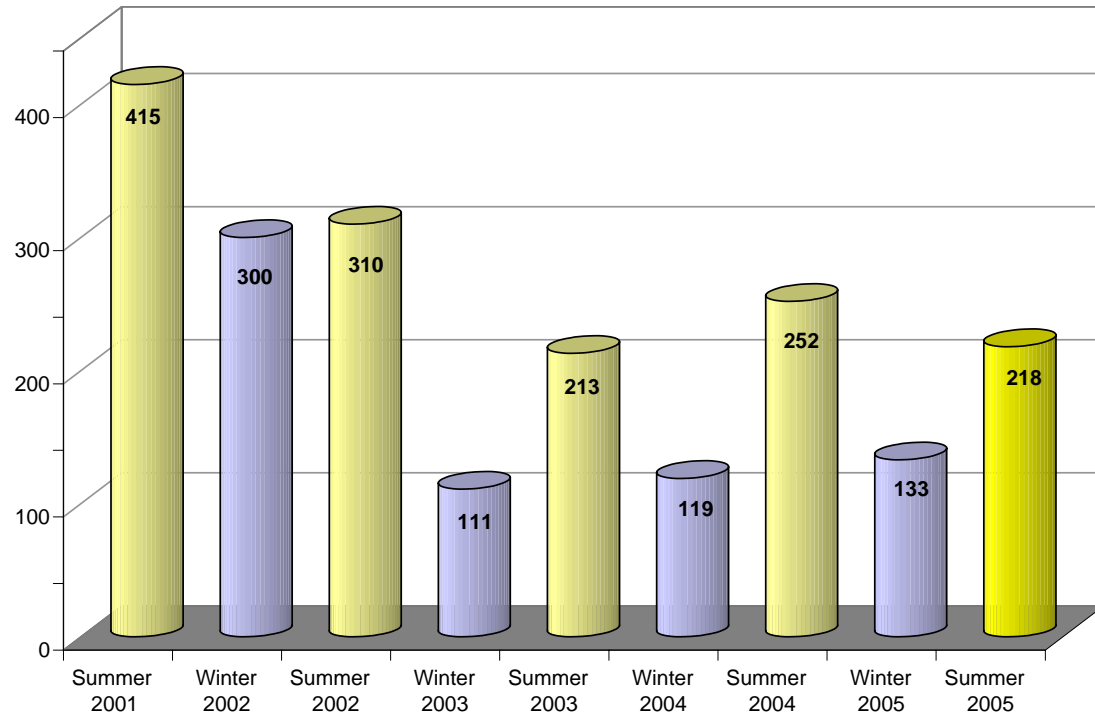


Source: CDLE, Local Area Unemployment Statistics, Released July 2005

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In the summer of 2001, the Colorado Department of Labor and Employment began collecting data on job vacancies in the Upper Arkansas Region. Employment increases each summer due to tourism and recreation related activities. Regional hiring typically expands in eating and drinking establishments, motels and other lodging businesses, recreation and amusement services, and transportation firms. Since the summer of 2001, job vacancies 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 continued to show an increase in job vacancies over both winter and summer surveys (*Figure 3*). However, job opportunities this summer appear to be less than the past several years as employers remain cautious in assessing business activity. With unemployment rates edging up, this could be an indication that employers are simply being cautious in offering positions.

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



	Summer 2001	Winter 2002	Summer 2002	Winter 2003	Summer 2003	Winter 2004	Summer 2004	Winter 2005	Summer 2005
<b>Vacancies</b>	415	300	310	111	213	119	252	133	218
<b>Employment</b>	37,698	33,631	37,994	33,943	38,774	35,773	38,975	35,759	37,876
<b>Unemployed</b>	1,244	1,967	1,734	1,954	1,861	1,625	1,685	1,799	2,161
<b>Unemployment Rate</b>	3.2%	5.5%	4.4%	5.4%	4.6%	4.3%	4.1%	4.8%	5.4%

*Source: CDLE, Local Area Unemployment Statistics, July 2005*

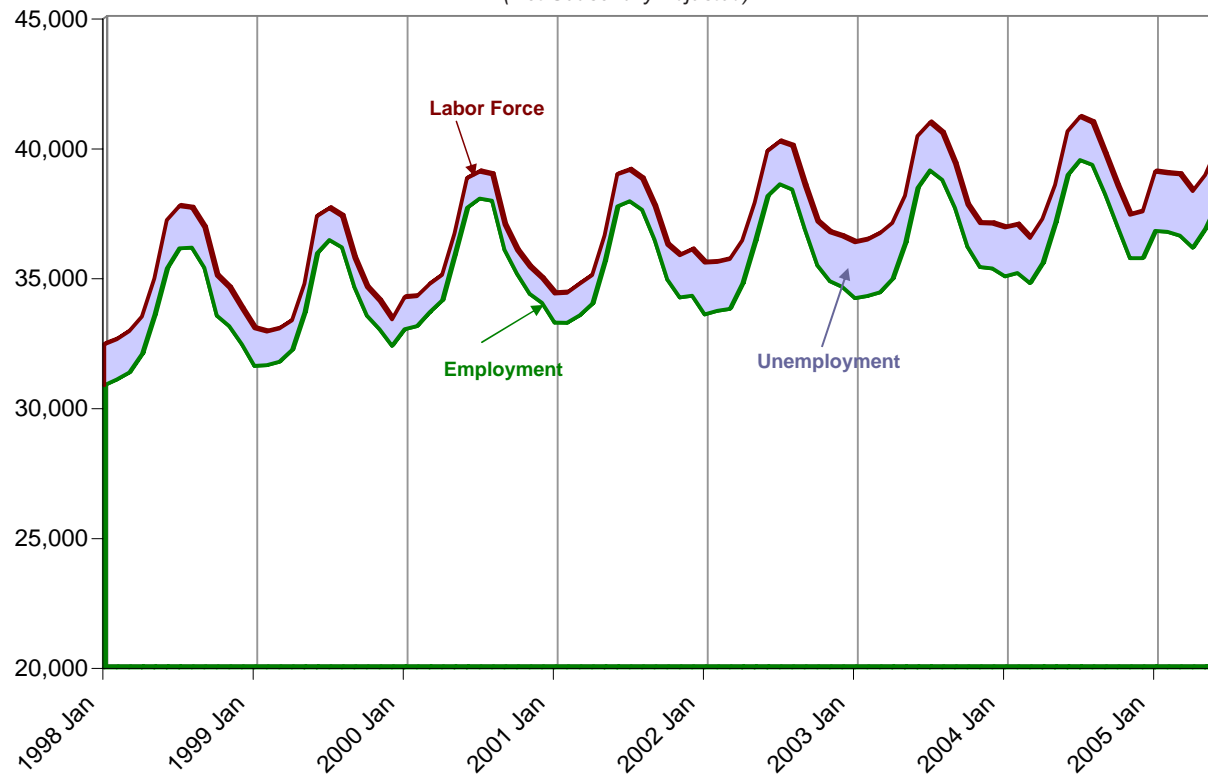
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The pronounced seasonal hiring patterns in the Upper Arkansas Region mean that both employment and labor force peak during mid-summer. Unemployment levels are higher than they were in the late 1990s and early 2000s, following the state and national trend, although the Region remains economically healthy. The jobless rate tends to jump each January and June. The remainder of each year employment opportunities 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. The rate of increase

in the Region's labor force slowed beginning mid-2001 reflecting the softening 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. Although the unemployment rate stood above 5% for the 2005 summer season, it remained below the 6.2% peak seen in March 2003.

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



Source: CDLE, Local Area Unemployment Statistics, July 2005

After steadily decreasing throughout the late 1990s, 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 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 6.0% in April 2005, then slightly declined.

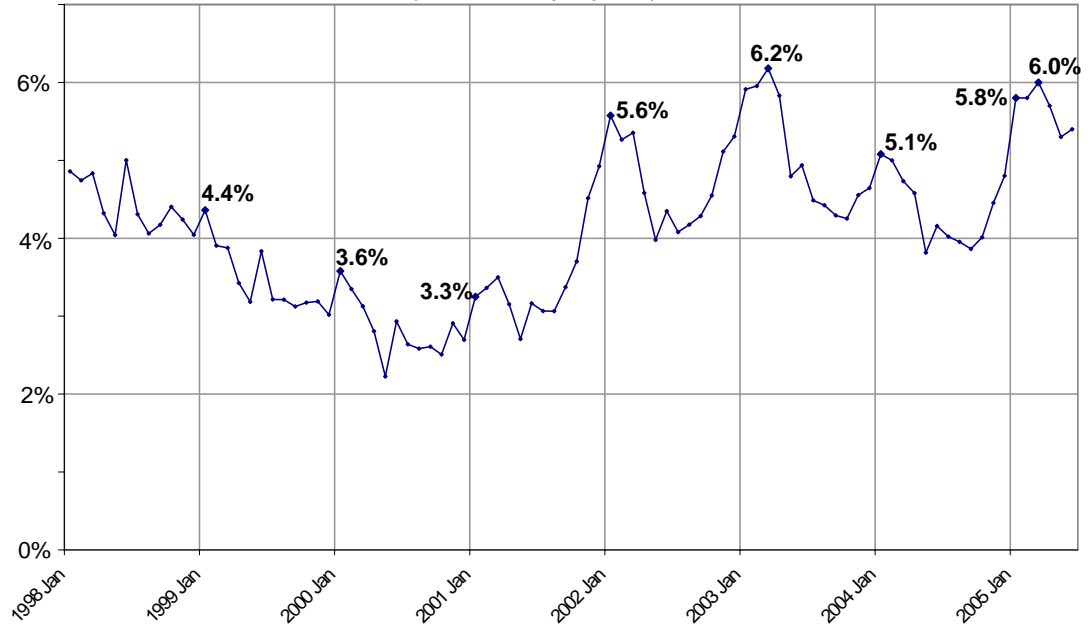
Figure 6 shows the most current unemployment statistics for the individual counties of the Upper Arkansas Region. Custer and Park counties have the lowest unemployment rates both at 4.3% in June. Both counties fall below the State average of 5.2%. The cities of Salida and Buena Vista are Chaffee County's 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 affordable 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 6.2% is higher than the Region's average of 5.4%.

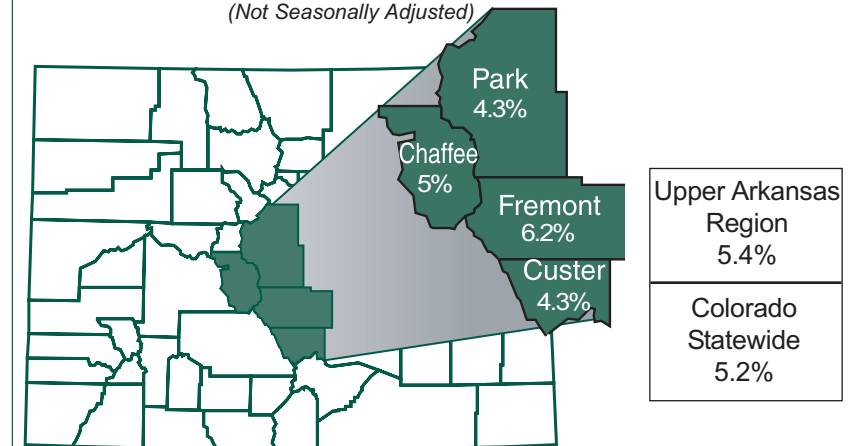
Park County is one of Colorado's oldest counties, established in 1861. It is encompassed by Pike and San Isabelle National forests, and is known for South Park—a lush valley of ranch and recreation land. Park County's unemployment rate of 4.3% is lower than the Region's average. Situated closer to the Denver Metro Area than the Region's other counties, residents often commute to Denver to work. Bailey has proved to be a popular community for relocation out of the Denver Metro area.

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



Source: CDLE, Local Area Unemployment Statistics, July 2005

**Figure 6: Unemployment Rates for June 2005**  
(Not Seasonally Adjusted)



Source: CDLE, Local Area Unemployment Statistics, Released July 2005

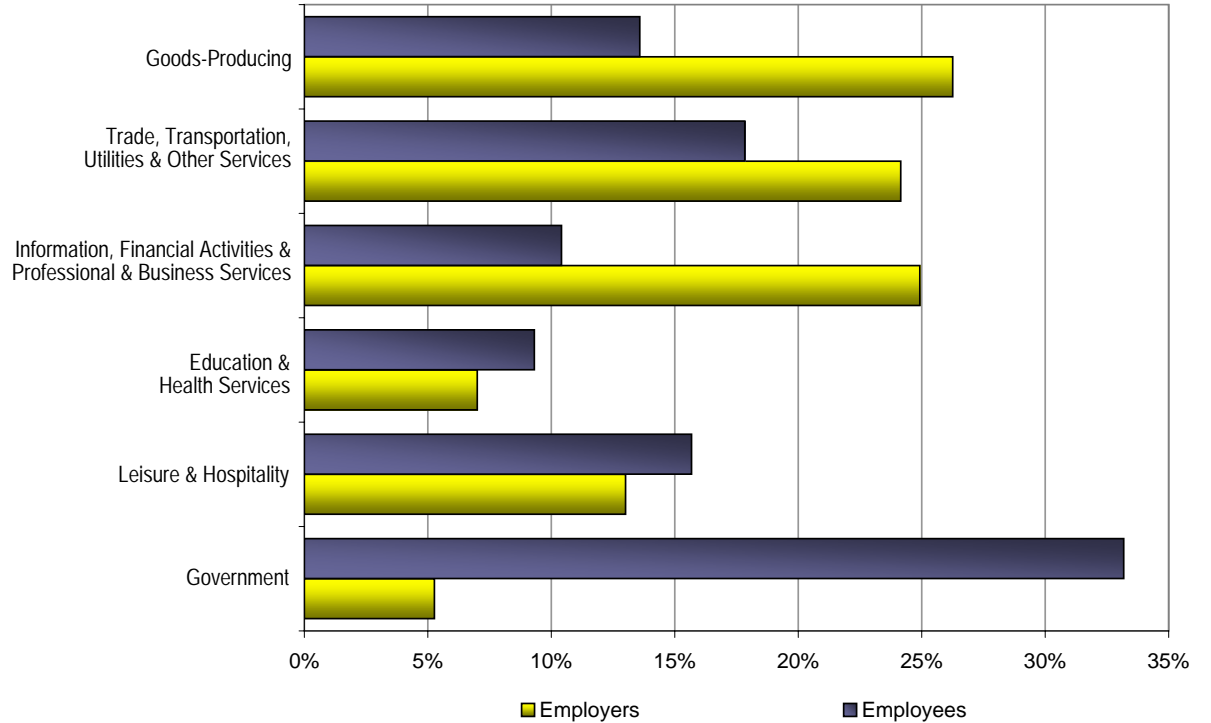
Park County’s main business district is Fairplay, although Main Street in Bailey is a great spot for food, gifts, sundries, clothing, and various camping and hunting supplies. Though one may feel as if the city has been left far behind, a cafe in Bailey offering high-speed internet connections for laptop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

Figure 7 shows the employment breakdown for each of the JVS sectors during the second quarter of 2004. 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 been similarly classified in the new system, others have significantly 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 within 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 distinct from other service industries allowing greater level of detail than previously available.

As in prior years, government has the smallest share of the Area’s employers but the largest proportion of the Area’s workers. Among the top employers are the large correctional and health facilities. Trade, Transportation,

**Figure 7: Upper Arkansas Region Employers and Employees, 2nd Quarter, 2004**



Source: CDLE, Quarterly Census of Employment and Wages (QCEW)

Utilities, & Other Services companies constitute one of the top three JVS sectors with a large share of the region’s employees. There is still a significant share of employment among separate service categories like Information, Financial Activities, and Professional & Business Services. The total of all goods-producing industries (Agriculture, Forestry, Fishing & Hunting; Mining; Construction; Manufacturing) has the top share of local area employers.



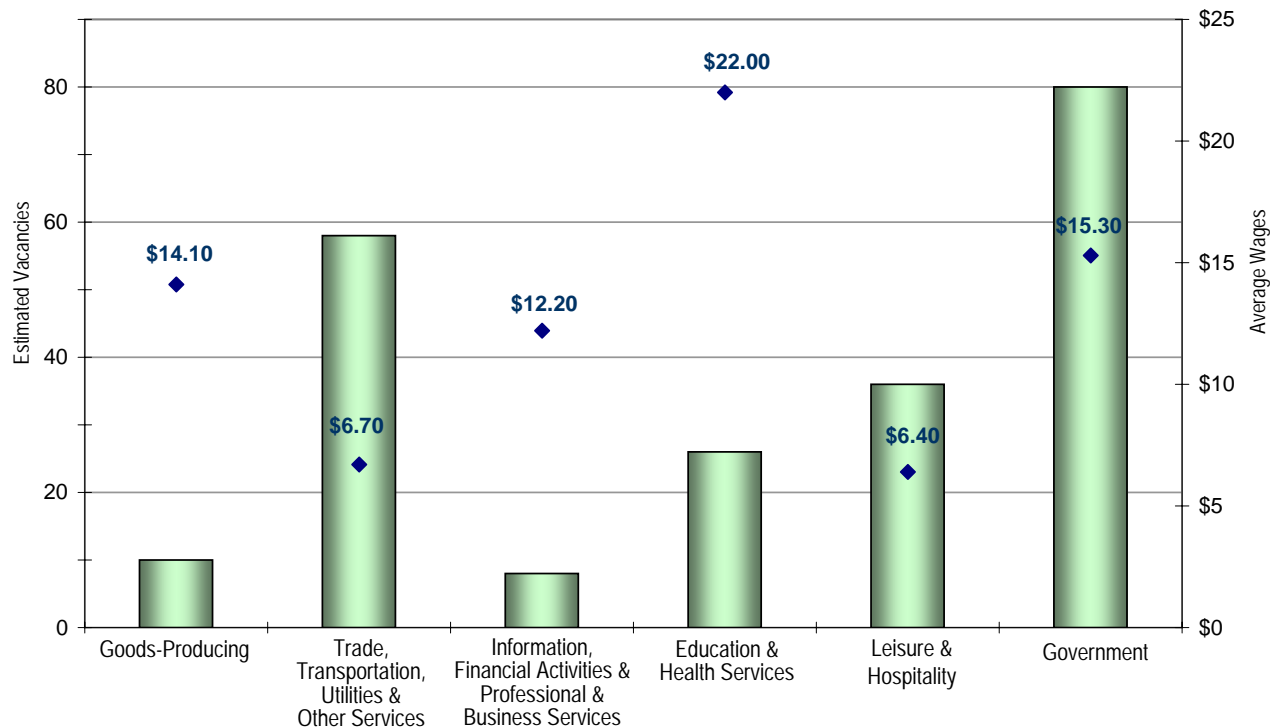
**To complement the new NAICS structure, surveying has been expanded to collect data sufficient for reporting more details than prior reports.** While results for the goods-producing JVS sector (Natural Resources & Mining, Construction, and Manufacturing) remain combined, results for the previously services-producing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

During the survey period, an estimated 218 vacancies were open for immediate hire in the Upper Arkansas Region. The region’s estimated vacancy rate is 1.1%, meaning that, overall, there are approximately 11 vacancies for every 1,000 positions. Last summer’s report showed a 1% vacancy rate, meaning there were approximately 10 vacancies for every 1,000 positions.

While it may seem as if there is little 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 with positions offered by employers thereby reducing job search times for persons seeking work and hiring costs for firms looking for workers. Many job seekers are matched with firms prior to firms resorting to advertising for workers.

Eleven percent of employers responding to the survey report having at least one vacancy. This is more than last summer’s report where 7% of the responding employers reported the same. Furthermore, 5% of all responding employers report having more than one vacancy.

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



For this survey, there are 138 vacancies in the Government and Trade, Transportation, Utilities & Other Services JVS sectors. Within the Government sector, 47% of the job vacancies fall in Education & Training, Protective Service, and Transportation & Material Moving occupations.

Among vacancies in the Trade, Transportation, Utilities & Other Services JVS sector, 77% fall in Sales, Building & Grounds Cleaning & Maintenance, and Transportation & Material Moving occupations.

Wages reported for this study represent those offered by employers for current vacancies over the survey period. The overall average wage for the summer report is \$12.60 per hour with the highest average wage found in the Education & Health Services sector. This summer, however, there are relatively few vacancies offered in this JVS sector. Positions in Government offer the second highest wage of \$15.30 per hour while positions in Trade, Transportation, Utilities & Other Services offer a wage of \$6.70 per hour.

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 variability is highest for occupations in the Education & Health Services sector. This includes a variety of jobs in the Healthcare Support, Healthcare Practitioner and Office & Administrative Support Occupations. Educational requirements for these jobs range from high school completion to advanced degrees. This diversity in education helps to explain the wage range in the Education & Health Services sector.

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

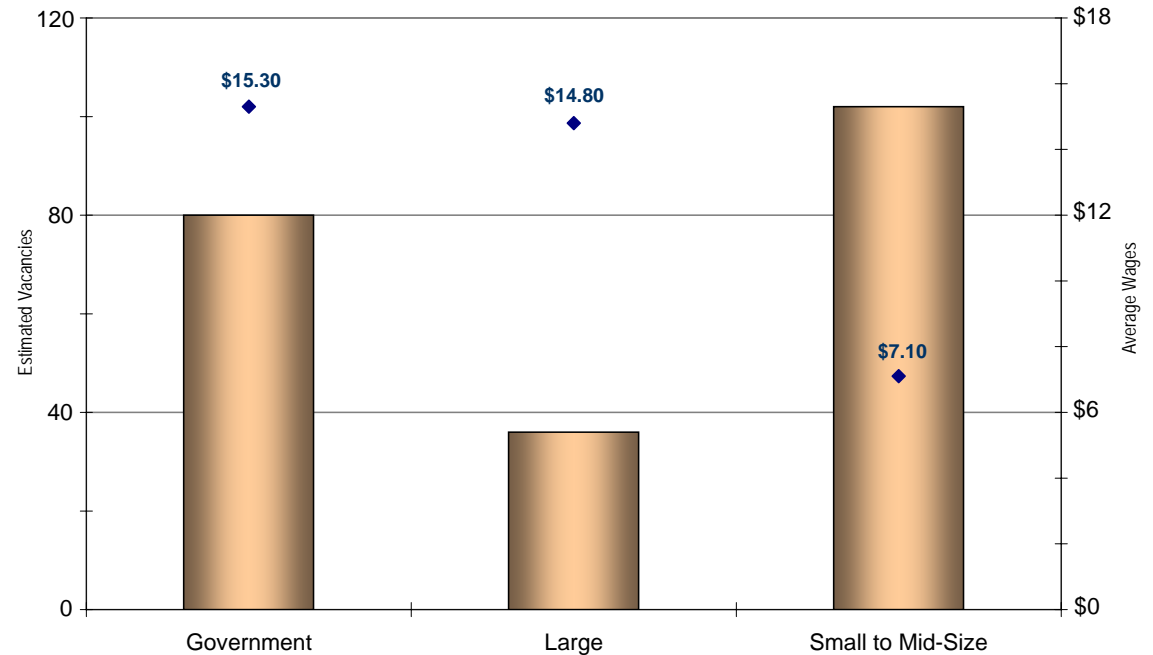


Small to mid-size firms account for almost half of total vacancies in the Upper Arkansas Region (*Figure 10*). Large companies have over 16% and Government agencies have a little less than 37% of all vacancies. The highest concentration of vacancies within the small to mid-size company category is found among Food Preparation & Serving Related in the Leisure & Hospitality JVS sector. Twenty-seven percent of vacancies are in the Trade, Transportation, Utilities & Other Services JVS sector. Relatively high levels of vacancies are also found among Building & Grounds Cleaning & Maintenance Occupations.

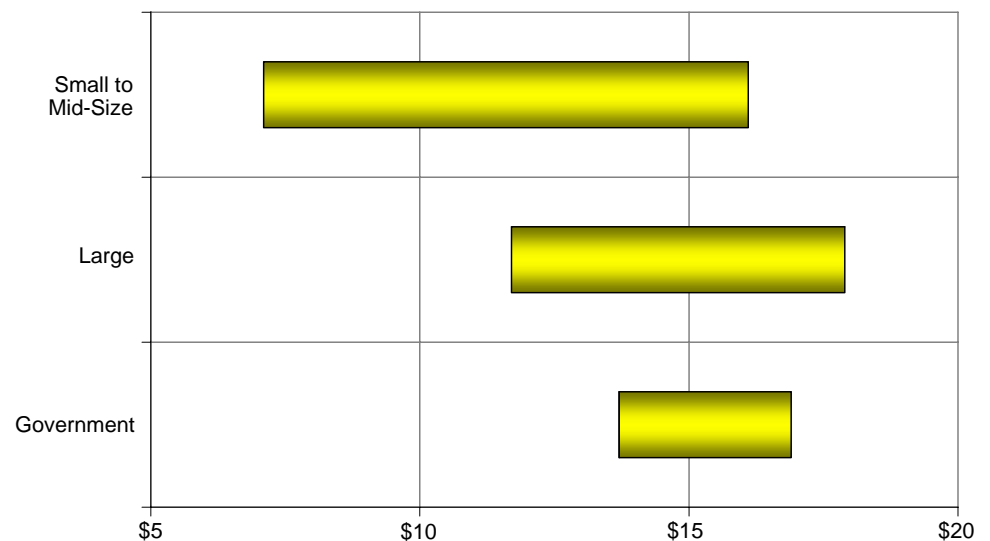
According to the survey, small to mid-size firms offer the lowest average wage. While many vacancies in this size category are low-wage jobs for unskilled applicants, others include medical personnel and skilled machine operators who are typically paid higher wages. The higher-paid positions require postsecondary education, ranging from vocational training/certification to a bachelor's degree. Large companies offer an average of \$14.80 per hour—an amount higher than the Upper Arkansas Region's overall average. *Figure 11* shows that the minimum average wage for government vacancies is higher than the minimum average wages for large and small to mid-size vacancies. Large firms exhibit a larger average wage range for vacancies than do governmental vacancies. The high end of the large firms' average wage range extends beyond that of government.

Furthermore, while the minimum average wage for vacancies in small to mid-size firms lies below that of large firms and government, the wage range of the former is greater than that of the latter. The high end of the small firms' wage range lies above \$15 per hour, which overlaps with wages offered in government and relatively larger firms.

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



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

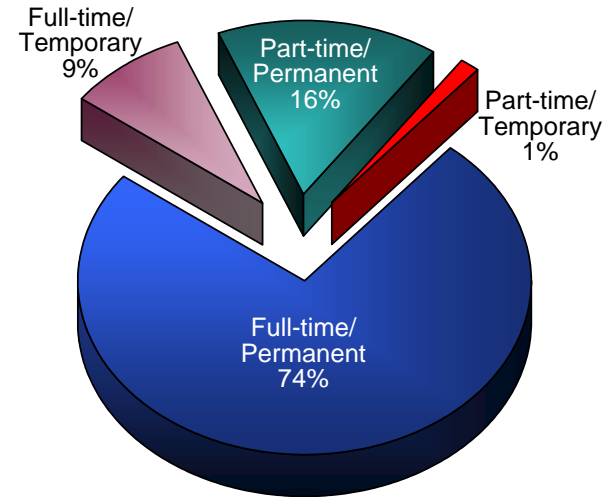


The remainder of this report provides descriptive statistics of the vacancies reported and are unique to this survey. The survey design does not allow for application of this detail to the region as a whole, but it can be used to understand characteristics of those job vacancies and occupations reported.

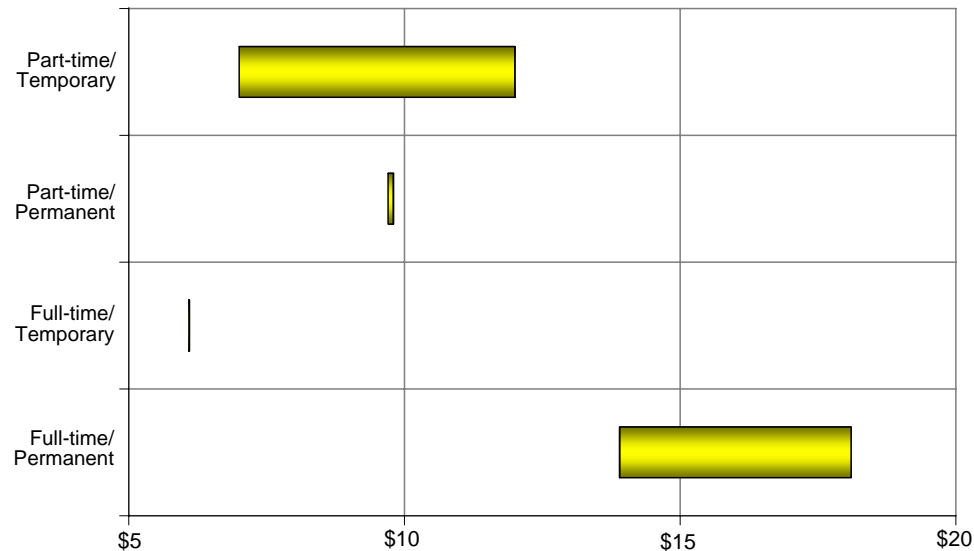
For this summer survey, three out of every four reported vacancies are for full-time permanent positions (*Figure 12*) and 16% are reported to be part-time permanent. Last year at this time, 40% of the reported vacancies were full-time permanent. All Upper Arkansas Region Job Vacancy Surveys have consistently shown a high percentage of permanent positions. 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 \$12.60 per hour.

**Figure 12: Vacancies by Employment Status**



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



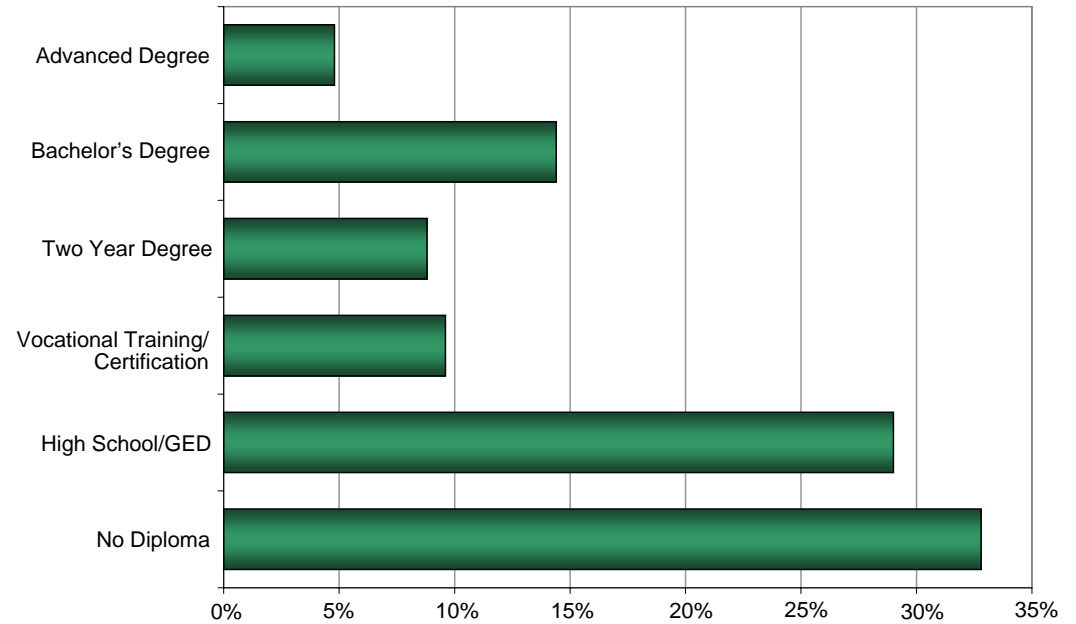
Employers were asked what level of education is required of an applicant in order to be considered for a particular vacancy. Nearly two out of five positions reported by employers in the Upper Arkansas Region require education beyond high school (*Figure 14*). Twenty-nine percent of all vacancies require a high school degree or GED equivalency while one third 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. Almost one-fifth of the vacancies require Vocational Training/Certification or a two-year degree. Fourteen percent of the vacancies require a bachelor's degree.

Last year at this time, 37% of the open positions required the applicant to be educated beyond high school and 14% required a bachelor's degree. In the summer of 2003, employers required education beyond high school for one-third the vacancies with only 4% associated with a bachelor's degree. The summer of 2002 showed a different need— 53% of the vacancies required postsecondary education with one-third demanding a bachelor's degree.

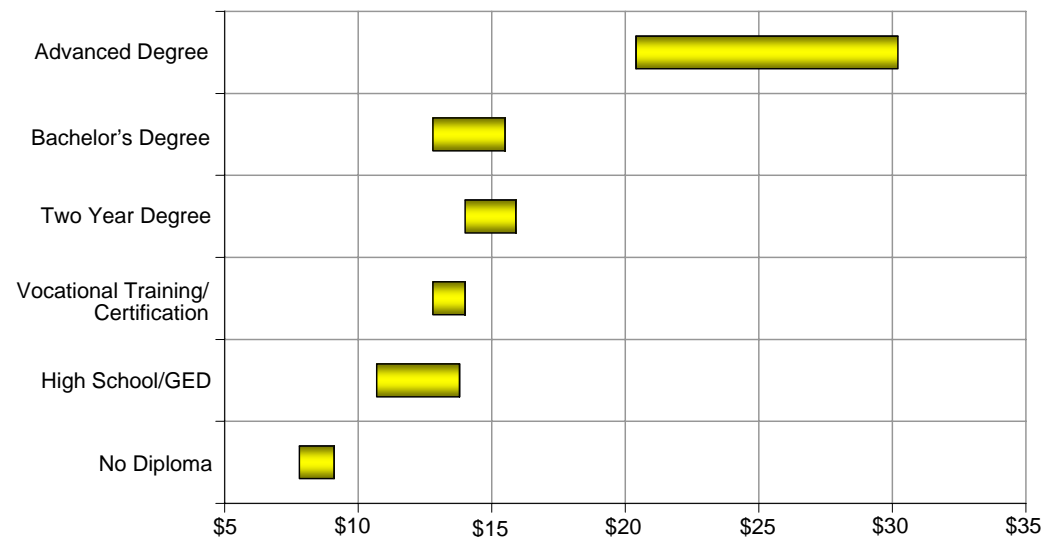
Most of the area's vacancies require no formal education but instead, require on-the-job training. While many restaurant positions require applicants to have some experience in the occupation, most employers in Leisure & Hospitality will offer the position to those without experience.

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**



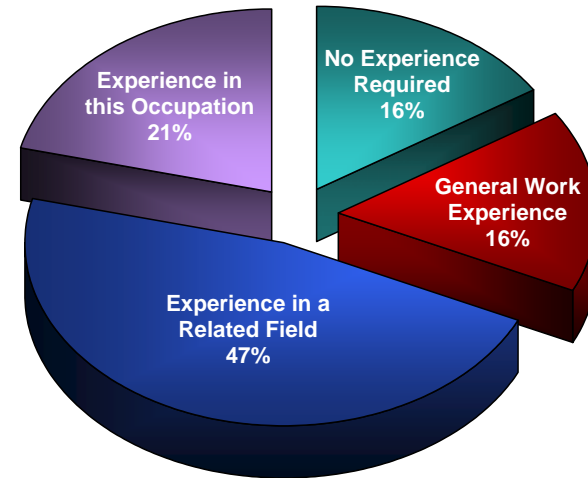
**Figure 15: Reported Average Wage Ranges by Education**



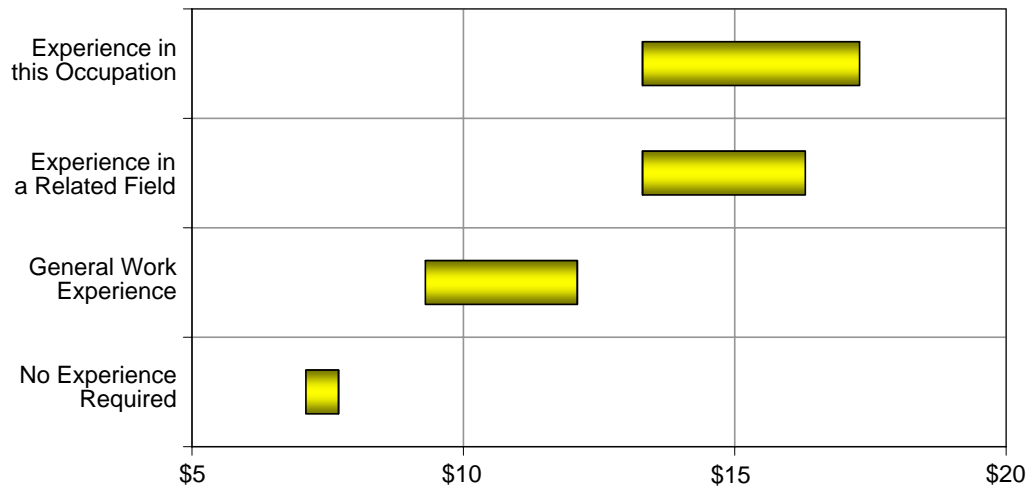
Employers require the applicant to have experience in a related field or in the occupation for over two-thirds of all vacancies. However, 16% of all vacancies require no experience. This is primarily due to the high number of Leisure & Hospitality vacancies, which include many restaurant and hotel employers willing to offer entry level positions. Last year at this time, 62% of all vacancies required experience in a related field or within the occupation while 27% did not ask for any 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 \$13.30 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.

**Figure 16: Vacancies by Experience**



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



**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.**

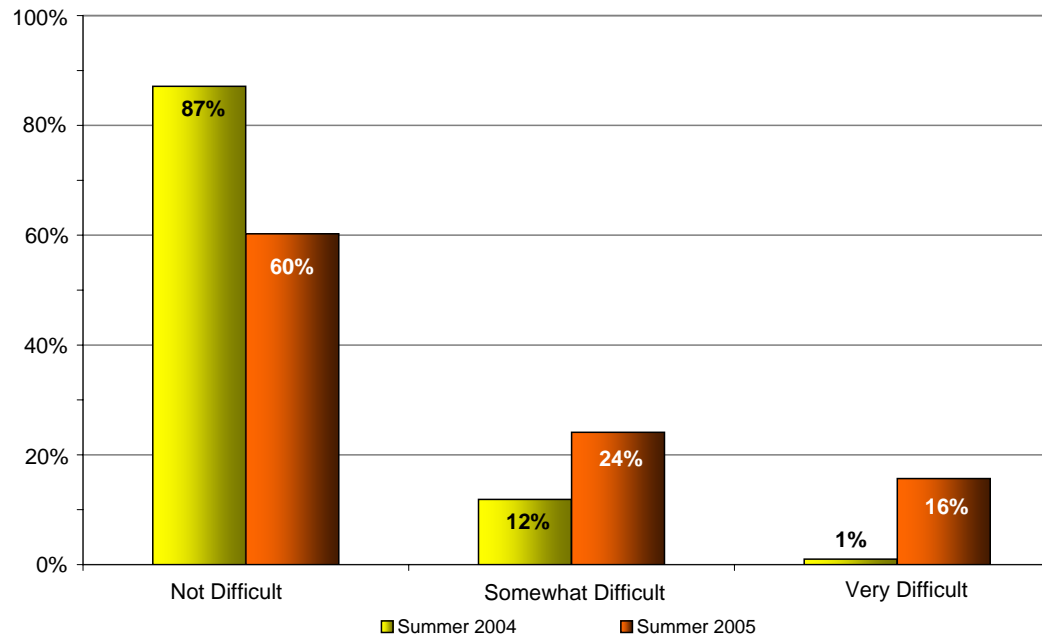
With more individuals available for work, employers should find it a little easier to fill vacancies. Sixty percent of the responding employers report that job vacancies are not difficult to fill, indicating the availability of workers has helped make the hiring process easier for employers (*Figure 18*). In fact, employers report that 24% of all vacancies are somewhat difficult to fill and 16% are very difficult to fill—a total of 40% associated with some level of hiring difficulty. This differs from last year when only 13% of the vacancies were associated with the same. This increased difficulty may stem from employers' changing needs. For example, this year's increased demand for

full-time permanent positions and some level of related experience indicates that jobs may be relatively more challenging to fill. A higher proportion of vacancies requiring part-time temporary work with little or no experience, on the other hand, would seem to suggest the jobs would be relatively easier 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, all of which 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

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

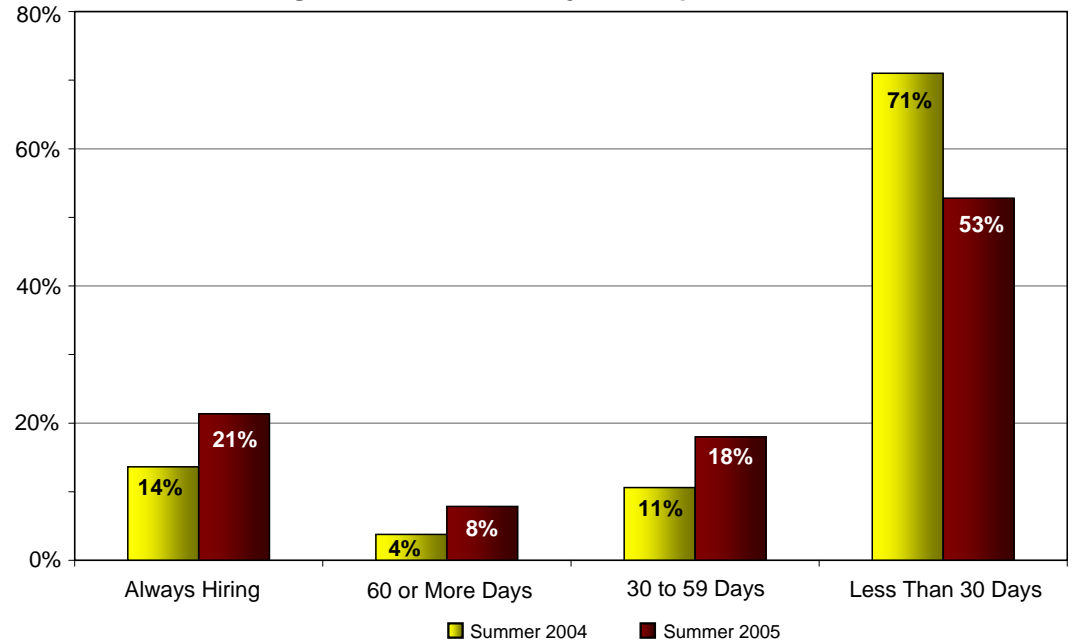


difficulty. Some employers may consider a vacancy as difficult to fill when it has been open for 30 to 60 days, while another employer may consider a similar vacancy not difficult to fill given the same time frame. Knowing how long a position has been open helps better understand the response to the 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, vacancies are relatively more difficult to fill, with 53% of the vacancies open for less than 30 days (*Figure 19*). Last year 71% of the vacancies were open for less than 30 days.

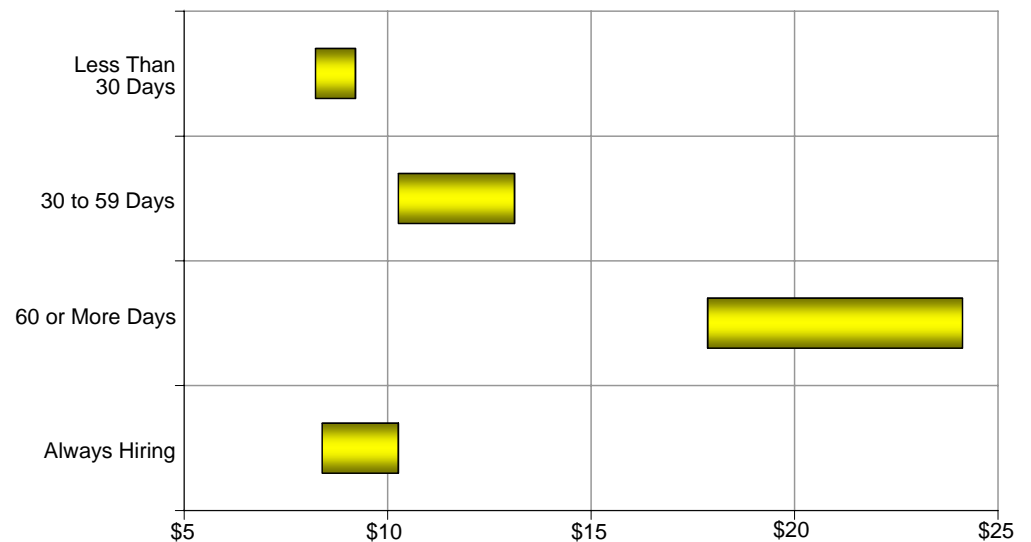
Eight percent of the vacancies are reported as open for 60 days or more, up from 4% last year at this time. These are medical and teaching positions that require the applicant to have a minimum of vocational training/certification or a bachelor's and experience in the occupation. Among the 18% of the vacancies that are open for 30 to 59 days, one quarter are teaching positions that require a bachelor's degree as well as experience, and others are for openings in construction and administrative support occupations—those requiring experience but do not demand high levels of education.

Vacancies considered not difficult to fill are offered with average wages less than the overall average of \$12.60 per hour. Generally, the longer it takes to fill a vacancy, the higher the wages offered. This summer's JVS confirms this pattern. The lowest wages are offered for vacancies that are open for less than 30 days, while higher wages are offered for positions open for more than 30 days.

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



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





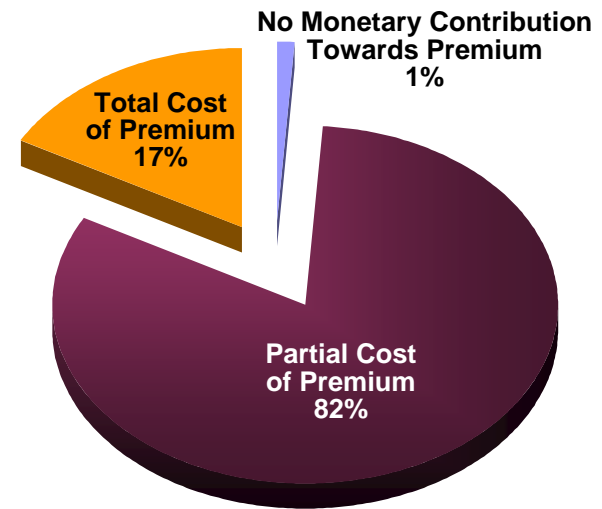
## Medical Insurance

Of all the firms that responded to the survey, almost two-thirds offered information on medical insurance. Those that offer medical insurance usually pay a partial cost of the premium. One percent does not contribute toward the premium, while seventeen percent pay the total cost of the premium. The average wage range offered for vacancies where the employer pays a partial cost of the premium is \$14.10 to \$18.20 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*



**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.

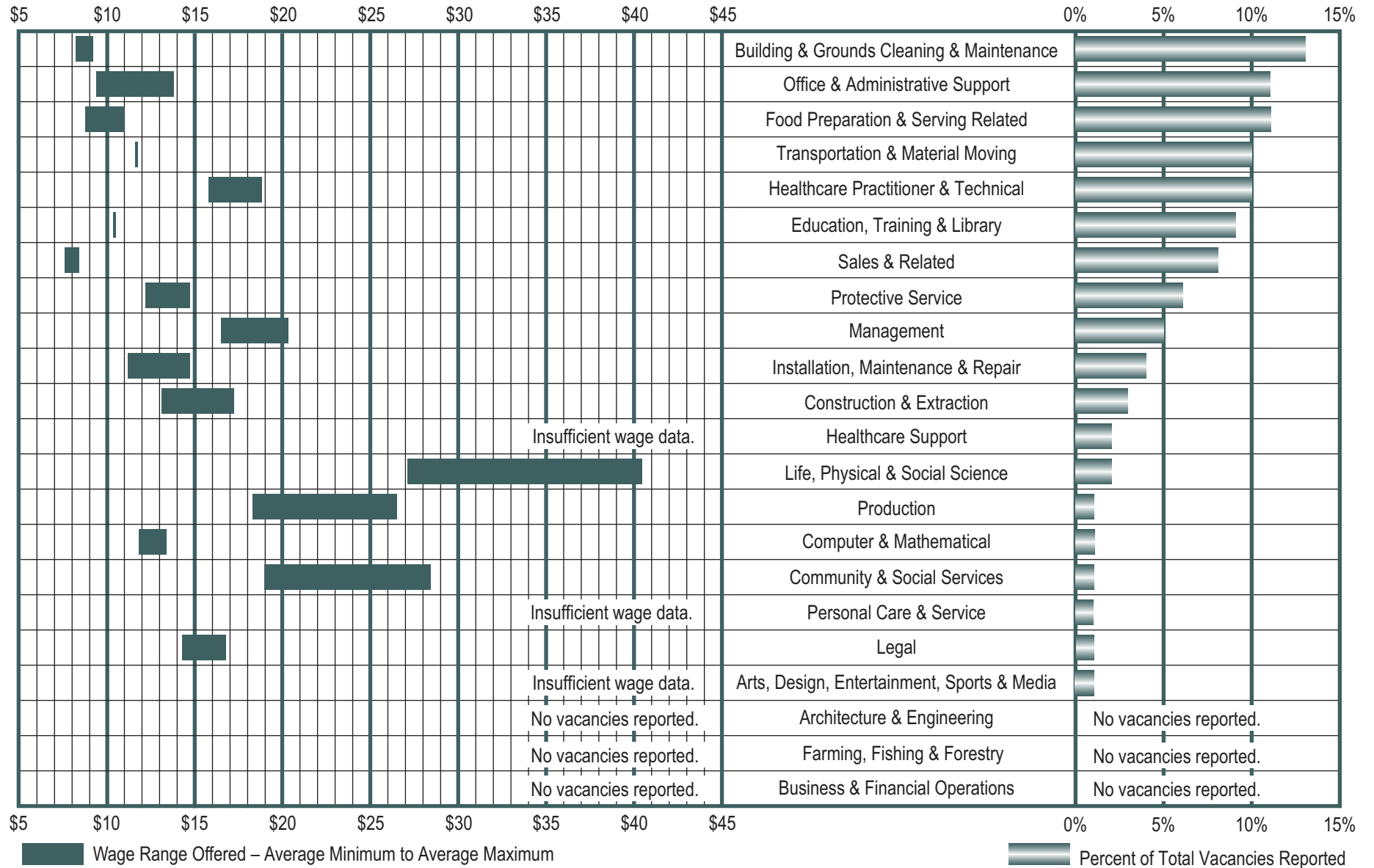
Vacancies found in this survey were coded into 15 of the 23 major occupation groups. Last summer's survey showed that the Food Preparation &

Serving and Sales Related occupational groups reported the greatest number of vacancies. This year the Building & Grounds Cleaning & Maintenance, and Office & Administrative Support categories have taken their place, indicating a shift in demand from temporary summer positions to permanent full-time jobs less associated with seasonal employment patterns.

The occupations that are in relatively low demand are found in Arts, Design, Entertainment, Sports & Media; Legal; and Personal Care & Service occupational groups.

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 groups offering the highest wages in this survey typically require postsecondary education and experience.

**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 assigned to vacancies reported in this survey. As 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 small to mid-size employers were contacted for the random sample, and likewise the occupations associated with these vacancies are listed.

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 these groups is not estimated; it is an actual count of the vacancies. However, in addition to the number found, vacancies are estimated for occupations reported by small to mid-size private firms. The additional estimated occupational vacancies are calculated per the current mix of occupations found in the region, but restricted to the occupational titles reported in the survey.

### Vacancies Found

The number of vacancies by occupation found in the survey.

### Average JVS Wage

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

### Average OES Wage

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. Wage data was collected in 2002 and aged to 2003 using the Employment Cost Index (ECI). 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 Title	Vacancies Estimated	Vacancies Found	Average JVS Wage	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
* 37-3019	Grounds Maintenance Workers, All Other	13	10	\$6.00	†	†	†	†	†	†	†	†
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	11	7	\$5.50	\$6.07	\$7.40	\$8.06	\$5.69	\$6.18	\$6.96	\$8.57	\$10.04
41-2011	Cashiers	10	8	†	\$6.13	\$8.08	\$9.05	\$5.87	\$6.57	\$7.68	\$8.77	\$11.09
29-1111	Registered Nurses	9	9	\$24.60	\$17.05	\$22.30	\$24.92	\$15.49	\$18.68	\$22.22	\$25.87	\$29.07
43-9061	Office Clerks, General	8	5	†	\$6.20	\$9.89	\$11.73	\$5.92	\$6.71	\$9.07	\$11.90	\$15.71
‡ 25-2031	Secondary School Teachers, Except Special and Vocational Education	7	7	\$11.20	\$28,483	\$36,486	\$40,487	\$26,079	\$30,203	\$35,294	\$43,300	\$49,709
53-3022	Bus Drivers, School	7	7	\$12.10	\$7.93	\$11.89	\$13.87	\$6.33	\$9.87	\$12.21	\$14.49	\$16.68
37-2012	Maids and Housekeeping Cleaners	7	6	\$9.50	\$6.85	\$8.20	\$8.87	\$6.21	\$7.31	\$8.16	\$9.11	\$10.46
35-3031	Waiters and Waitresses	6	4	\$5.20	\$6.06	\$6.36	\$6.52	\$5.53	\$5.81	\$6.26	\$6.72	\$7.02
41-2022	Parts Salespersons	5	2	\$6.40	\$6.89	\$8.96	\$10.00	\$6.19	\$7.39	\$8.27	\$9.65	\$12.62

\* OES wages reported for Colorado statewide

† Insufficient wage data

‡ Annual wage data

Table 2: Occupations with Fewer than Four Estimated Vacancies

		Occupational Employment Statistics Wage Data (2003)							
		Average Wages			Percentile Distribution				
SOC Code	SOC Occupational Title	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
11-1021	General and Operations Managers	\$17.61	\$32.89	\$40.53	\$14.55	\$21.12	\$30.90	\$41.31	\$53.68
11-9021	Construction Managers	\$17.55	\$23.79	\$26.91	\$16.14	\$18.53	\$21.74	\$26.82	\$35.60
‡ 11-9032	Education Administrators, Elementary and Secondary School	\$49,055	\$57,402	\$61,576	\$45,268	\$51,023	\$56,849	\$62,704	\$73,750
11-9151	Social and Community Service Managers	\$11.98	\$23.88	\$29.82	\$10.81	\$13.50	\$27.70	\$33.32	\$35.97
* 15-1041	Computer Support Specialists	\$14.56	\$22.86	\$27.01	\$13.70	\$16.63	\$20.72	\$26.72	\$38.47
* 15-1061	Database Administrators	\$18.92	\$29.67	\$35.05	\$16.89	\$21.87	\$27.85	\$37.96	\$44.34
* 23-1011	Lawyers	\$25.67	\$45.92	\$56.05	\$22.93	\$30.12	\$41.05	\$55.13	†
25-2011	Preschool Teachers, Except Special Education	\$6.37	\$9.05	\$10.38	\$5.91	\$6.83	\$8.26	\$10.54	\$13.25
*‡ 25-2043	Special Education Teachers, Secondary School	\$32,000	\$45,400	\$52,100	\$30,010	\$34,970	\$44,580	\$55,600	\$65,480
*‡ 27-2022	Coaches and Scouts	\$16,870	\$33,910	\$42,430	\$13,930	\$19,810	\$25,980	\$36,640	\$61,760
* 29-1122	Occupational Therapists	\$18.47	\$24.17	\$27.02	\$17.70	\$20.12	\$23.84	\$27.16	\$32.39
* 29-1126	Respiratory Therapists	\$15.19	\$18.93	\$20.81	\$14.50	\$16.52	\$19.11	\$21.49	\$23.82
31-1012	Nursing Aides, Orderlies, and Attendants	\$6.99	\$9.33	\$10.51	\$6.41	\$7.71	\$9.42	\$10.87	\$12.63
33-1012	First-Line Supervisors/Managers of Police and Detectives	\$16.47	\$22.60	\$25.66	\$15.32	\$17.28	\$19.79	\$28.57	\$35.78
33-3051	Police and Sheriff's Patrol Officers	\$10.96	\$15.60	\$17.91	\$10.20	\$11.56	\$14.42	\$17.52	\$25.24
37-1011	First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	\$7.37	\$9.41	\$10.44	\$7.06	\$7.70	\$8.77	\$10.70	\$12.01
* 37-1012	First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	\$11.93	\$18.67	\$22.04	\$10.30	\$13.73	\$17.61	\$22.07	\$28.40
37-3011	Landscaping and Groundskeeping Workers	\$7.02	\$9.46	\$10.69	\$6.43	\$7.60	\$9.15	\$11.04	\$13.08
39-9031	Fitness Trainers and Aerobics Instructors	\$6.39	\$8.68	\$9.82	\$5.95	\$6.88	\$8.14	\$9.55	\$10.68
43-4171	Receptionists and Information Clerks	\$6.90	\$9.53	\$10.84	\$6.33	\$7.50	\$9.23	\$11.80	\$13.29
* 43-5011	Cargo and Freight Agents	\$12.82	\$16.56	\$18.43	\$12.21	\$14.14	\$16.54	\$19.62	\$21.70
* 43-5032	Dispatchers, Except Police, Fire, and Ambulance	\$10.45	\$15.38	\$17.84	\$9.54	\$11.73	\$14.78	\$18.26	\$22.13

\* OES wages reported for Colorado statewide

† insufficient wage data available

‡ annual wage data

**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 Title	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
43-6014	Secretaries, Except Legal, Medical, and Executive	\$7.49	\$11.51	\$13.53	\$6.91	\$8.37	\$10.90	\$13.77	\$18.07
49-9042	Maintenance and Repair Workers, General	\$8.39	\$12.71	\$14.88	\$6.84	\$9.66	\$11.89	\$15.21	\$18.61
51-1011	First-Line Supervisors/Managers of Production and Operating Workers	\$13.91	\$19.83	\$22.79	\$12.62	\$15.75	\$20.59	\$24.56	\$26.60
53-3041	Taxi Drivers and Chauffeurs	\$6.31	\$7.89	\$8.68	\$5.85	\$6.27	\$6.97	\$9.97	\$11.05
35-2014	Cooks, Restaurant	\$6.03	\$7.94	\$8.90	\$5.81	\$6.54	\$7.70	\$8.67	\$11.43
* 29-1123	Physical Therapists	\$18.76	\$24.82	\$27.85	\$17.71	\$21.32	\$24.88	\$27.89	\$33.17
* 29-1131	Veterinarians	\$16.84	\$29.22	\$35.42	\$13.65	\$19.63	\$25.04	\$33.78	\$57.98
* 29-2056	Veterinary Technologists and Technicians	\$9.57	\$11.87	\$13.02	\$9.14	\$10.03	\$11.61	\$13.35	\$15.67
* 31-9091	Dental Assistants	\$11.14	\$16.76	\$19.57	\$10.01	\$12.91	\$16.68	\$20.59	\$24.84
	31-9092 Medical Assistants	\$8.34	\$9.75	\$10.45	\$7.88	\$8.80	\$9.80	\$10.80	\$11.48
* 49-2011	Computer, Automated Teller, and Office Machine Repairers	\$12.66	\$18.28	\$21.08	\$11.01	\$14.39	\$17.26	\$21.86	\$27.65
	49-3023 Automotive Service Technicians and Mechanics	\$7.77	\$14.32	\$17.60	\$6.61	\$9.00	\$11.85	\$19.22	\$25.89
* 11-3011	Administrative Services Managers	\$18.69	\$32.10	\$38.81	\$16.87	\$21.70	\$29.44	\$39.27	\$50.67
	11-9111 Medical and Health Services Managers	\$20.67	\$28.88	\$32.98	\$17.39	\$23.50	\$27.27	\$34.23	\$42.49
	21-1014 Mental Health Counselors	\$13.93	\$17.36	\$19.08	\$12.96	\$15.06	\$16.92	\$20.31	\$22.97
‡ 25-2022	Middle School Teachers, Except Special and Vocational Education	\$26,867	\$35,932	\$40,465	\$25,414	\$28,412	\$34,311	\$43,392	\$50,821
	29-2061 Licensed Practical and Licensed Vocational Nurses	\$11.60	\$14.02	\$15.23	\$11.15	\$12.16	\$13.86	\$16.07	\$17.39
	33-3012 Correctional Officers and Jailers	\$14.31	\$18.94	\$21.25	\$13.36	\$16.01	\$19.16	\$22.25	\$25.29
* 33-9099	Protective Service Workers, All Other	\$7.10	\$11.33	\$13.45	\$6.58	\$7.89	\$10.49	\$12.72	\$18.17
	37-2011 Janitors and Cleaners, Except Maids and Housekeeping Cleaners	\$6.49	\$9.45	\$10.94	\$6.05	\$6.98	\$9.00	\$11.30	\$13.70
* 47-4051	Highway Maintenance Workers	\$12.49	\$16.49	\$18.50	\$11.64	\$13.82	\$17.08	\$19.60	\$21.17
	53-3033 Truck Drivers, Light or Delivery Services	\$9.28	\$15.98	\$19.33	\$9.03	\$10.09	\$12.79	\$24.33	\$26.79

\* OES wages reported for Colorado statewide

† insufficient wage data available

‡ annual wage data

continued

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 Title	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
* 53-7064	Packers and Packagers, Hand	\$6.58	\$8.94	\$10.12	\$6.16	\$7.10	\$8.30	\$10.07	\$13.19
51-4121	Welders, Cutters, Solderers, and Brazers	\$10.19	\$13.65	\$15.38	\$8.64	\$11.65	\$14.10	\$16.20	\$17.46
43-1011	First-Line Supervisors/Managers of Office and Administrative Support Workers	\$10.92	\$16.99	\$20.02	\$9.74	\$12.29	\$15.72	\$20.35	\$27.17
43-3031	Bookkeeping, Accounting, and Auditing Clerks	\$8.75	\$12.46	\$14.32	\$7.93	\$9.76	\$11.97	\$14.95	\$17.65
43-4081	Hotel, Motel, and Resort Desk Clerks	\$6.30	\$7.70	\$8.40	\$5.95	\$6.79	\$7.74	\$8.58	\$9.78
* 43-4181	Reservation and Transportation Ticket Agents and Travel Clerks	\$9.30	\$12.89	\$14.69	\$8.76	\$10.00	\$11.77	\$15.41	\$19.84
41-2031	Retail Salespersons	\$6.20	\$9.84	\$11.65	\$5.89	\$6.50	\$7.68	\$10.15	\$15.23
* 41-3011	Advertising Sales Agents	\$11.04	\$22.81	\$28.70	\$10.05	\$12.75	\$17.15	\$26.89	\$45.17
* 19-3031	Clinical, Counseling, and School Psychologists	\$16.39	\$25.85	\$30.58	\$14.96	\$18.48	\$25.36	\$31.48	\$35.59
‡ 25-9041	Teacher Assistants	\$13,363	\$18,109	\$20,482	\$12,461	\$14,413	\$18,121	\$21,423	\$24,463
35-1012	First-Line Supervisors/Managers of Food Preparation and Serving Workers	\$7.62	\$11.04	\$12.75	\$7.18	\$8.40	\$10.23	\$13.95	\$16.67
43-6013	Medical Secretaries	\$9.85	\$11.25	\$11.95	\$9.29	\$9.96	\$11.06	\$12.68	\$13.76
* 49-9043	Maintenance Workers, Machinery	\$8.94	\$16.03	\$19.57	\$7.09	\$10.77	\$15.70	\$21.23	\$26.05
47-2031	Carpenters	\$10.25	\$15.50	\$18.12	\$9.31	\$12.11	\$15.44	\$19.48	\$21.97
47-2061	Construction Laborers	\$8.79	\$11.69	\$13.14	\$7.98	\$9.72	\$11.50	\$13.39	\$16.34
47-2152	Plumbers, Pipefitters, and Steamfitters	\$9.57	\$14.72	\$17.29	\$9.28	\$10.40	\$14.81	\$17.70	\$21.78
35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	\$6.06	\$6.07	\$6.07	\$5.52	\$5.77	\$6.19	\$6.60	\$6.85
53-3032	Truck Drivers, Heavy and Tractor-Trailer	\$9.52	\$14.19	\$16.52	\$9.00	\$11.26	\$14.28	\$17.17	\$20.52
43-4031	Court, Municipal, and License Clerks	\$7.95	\$11.64	\$13.49	\$7.24	\$8.77	\$10.69	\$14.78	\$16.61
* 33-9092	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	†	†	†	†	†	†	†	†
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$6.51	\$8.65	\$9.71	\$6.03	\$7.02	\$8.47	\$10.16	\$11.20

\* OES wages reported for Colorado statewide

† insufficient wage data available

‡ annual wage data



**G**overnment agencies represent approximately 5% of the region's employers and 33% of the Upper Arkansas workforce, a larger share than any other JVS sector. The total of all goods-producing JVS sectors employ the second largest share of the region's workers (26% of the region's workforce). For this summer survey, Government also ranks first in the number of vacancies, with 37% of the area's open positions at this time.

Since the Colorado Department of Labor & Employment began keeping track of employment information using the North American Industrial Classification System in 2001, state, local and federal Government has continually employed a large portion of the region's employment. In the second quarter of 2004 there were 4,970 government employees working in Fremont County, with an additional 1,580 in Chaffee. Forty-nine percent of all government employees in the region (all four counties) are in local government, which include city and county agencies. Seventeen percent work in federal government while 34% are in state government.

Large employers include the school districts, parks and recreation, and City & County offices in addition to correctional facilities. The highest numbers of vacancies are offered in the Education, Training, & Library, Protective Service, and Transportation & Material Moving occupational categories, respectively.

These vacancies are for positions such as Middle and Secondary School Teachers, Teacher Assistants, School Bus Drivers and Recreational Protective Service Workers.

Other vacancies are offered in the Office & Administrative Support, Management, and Building & Grounds Cleaning & Maintenance occupational categories. There are positions for Clerks, Receptionists, Administrative Services Managers, Construction Managers and Janitors & Cleaners.

#### **Other vacancies**

Twenty- two percent of all Government vacancies in this report offer annual wages above \$40,000. An additional 9% of the Government vacancies offer annual wages ranging \$30,000 to \$40,000 and the remaining 69% of vacancies are offered at less than \$30,000. With all vacancies in this sector, an increased level of education is associated with an increase in wages offered. Eighty-seven percent of the Government vacancies require either experience in the occupation or in a related occupation. Teacher Assistants, Bus Drivers, Recreational Protective Service Workers, Occupational Therapists, Coaches, Preschool Teachers, School Psychologists and Computer Support Specialists are reported to be part-time vacancies while all others are full-time job opportunities.

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

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

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

## Employers

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

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

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

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

## Job Seekers

The Job Vacancy Survey provides job seekers with a broad view of which industries are hiring, which occupations are in demand along with currently offered salaries and

benefits, and what education and experience levels are required. This report is a roadmap that can be used to determine where the best paying jobs are given an individual's skills and level of education.

Job seekers can also use Labor Market Information's occupational projections, which provide a long-term outlook of occupational demand, along with the survey, which illustrates the current level of demand in the local job market to determine how current employment opportunities can contribute to their long-term career goals. Career minded individuals can tailor education, training, and work-experience to fit future high-demand positions.

## Workforce Centers

The Job Vacancy Survey is designed to aid Colorado's Workforce Centers and other job placement organizations. As Workforce Centers serve job seekers and employers, the report acts as a handy reference for information on current vacancies, position requirements, wages and benefits offered, seasonal employment trends, and dominant regional industries. Workforce Center representatives can increase placement success by directing job seekers toward high demand occupations and industries. The Workforce Research and Analysis survey unit cooperates with regional Workforce Centers to list reported vacancies given the approval of the reporting businesses.

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

## Economic Developers

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

## Caveats

**The Job Vacancy Survey uses sampling methods to estimate overall 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.

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 34% 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.

## Survey Sample

The Summer Upper Arkansas Region Survey was conducted from May 30th through June 10th, 2005. 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 almost 39% of the employment in the sample frame, while private industry employers make up the remaining 61%. Large firms account for 35% 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 65% of private industry employment.

The margin of error for the overall vacancy estimate is plus or minus 5.5% or about 24 vacancies at a 0.95 certainty level. In other words, in 95 out of 100 samples, the actual number of vacancies in the region will be between 206 and 230 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 81%. 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 six 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 28.

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

## 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 open. Employers are also asked if sign-on bonuses and health insurance coverage are offered for these positions. These data are collected in addition to the minimum and maximum wages in order to describe more fully the compensation offered.

## Occupational Coding

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

## Data Editing

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

## Wage Conversion

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

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

## North American Industry Classification System (NAICS)

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

### History of Process

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

### Industrial Classification vs. Occupational Classification

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

### Benefits

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

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

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

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

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

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

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

**Things to Consider**

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

**New Industries Reflected in NAICS**

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

◆ Formerly, under SIC, corporate headquarters were not distinguished from the industry category of the product or service they produced. Now corporate headquarters are recognized in the new Management sector.

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

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

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

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

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

**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 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.





### **Cañon City Workforce Center**

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

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

### **Salida Workforce Center**

141 E. 3rd Street  
Salida, CO 81201

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

### **Buena Vista Workforce Center**

114 Linderman Ave.  
Buena Vista, CO 81211

719-359-0344, #100  
Hours: 8am-5pm Tues.

### **Fairplay Workforce Center**

824 Castello Avenue  
Department of Human Services  
Building  
Fairplay, CO 80440

719-836-6181  
Hours: 9am-4pm Tues.,  
Wed. and Thurs.



For a listing of all Colorado Workforce Centers:

[www.coworkforce.com/emp/wfcs.asp](http://www.coworkforce.com/emp/wfcs.asp)