pper Arkansas Region

Job Vacancy Survey

Winter 2003



Upper Arkansas Region Job Vacancy Survey



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January	8-15,	2003

State of Colorado

Bill Owens, Governor

Colorado Department of Labor & Employment

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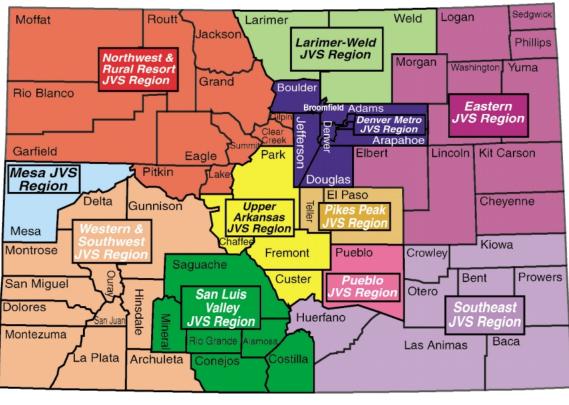


Figure 1: Colorado Job Vacancy Survey Regions

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.

Introduction

to the Colorado Job Vacancy Surveys

The CDLE's survey unit collects original data by conducting phone interviews with a representative sample of employers in a given region. The department's economists analyze the raw data, estimate the number of vacancies in the area and publish the report within weeks of the original data collection, providing a timely portrait of the employment situation.

The survey is funded by a grant from the U.S. Department of Labor's Employment and Training Administration. The survey is produced for each region in Colorado by Labor Market Information's office of Workforce Research and Analysis.



Executive Summary

he Winter 2003 Upper Arkansas Job Vacancy Survey was conducted from January 8th through 15th, 2003. The goal of the survey is to provide current information on the demand for workers so that employers, job seekers, economic developers, educators, and workforce centers can make informed decisions in the Upper Arkansas Region.

Over the survey period, randomly selected small to mid-size private employers with at least 5 employees, Government, and large employers 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 529 employers representing approximately 58% of the region's total employment responded to the survey. Out of these, 16 were large employers (75 employees or more), 46 were government employers, and 467 were from the small to mid-size category (5 to 74 employees). The survey had a 76% response rate and a near perfect (99%) cooperation rate. The margin of sampling error for the overall result is plus or minus five percentage points or about six vacancies.

The major findings of the survey follow.

♦ It is estimated that a total of 111 jobs were open for hire in the Upper Arkansas Region during the survey period
♦ Six percent of employers responding to the survey reported having at least one vacancy <i>Page</i> 7
♦ About 35% of the estimated job openings are in Education and Health Services while 27% are in Leisure and Hospitality
♦ Over half of the estimated vacancies are offered by small to mid-size employers and one-third are offered by large employers
♦ Ninety-seven percent of all reported vacancies are for permanent positions
♦ Eighty-seven percent of the reported vacancies are for full-time positions compared to 78% last a year ago
♦ The overall average wage for all reported vacancies is \$9.30 per hour. This excludes wage data from large companies, as there was insufficient wage data to report for this categoryPage 9
♦ Sixty-three percent of all vacancies require post-secondary education while 37% require, at most, high school completion. A year ago less than half of all vacancies required postsecondary education
♦ Out of those vacancies requiring postsecondary education, only a very small percent require an advanced degree. Most vacancies that have educational requirements beyond high school require either two-year degrees or vocational training/certification
♦ For this report, 48% of the reported vacancies are filled in less than 30 days, about the same as this time last year. There are more vacancies open 60 or more days this year than the winter 2002. This is due in part to persistent vacancies in health care related occupations
♦ Just over half (53%) of all vacancies are considered somewhat difficult to fill. This has not changed from a year ago. In fact, this year more employers consider vacancies as not difficult to fill (36%), compared to last year when 28% of the vacancies were considered as such

The Upper Arkansas Region includes Chaffee, Custer, Fremont and Park counties. The U.S. Census Bureau's Census updates for 2001 estimates the region's population to be about 83,000 people. Park and Custer counties experienced the most growth over the 1990 to 2000 period. Park County's population grew by 102.4% and recorded the third highest population increase of all Colorado counties. In addition, Park County experienced the highest population change of 7.5% over the 2000-2001 period.

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

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

Although the availability of job opportunities has declined over the last four surveys, employment per season

Upper Arkansas Region

Park 24%

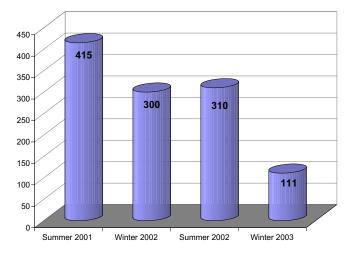
Chaffee 22%

Custer 5%

Source: CDLE, Local Area Unemployment Statistics, December 2002

has increased. For example, not only did employment increase from the summer of 2001 to the summer of 2002, employment also increased from the winter of 2002 to the winter of 2003. Furthermore, wintertime unemployment levels decreased over the last two winter reports. The Upper Arkansas Region's unemployment rate has also shown a similar pattern, meaning the seasonal labor force level has remained relatively in check with the fluctuations in employment levels.

Figure 3: Vacancies-Last Four Upper Arkansas JVS



	Summer 2001	Winter 2002	Summer 2002	Winter 2003
Vacancies	415	300	310	111
Employment	36,777	32,983	36,900	33,778
Unemployment	1,194	1,909	1,493	1,717
Unemployment Rate	3.14%	5.47%	3.89%	4.84%
Unemployment Rate	3.14%	5.47%	3.89%	4.84%

Source: CDLE, Local Area Unemployment Statistics

Upper Arkansas Region Job Vacancy Surveys are conducted semi-annually in the winter and summer months. The timing of the survey was developed with the intent of measuring demand for labor at intervals that provide the most useful information. Vacancies found in the winter represent demand for labor at a time of year when employment is at its cyclical low. A study at this time indicates the types of occupations for which vacancies exist even when there is an adequate number of job seekers available and willing to work. 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. During the height of the season, employers are competing for job seekers available in the labor market at a time when there are too few applicants available for the open positions.

Historically, the level of employment in the Upper Arkansas Region peaks in or around the month of July. The labor force, the number of people employed or actively looking for work, also peaks at that time (Figure 4). Unemployment levels have increased over the last year, 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 year. The total number employed decreased more than usual since mid-2001, reflecting the effects of a slowing economy in addition to the seasonal decline. Yet, rather than following the seasonal trend, the total labor force decreased at a much slower rate 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.

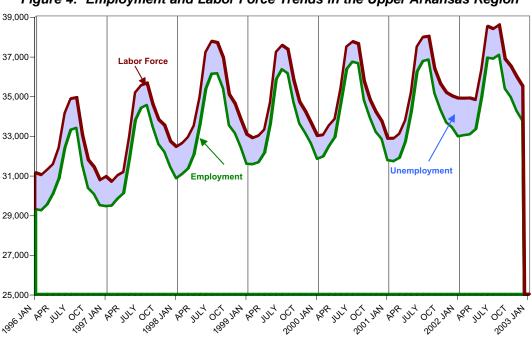


Figure 4: Employment and Labor Force Trends in the Upper Arkansas Region

Source: CDLE, Local Area Unemployment Statistics

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). After the unemployment rate reached a high of 5.5% in January 2002 (the highest rate since January of 1996), the local economy showed promising signs of increasing summertime employment. Actual unemployment levels increased as well, though, due to an increasing labor force which has helped keep the unemployment somewhat elevated. Still, the region is faring better than most other rural regions in keeping unemployment in check with the

help of local workforce centers aiding in the placement of entrants to the labor force as well as repositioning dislocated workers.

Figure 6 shows the most current unemployment statistics for the individual counties of the Upper Arkansas Region. Chaffee County, "Home of the Fourteeners," shows the lowest unemployment rate of the four counties. 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 banana belt of Salida.

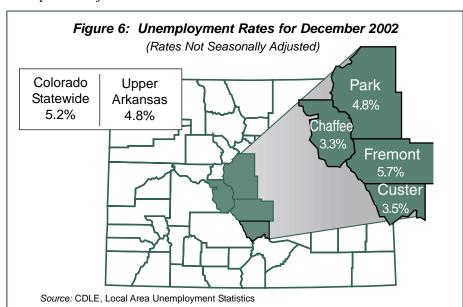
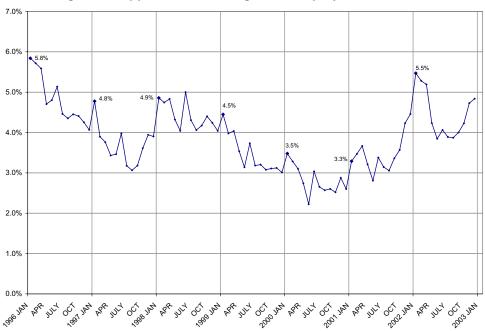


Figure 5: Upper Arkansas Region Unemployment Rate Trend



Source: CDLE, Local Area Unemployment Statistics

While Fremont County cannot claim title to an abundance of 14,000-foot mountain peaks, it can lay claim to the Royal Gorge Bridge-the world's highest suspension bridge hovering 1,053 feet over the Arkansas River. Outdoor activities are just as popular here as in neighboring counties. Cañon City is the primary business district with a metropolitan population of over 25,000. Fremont County's unemployment rate of 5.7% is higher than the region's, as well as the state's, but is below the national unemployment rate of 6.0%. While the two largest employers are the Colorado Department of Corrections and the Federal Bureau of Prisons, the third largest employer is St. Thomas More/Centura Health Systems. Healthcare Practitioners and Technical Occupations have

> been in the highest demand since the Job Vacancy Survey began.

The Upper Arkansas Region's unemployment rate of 4.8% is also Park County's. 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—popular enough that the Colorado Department of Transportation has continued expansion projects in that area.

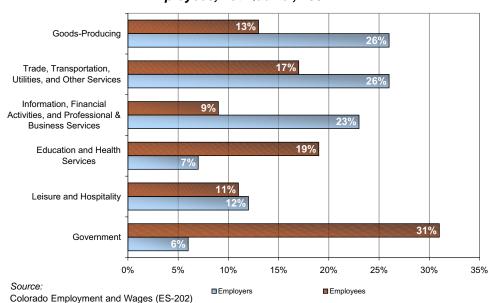
Figure 7 shows the distribution of employers and employees in the same industries in which the job vacancies are measured. The industry groups are based on the North American Industry Classification System (NAICS) which is being used in the Job Vacancy Survey for the first time in 2003. While the Standard **Industry Classification** System classified firms according to the product they produced, NAICS classification is based on production process used.

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, and Professional and Business Services. Education and Health Services are also separate industries.

The Government sector remains similar to past years a small percentage of area employers with a large percentage (almost one-third) of the area's employees. Again,

Figure 7: Upper Arkansas Region Employers and Employees, 1st Quarter, 2002

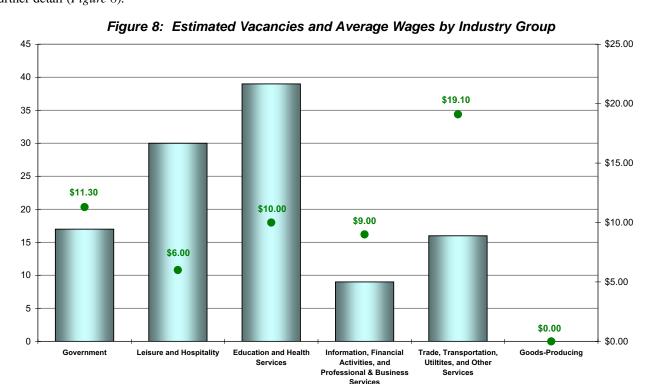


among the top employers are the large correctional and health facilities. The Goods-Producing companies are among top three industries in regard to both employment as well as employers. Trade, Transportation, Utilities, and Other Services has one-fourth of the area's employers. There is still a significant share of employers among the now separate service categories like Information, Financial Activities, and Professional and Business Services.

Job Vacancy Surveys have been expanded to collect data sufficient for reporting more details than prior reports. While results for the Goods-Producing industries (Natural Resources and Mining, Construction, Manufacturing) remain combined, results for the Service-Producing industries are broken down into further detail (*Figure 8*).

Vacancies:

Industry, Size and Status



During the survey period, an estimated 111 vacancies were open for immediate hire in firms with at least 5 employees in the Upper Arkansas Region.

The region's estimated vacancy rate is 0.5%, meaning that there were approximately 5 vacancies in the survey for every 1,000 positions. The overall vacancy rate is calculated by dividing the estimated number of vacancies by total employment plus the estimated number of vacancies. The demand for labor is composed of people currently employed plus all of the open positions that employers want to fill. The results of this survey as well as current employment numbers suggest that demand for workers has decreased in the region.

Only 6% of employers responding to the survey reported having at least one vacancy. This is due, in part, to the winter survey being conducted during the first quarter when employment is at its lowest levels. Persistent vacancies can also be due to structural changes in the economy as the local labor force retrains for newer—or modernized—jobs. In some cases, formal training beyond several

months is required in order to fulfill the position requirements. In addition to local changes defining the actual positions available to fill, cyclical downturns such as the current business cycle can prevent job openings from occurring in the first place. Thus, the fact that the number of vacancies has declined to such a low number is an important fact itself, making the vacancies that do exist even more interesting to review.

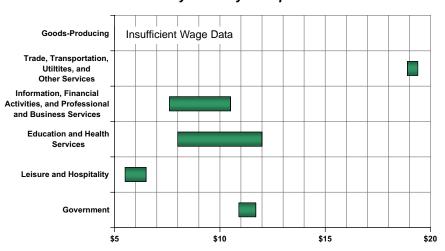
For this survey, there are no vacancies reported in the Goods-Producing industries. Openings in Natural Resources and Mining as well as in Construction are usually more prevalent during the warmer summer season. There are also no vacancies reported in the Manufacturing industry, which falls in line with the lower business activity. About 35% of the estimated job openings are in Education and Health Services while 27% are in Leisure and Hospitality. All but four of the vacancies in Education and Health Services are health care related. Opportunities in health services range from certified nurse assistants and other aides to registered nurses, therapists and medical technicians. Leisure and Hospitality

also shows continued demand for food and beverage occupations both in restaurants as well as in non-restaurant facilities, though the lower average wages imply these may be lower skilled jobs.

While some post-secondary education and work experience are required for a few positions, most are available to applicants regardless of education completed or experience acquired. The highest average wages offered are in Trade, Transportation, Utilities, and Other Services. This industry currently has openings ranging from mechanics and welders to head engineers.

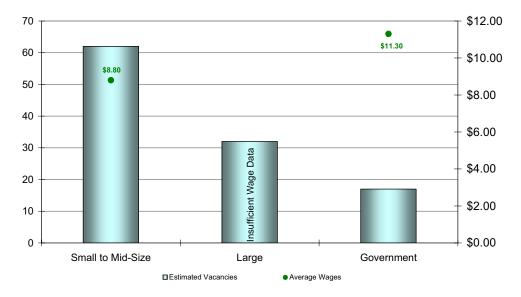
Since wages offered vary according to the individual applicant's qualifications, employers were asked to provide the range of wages offered for the vacancies (*Figure 9*). Wages reported for this study represent those offered by employers for current vacancies over the survey period. Wages are more variable for Education and Health Services as well as for Information, Financial Activities, and Professional and Business Services.

Figure 9: Reported Average Wage Ranges by Industry Group



Small to mid-size firms account for over 55% of total vacancies (*Figure 10*) in the Upper Arkansas Region. Large companies are reporting nearly 30% and Government agencies have only 15% of all vacancies. The highest concentration of vacancies is found in health services within the large company category.

Figure 10: Estimated Vacancies and Average Wages by Employer Size

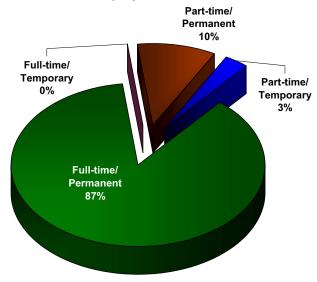


According to the survey, Government is offering \$2.50 per hour more, on average, than small to mid-size companies. Most of these positions require a minimum of vocational training/certification though some highly specialized engineering positions require advanced degrees. While there is insufficient data to report wages for large companies, Government and small to mid-size companies show average wages similar to those in the winter 2002 report, though at a slightly lower average.

Figure 11: Reported Average Wage Ranges by Employer Size



Figure 12: Vacancies by Employment Status



10% are reported to be part-time permanent. Last year at this time 78% of the reported vacancies were full-time permanent. The increase in full-time permanent employment may indicate that actual openings at this time are steadier or more secure than some positions that seem to disappear over the winter months. Furthermore, a high percentage of full-time positions during a softened economy is an encouraging sign to job seekers who are looking for more than a temporary or part-time position. Open positions at this time are likely due to longer-term need rather than a result of short-term demand. However, for job seekers who prefer to work less than full-time, opportunities do exist. Full-time positions include a variety of occupations in all industries while most part-time positions are in restaurants and banking facilities.

For this winter survey, 87% of the reported vacancies

are for full-time permanent positions (Figure 12) while

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, fulltime positions offer wages slightly higher than the overall average of \$9.30 per hour although, once again, this excludes wage data from large companies. There simply was not enough wage data available to report for this category (Figure 13). A year ago full-time and part-time temporary positions were offering the highest wages. This could have been a result of the demand to fill positions that had been open for too long in addition to bringing in an employee who would be willing to leave once the economy shows stronger trends downward.

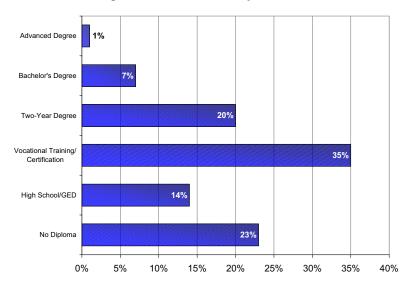
Figure 13: Reported Average Wage Ranges by Employment Status



Vacancies

Education and Experience Requirements

Figure 14: Vacancies by Education



mployers were asked what level of education is required of an applicant in order to be considered for a particular vacancy. Over 60% of the positions reported by employers in the Upper Arkansas Region require education beyond high school (Figure 14). This is due, in part, to the fact that a high proportion of the region's vacancies are for skilled occupations. Furthermore, due to economic conditions, employers are in a position to insist that applicants have completed a specified level of training. Last year at this time employers reported that only half of the open positions required the

Figure 15: Reported Average Wage Ranges by Education



applicant to be educated beyond high school. For this survey, 63% require education beyond high school.

While the nature of the open position plays a significant role in the education and experience demanded, the availability of workers also has an effect on employers' demands. Only 8% of all vacancies require a bachelor's degree or higher. Most of the area's vacancies are occupations requiring vocational training or certification (or other similar two-year training), which shows the importance of trade-related positions available in the area. While many of the registered nurse positions require the applicant to have advanced degrees, most positions in health services will offer the position for only a two-year degree or vocational training/certification provided the applicant has adequate experience in the occupation. Other vacancies requiring formal education to this level include correctional officers, childcare workers, and automotive technicians.

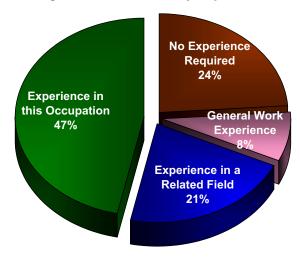
There are positions available that do not require advanced levels of education. Just over one-third of all vacancies are available to

applicants looking for occupations considered easy to enter. While these are mostly jobs at lower skills levels, the positions can lead to more fruitful positions within the company or industry. These include positions in retail, banking, landscaping, and maintenance in addition to restaurants and hotels. At the top end are vacancies requiring a minimum of a bachelor's degree as well as related experience. These are vacancies for occupations such as pharmacists, teachers, registered nurses, welders, and engineers.

On average, employers add a premium to pay scales when requiring higher levels of education. For this survey, the highest reported wages are found within the Vocational Training/Certification category. Wages for advanced levels of education are generally higher, however due to insufficiency of wage data, this report is unable to reveal wages for the top levels of educational attainment.

Wages offered to individuals who have completed high school are surprisingly close to wages offered to those with two-year degrees. Although wages offered to those with no diploma are relatively low, the reported average wage is higher than the legal minimum (*Figure 15*).

Figure 16: Vacancies by Experience



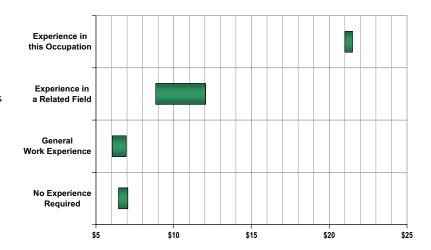
Work experience is essential for many positions. During an economic downturn, employers can command higher levels of education and experience due to the increased number of job seekers available to work. Even when experience at a very detailed level is not necessary, having some kind of familiarity with the working environment is valued.

Employers require the applicant to have experience in a related field or in the occupation for over two-thirds of all vacancies. In fact, nearly half of all vacancies require actual experience within the occupation where a year ago, only 35% of all vacancies required the same level of experience. This

is primarily due to the high level of health services vacancies, which will not yield when it comes to experience. As a result, many of these positions take 60 or more days to fill and are considered at least somewhat difficult to fill. Vacancies that do not require experience, or require only general work experience are mostly in the restaurant occupations, although some openings can be found in retail, banking and maintenance as well.

As with increasing levels of education, employers are willing to pay higher wages for added skills. Vacancies requiring experience in the occupation, the category most sought after by employers, are offered with an average minimum wage of \$21.00 per hour to start, far exceeding the minimum average wages offered for the other levels of acquired experience. Most of these vacancies also require post-secondary education. This is comparable to last year's wages offered to those with high levels of experience. However, wages offered to those with experience in a related field have dropped considerably from a year ago, with the average minimum starting wage close to \$9.00 per hour this year down from \$12.50 offered last year.

Figure 17: Reported Average Wage Ranges by Experience





Vacancies

Difficulty to Fill And Time Open for Hire

To measure the level of difficulty in filling vacancies, employers' perception of difficulty as well as data on how long each position had been open at the time of the survey were gathered. In this survey, 11% of the vacancies reported are classified as very difficult to fill. This is down eight percentage points from last year. Logically, with more individuals available for work, employers should find it a little easier to fill vacancies. While about one-third of the responding employers believed open positions were not difficult to fill, approximately half of the reported vacancies were associated with some sort of hiring difficulty (*Figure 18*). In

some sort of hiring difficulty (*Figure 18*). In fact, employers believe that just over half of all vacancies are somewhat difficult to fill and this perception has not changed from the winter report a year ago.

While it could be that the job seeker's skills do not match those required for the desired position, the vacancy could also be related to lower-than-expected wages or require a longer commute to work. The inconsistency in the perceptions of difficulty to fill adds to the challenge of interpreting hiring difficulty. While some employers may consider a vacancy to be difficult to fill when it has been open for 30 to 60 days, another employer may consider a similar vacancy not difficult to fill given the same time frame. Knowing how long a position has been open helps better understand the response to the question about how difficult it is to fill a vacancy. Just as the characteristics of the difficulty to fill categories have not changed much from last year, there are similarities in time open for hire. While there is a higher percentage of vacancies that take 60 days or more to fill this year, not much else has changed compared to last winter's report. (Figure 19)

Positions that are considered difficult to fill tend toward the health services industry. In this industry, most of the occupations are considered difficult to fill and are open for more than 60 days. Last winter's report showed the same, with the highest number of vacancies in the Healthcare Practitioners and Technical occupations. These consistent findings suggest that there is a continued need for applicants in the health services arena and that the shortage of trained individuals will result in persistent vacancies.

Barely less than half of all vacancies have been open for less than 30 days. A small portion of highly technical vacancies is in this group, including a few health care occupations. The majority of vacancies found open for this short time period are mostly full-time positions that require lower levels of education and experience and exist throughout all industries. Vacancies that are reported as always hiring are split between entry-level positions with different educational requirements and licensed practical nurses.

Figure 18: Vacancies by Difficulty to Fill

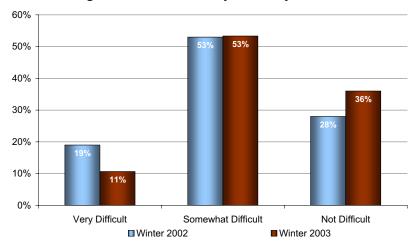
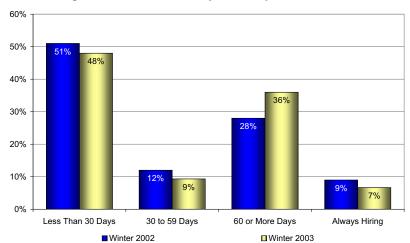


Figure 19: Vacancies by Time Open for Hire



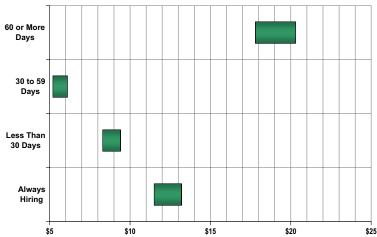
Thirty-six percent of the vacancies are reported as open for 60 days or more. For this survey, these positions also require the applicant to have a minimum of vocational training/certification or a two-year degree and experience in the occupation. Ninetynine percent of these positions are in the health services industry and the remaining can be found in hotel occupations.

Positions that are considered easiest to fill are offered with lower wages (as would be expected), while positions at the other end of the spectrum, those that employers reported as being difficult or very difficult to fill were offered the highest wages.

For this survey, vacancies considered not difficult to fill are associated with low-skilled positions that offer wages closer to the legal minimum of \$5.15 per hour. Positions perceived to be somewhat difficult to fill add \$5.00 to the average minimum wage offered while those considered difficult to fill are offered even higher wages.

Whereas traditionally, higher wages are offered as the time a vacancy takes to fill increases, survey results show an unpredictable pattern. The lowest wages are offered to vacancies open for a moderate amount of time while higher

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



wages are offered for positions that are always open for hire. The highest reported average wages for this survey are for positions that have been open for 60 or more days, a typical result in most job vacancy survey analyses.

For positions that are open for less than 30 days, the occupations with the highest wages offered are automotive service technicians and emergency medical technicians. The lowest offered wages in this category go to dishwashers and non-restaurant food servers.

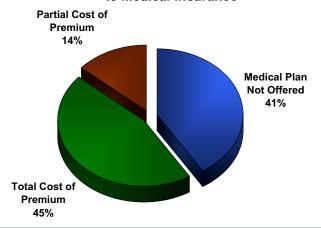
Vacancies

Additional Compensation

Medical Insurance

Almost 60% of the vacancies include some form of medical insurance. This is down from last winter's report where almost all of the vacancies were offered with some form of medical insurance.

Figure 21: Employers' Contribution to Medical Insurance



Vacancies associated with no medical plans are, for the most part, low-education and low-skilled positions and are usually filled without difficulty.

As expected, the vacancies with more intensive requirements offer higher pay as well as more complete medical coverage. In particular, almost all of the vacancies in health care, as well as a few teaching positions, include the employer paying the total cost of the premium. Vacancies offered with only a partial cost of medical premium offer a higher wage range of about \$15.00 to \$16.00 per hour. Those with the total cost of the medical premium paid offer a wage range of about \$10.00 to \$12.00 per hour.

Sign-On Bonus

There was insufficient data regarding sign-on bonuses for this survey report. This type of compensation is usually used during a tight labor market when employers are using a variety of methods to attract potential applicants.

Occupations

The information reported in the Job Vacancy Survey is intended to provide job seekers and employers with useful and current information to help them make informed labor market decisions. Estimating the number of overall vacancies in a region and breaking those numbers down by categories such as industry and size provides a useful overview of the vacancy market, but when it comes down to filling a particular opening, the more detailed the information the better. Reporting vacancies at the individual occupation level is the most detailed information the survey can provide without breaking confidentiality with those employers who participated in the survey.

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

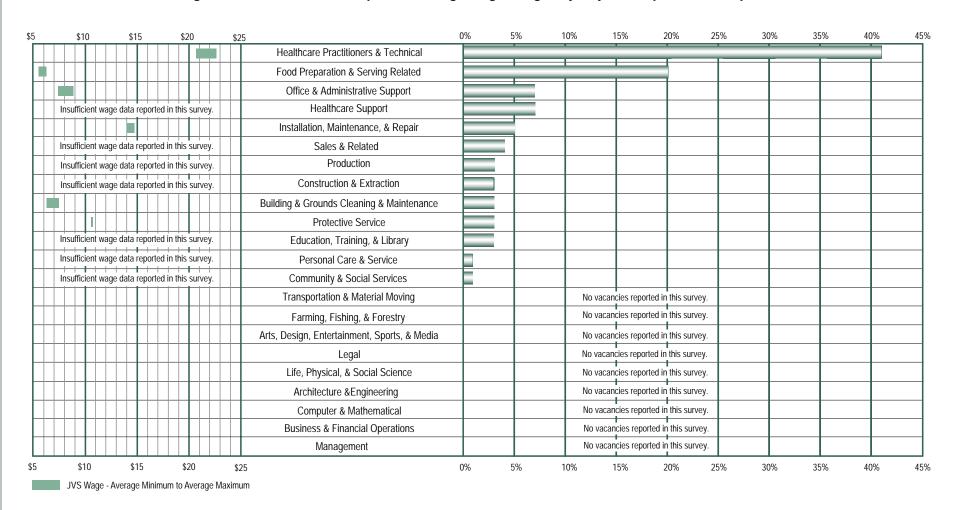
Vacancies found in this survey were coded into 13 of the 23 major occupation groups. For the past three surveys, the industry reporting the greatest number of vacancies has been health services. This survey period is no different.

The highest proportion of vacancies is found

in the Healthcare Practitioners and Technical occupational group, with the second highest proportion of vacancies in Food Preparation and Serving Related. Office and Administrative Support as well as Healthcare Support also remain among the top five occupational groups most in demand. The least in demand occupations are found in Community and Social Services as well as in Personal Care and Service. Proportions of vacancies found in popular occupational groups such as Computer and Mathematical as well as Education, Training, and Library increase/decrease depending upon circumstances at the time of the survey.

Survey results show that the 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. Low vacancies at this time of the year, in addition to the softening of the economy, can produce little or no wage data. For this report, no vacancies were found in 10 of the 23 occupational groups and seven additional occupational groups had insufficient wage data to report. The occupational group offering the highest wages in this survey typically requires higher levels of education and experience—Healthcare Practitioners and Technical.

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



High Demand Occupations

Registered nurses have been some of the most in demand individuals since the beginning of the Job Vacancy Survey, not just in the region but throughout the state. In fact, a variety of health care positions have been in high demand, ranging from entry level nursing aides to

top-skilled nurses and technicians. For the winter 2003 report, bank teller and restaurant positions are also abundant. Though many waiter and waitress positions require varying levels of experience and professionalism depending on the restaurant, many of these vacancies offer steady employment for those desiring entry into the Accommodation and Food Services Industry.

Figure 23: Top Hot Jobs

SOC Occupation Title	Average JVS Wage				
Registered Nurses	†				
Tellers	\$8.90				
Licensed Practical and Licensed Vocational Nurses	†				
Retail Salespersons					
Waiters and Waitresses	\$5.20				
Dishwashers	\$5.80				
Combined Food Preparation and Serving Workers, Including Fast Food					
Home Health Aides					
Repiratory Therapy Technicians	†				

[†] Insufficient Wage Data Available

Wage Data

Tables 3 and 4 contain a list of all the detailed SOC job titles that were assigned to vacancies reported in this survey. Because a census of large employers and Government agencies is conducted, the list contains titles for nearly all of the vacancies available at the time of the survey for those employers. Almost one-third of all small to mid-size employers were contacted for the random sample, so the list also includes occupations reported by those employers. Given the large size of the random sample collected, the list of occupations should be fairly comprehensive; however, it is not exhaustive. Most likely, if a different random sample had been drawn there would be some differences in the job titles reported, but there would also be many of the same.

Estimated Vacancies

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

Vacancies Found

The number of vacancies by occupation found in the survey.

Average JVS Wage

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

Occupational Employment Statistics (OES) Wage Data

Occupational Employment Statistics (OES) wage data are provided for each occupation. OES data are based on a national survey of employers and refer to filled positions, not vacancies. The data provided here are reported for the Upper Arkansas Region when available and statewide otherwise. Data were collected in 1999 and 2000 and aged to 2001 using the Employment Cost Index (ECI). A complete description of the OES survey and the ECI is available on the Internet at: http://www.bls.gov/.

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

Table 1: Occupations With 4 or More Estimated Vacancies

					Occupational Employment Statistics Wage Data (2002)						ge Data	ta
					Av	erage Wa	ges		Percei	ntile Dist	ribution	
SOC Code	SOC Occupational Title	Vacancies Estimated	Vacancies Found	Average JVS Wage	Entry- Level	Overall	Experi- enced	10th	25th	50th	75th	90th
29-1111	Registered Nurses	14	13	†	\$17.13	\$21.91	\$24.29	\$15.39	\$18.89	\$21.74	\$25.31	\$28.55
43-3071	Tellers	6	3	\$8.90	\$7.87	\$8.64	\$9.03	\$7.36	\$7.79	\$8.51	\$9.40	\$10.54
29-2061	Licensed Practical and Licensed Vocational Nurses	5	5	†	\$11.23	\$14.57	\$16.24	\$10.65	\$12.05	\$14.77	\$16.77	\$19.04
41-2031	Retail Salespersons	5	2	†	\$6.14	\$9.37	\$10.98	\$5.75	\$6.22	\$7.01	\$9.26	\$14.42
35-3031	Waiters and Waitresses	4	3	\$5.20	\$6.01	\$6.24	\$6.37	\$5.50	\$5.76	\$6.22	\$6.67	\$7.07
35-9021	Dishwashers	4	3	\$5.80	\$6.00	\$6.87	\$7.30	\$5.59	\$6.03	\$6.73	\$7.80	\$8.52
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	4	3	†	\$5.98	\$6.90	\$7.35	\$5.53	\$5.90	\$6.51	\$7.43	\$8.40
31-1011	Home Health Aides	4	3	†	\$8.14	\$8.55	\$8.76	\$7.58	\$7.90	\$8.45	\$9.02	\$9.55
29-2054	Respiratory Therapy Technicians	4	4	†	†	†	t	†	†	†	†	†

[†] Insufficient Wage Data Available



Table 2: Occupations With Fewer Than 4 Estimated Vacancies -

		Occupational Employment Statistics Wage Data (2002)							
		Average Wages							
SOC Code	SOC Occupational Title	Entry- Level	Overall	Experi- enced	10th	25th	50th	75th	90th
29-9091	Athletic Trainers	†	†	†	†	†	†	†	†
* 49-3023	Automotive Service Technicians and Mechanics	\$7.20	\$12.45	\$15.07	\$6.25	\$8.31	\$10.54	\$15.96	\$21.85
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	\$12.89	\$15.65	\$17.03	\$12.20	\$13.56	\$15.21	\$16.81	\$18.36
41-2011	Cashiers	\$6.09	\$8.04	\$9.02	\$5.82	\$6.46	\$7.59	\$8.77	\$11.34
39-9011	Child Care Workers	†	†	†	†	†	†	†	†
21-1021	Child, Family, and School Social Workers	\$13.78	\$17.92	\$19.99	\$12.74	\$15.07	\$17.91	\$20.89	\$24.31
35-2011	Cooks, Fast Food	\$6.91	\$7.63	\$7.99	\$6.33	\$7.12	\$7.72	\$8.31	\$8.67
35-2014	Cooks, Restaurant	\$6.39	\$8.26	\$9.20	\$5.91	\$6.86	\$7.86	\$8.72	\$11.04
33-3012	Correctional Officers and Jailers	\$15.13	\$18.25	\$19.80	\$14.65	\$16.35	\$18.57	\$20.45	\$21.58
35-3022	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	\$5.98	\$6.06	\$6.10	\$5.45	\$5.71	\$6.14	\$6.57	\$6.83
35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	\$6.00	\$6.37	\$6.55	\$5.49	\$5.78	\$6.26	\$6.74	\$7.80
29-2041	Emergency Medical Technicians and Paramedics	†	†	†	†	†	†	†	†
_* 47-1011	First-Line Supervisors/Managers of Construction Trades and Extraction Workers	\$15.42	\$21.90	\$25.14	\$13.84	\$17.51	\$20.37	\$24.75	\$31.25
35-3041	Food Servers, Nonrestaurant	†	†	†	†	†	†	†	†
47-4051	Highway Maintenance Workers	\$12.97	\$16.26	\$17.91	\$11.97	\$14.40	\$16.22	\$17.98	\$21.44
43-4081	Hotel, Motel, and Resort Desk Clerks	\$5.98	\$7.95	\$8.93	\$5.74	\$6.43	\$8.03	\$9.61	\$10.45
25-2012	Kindergarten Teachers, Except Special Education	†	†	†	†	t	t	†	†
37-3011	Landscaping and Groundskeeping Workers	\$7.27	\$10.31	\$11.83	\$6.32	\$8.38	\$10.43	\$12.13	\$13.48
51-6011	Laundry and Dry-Cleaning Workers	\$6.03	\$7.96	\$8.93	\$5.63	\$6.03	\$6.69	\$9.21	\$13.34
37-2012	Maids and Housekeeping Cleaners	\$6.38	\$7.81	\$8.53	\$5.93	\$6.86	\$7.84	\$8.82	\$10.07
49-9042	Maintenance and Repair Workers, General	\$8.58	\$12.74	\$14.80	\$6.98	\$9.90	\$12.49	\$15.81	\$17.93
31-9092	Medical Assistants	\$8.18	\$9.60	\$10.31	\$7.75	\$8.61	\$9.65	\$10.66	\$11.32
31-2011	Occupational Therapist Assistants	†	†	t	†	†	t	†	†

Table 2: Occupations With Fewer Than 4 Estimated Vacancies — Page 2 =

		Occupational Employment Statistics Wage Data (2002)							
		Av	erage Wa	ges	Percentile Distribution				
SOC Code	SOC Occupational Title	Entry- Level	Overall	Experi- enced	10th	25th	50th	75th	90th
29-1122	Occupational Therapists	†	†	†	†	†	†	†	†
29-1051	Pharmacists	\$24.95	\$31.46	\$34.70	\$24.26	\$29.02	\$32.89	\$36.19	\$39.68
33-3051	Police and Sheriff's Patrol Officers	†	t	†	†	t	†	†	†
* 29-2034	Radiologic Technologists and Technicians	\$14.37	\$17.62	\$19.24	\$13.27	\$15.06	\$16.88	\$20.53	\$23.19
* 43-4171	Receptionists and Information Clerks	\$7.04	\$9.65	\$10.95	\$6.36	\$7.86	\$9.78	\$11.65	\$12.99
25-2031	Secondary School Teachers, Except Special and Vocational Education	†	†	t	†	†	†	†	†
29-2055	Surgical Technologists	†	t	†	†	t	†	†	†
* 29-2056	Veterinary Technologists and Technicians	†	t	†	†	t	†	†	†
* 51-4121	Welders, Cutters, Solderers, and Brazers	\$9.11	\$13.83	\$16.19	\$8.32	\$10.30	\$14.56	\$16.86	\$19.56

^{*} OES wages reported for Colorado statewide



[†] Insufficient Wage Data Available

Industry Briefs

Health Care and Social Assistance

Occupations in the Health Care and Social Assistance industry have been in the most demand by employers, not just in the Upper Arkansas Region, but in most regions of Colorado for quite some time. While some individuals have chosen this career path and are on their way with education and experience to fulfill the requirements, there is a persistent shortage of health care workers.

Opportunities exist at nearly every level in this industry. The largest health care occupation, with over two million jobs nationwide, is registered nurses. Wages are usually above average, especially for advanced nurses with higher levels of education and experience. Varying levels of medical personnel are always in demand in the region, ranging from registered nurses, radiation and respiratory technicians and other health diagnosing and treating practitioners to lower-skilled entry positions in health care support such as home health aides, nursing aides, orderlies and other assistants.

Entering into health care occupations offers almost immediate employment in addition to allowing the trained individual to find employment anywhere in the state. The Upper Arkansas Region has a variety of emergency medical facilities as well as many family prac-

tice clinics offering varying levels of opportunities.

The region's Colorado Mountain College and Pueblo Community College Fremont Campus can help prepare individuals for entering into these various positions. The nursing programs can have a career seeker trained as a nurse's aide in one semester with the Nurse Aide Training program, the individual receiving a Certificate of Occupational Proficiency in Nurse Aide Training upon completion of the program. Individuals can also choose a program of study to meet the requirements necessary to become a licensed practical nurse, and when desired, can follow that with an additional two semester program that will prepare the individual to become a registered nurse. Students can also transfer to Colorado State University at Pueblo to complete a bachelor of science degree in nursing. The nursing programs follow the guidelines for the Colorado State Board of Nursing Articulation Model, offering candidates exciting and rewarding careers in the region.

ith 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 employer's seeking?
- ♦ Are employers having difficulty filling positions?

How to Use This Report

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 **L** 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 industry segment along with indications of difficulty filling these positions should caution a firm requiring a similar labor profile.

Job Seekers

The Job Vacancy Survey provides job L 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

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

necks may occur should current vacancies persist. Economic developers can also generate a comprehensive picture of the region by determining where labor demand stands today, as identified by the survey, and where the local market is trending using Labor Market Information's employment projections.



Caveats

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

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

Nonsampling 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 an industry 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 roles are being phased-out.

Occupational demand is subject to seasonal changes and is affected by business cycles. For example, the reader would want to be aware that a decrease in vacancies for construction workers from April to November could represent seasonal variations, not necessarily a long-term decrease in the

demand for such workers. When several years of survey data have been collected, patterns that more accurately reflect changing labor market conditions may be identified. Regional surveys are timed to make these comparisons possible.

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

T he Job Vacancy Survey was designed to accurately estimate the number of job vacancies for firms employing 5 or more people. The secondary purpose of the survey is to obtain and report significant vacancy characteristics.

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

Stratifications containing small and medium sized private employers are randomly sampled. In order to report vacancy characteristics such as education and experience requirements demanded, the survey must contact more employers than would be necessary if the survey only estimated the total number of vacancies. For this reason all of the large employers and government agencies are contacted in the region. These employers provide the most cost effective means of obtaining large amounts of vacancy information. Approximately 40% of the employment in the region is found in large and government employers that make up only 1%-2% of the total number of firms. Censusing these entities allows us to cover a large portion of the region's employment while contacting relatively few entities.

Survey Sample

The Upper Arkansas Region survey was L conducted from January 8 through January 15, 2003. For the purpose of this report, private and government employers with 5 or more employees are referred to as the sample frame. Firms with fewer than 5 employees make up a very large portion of all employers in the region, but a small proportion of the total employment. Employment in the sample frame accounts for 52% 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 industry groups. The number of firms surveyed in each industry varies according to the number of employees and employers in the industry. In most industries half of all employers are contacted in an industry up to 200 employers. In industries 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 an industry 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 36% of the employment in the sample universe, while private industry employers make up the remaining 64%. Large firms account for 29% of private industry employment in the sample universe. Firms employing from 5 to 74 individuals are considered small to midsize employers, and account for the remaining 71% of the private industry employment.

NAICS Industry Sectors					
Governr	nent				
Public Admin	istration				
Private Inc	dustry 				
Goods Producing Industries					
Agriculture, Forestry, Fishing & Hunting	Construction				
Mining	Manufacturing				
Service Producing Industries					
Utilities	Professional, Scientific and Technical Services				
Wholesale Trade	Management of Companies and Enterprises				
Retail Trade	Administrative and Support and Waste				
Transportation and Warehousing	Management				
Other Services	Educational Services				
Information	Health Care and Social Assistance				
Finance and Insurance	Arts, Entertainment, and Recreation				
Real Estate and Rental Leasing	Accommodation and Food Services				

The response rate for this survey is 76% and the cooperation rate is 99%. The response rate measures how successful the survey is at contacting eligible employers. The cooperation rate measures how willing employers are to participate in the survey

once they are contacted. The margin of sampling error for the overall results is plus or minus 5%, or about 6 vacancies. In other words in 95 out of 100 samples the actual number of vacancies in the Upper Arkansas Region during the survey would be between 103 and 119. These statistics are intended to give the reader confidence that the estimates in this survey are accurate and that the survey was conducted according to recognized survey research standards.

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 public sector for several years, Colorado is the first state in the nation to pioneer the use CATI data collection for the Job Vacancy Survey.

Professional interviewers, trained in economic data collection processes, gather

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.

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

Data Editing

nce 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.

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.

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

Office of Management and Budget established the Economic Classification Policy Committee in 1992 to pursue a fresh slate examination of economic classifications for statistical purposes¹. Since 1939 the U.S. has been using the Standard Industrial Classification (SIC) system. While SIC had undergone periodic revisions, the last one in 1987, rapid changes in the U.S. and world economies brought SIC under increased scrutiny. In response to the need for a classification system that better reflected the dynamic nature of economies, OMB established the Economic Classification Policy Committee2. Government agencies from the United States, Mexico and Canada³ were tasked with the development of a system that accounted for rapid changes in the U.S and world economies.

Industrial Classification *vs.* **Occupational Classification**

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

Benefits

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

Relevant— NAICS recognizes hundreds of new businesses in the economy with 20 broad industry sectors, up from SIC's 10. Some new industry categories include an Information sector and a Health Care and 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 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 informationbased 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 and 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.

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

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 Informàtica (INEGI) and Statistics Canada

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

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

Glossary

hese 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 and also permits the interviewer to educate the respondents on the importance of timely and accurate information.

Cooperation Rate

The number of completed interviews divided by the number of eligible survey units contacted. 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 number of surveyed units not deemed ineligible. 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 1 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 produce similar products or provide similar services. For example, all establishments that manufacture automobiles are in the same industry. A given industry, or even a particular establishment in that industry, might have employees in dozens of occupations. The North American Industry Classification System (NAICS) groups similar establishments 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 industries.

Part-time Employee

An employee who usually works between 1 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 less than \$15.00; therefore 75% of workers earn 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 5 or more employees; government entities are drawn from ES-202 while private companies come from the ALMIS (America's Labor Market Information System) database.

Seasonally Adjusted

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

Service Producing Industries (NAICS)

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

Shortage (as in shortage of workers)

Shortages occur in a market economy when the demand for workers for a particular occupation is greater than the supply of workers who are qualified, available, and willing to do that job.

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 4-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

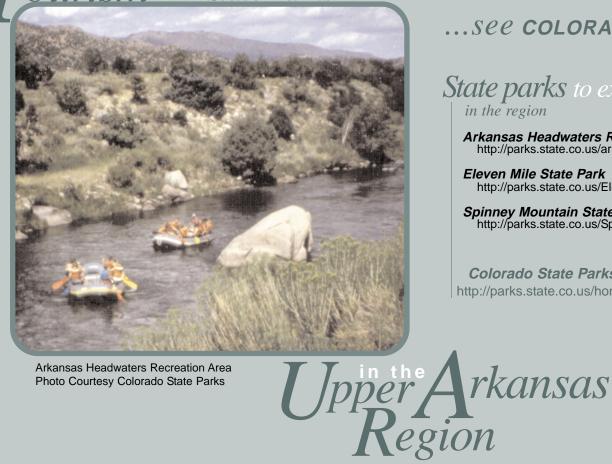
The unemployment rate represents the number unemployed as a percent of the labor force.

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.



OUTISM and our State Parks are important parts of Colorado's economy. We urge you to



Arkansas Headwaters Recreation Area Photo Courtesy Colorado State Parks

...see colorado first

State parks to explore

in the region

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

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

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

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

WORKFORCE CENTERS

Salida Workforce Center

141 E. 3rd Street Salida, CO 81201

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

Canon City Workforce Center

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

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

Fairplay Satellite Office

Department of Human Services Building 824 Costello Fairplay, CO 80440

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



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