

Western & Southwest Region

Job Vacancy Survey

Summer 2004



Survey Conducted
June 15 – 29, 2004

Released
Summer 2004

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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.

Analyst for this region: Steven Krichbaum

Workforce Research & Analysis
Labor Market Information
Colorado Department of Labor & Employment
Two Park Central, Suite 300
1515 Arapahoe Street
Denver, CO 80202-2117

(303) 318-8890 Email: Imi@state.co.us
www.coworkforce.com/Imi/wra/home.htm

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State of Colorado
Bill Owens, *Governor*



Colorado Department of Labor & Employment
Jeffrey M. Wells, *Executive Director*

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The Colorado Job Vacancy Survey

Introduction

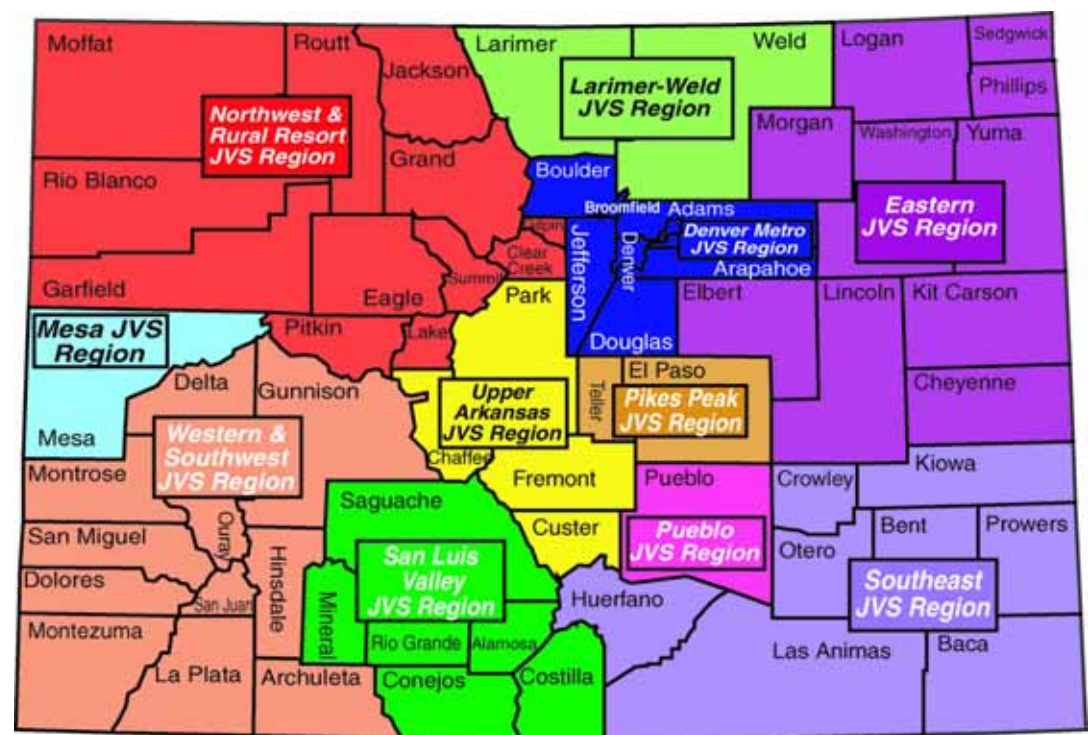
The unemployment rate, along with the level and growth rate of employment, has been used as an indicator of labor market conditions for decades. While this indicator provides information about changes in the supply and demand for labor, it reveals nothing about the skills most sought after by employers. As such, individuals preparing themselves for the job market have done so with limited knowledge of what skills are necessary to successfully compete in the contemporary labor market.

Employers have had an equally difficult time determining appropriate compensation levels due to a limited knowledge of what similar firms in their region are currently offering.

Job seekers and employers, as well as Workforce Centers and economic developers need more than a measure of demand for workers at a specific point in time. They also need a measure of where in the economy that demand is located and what education and experience levels are most preferred. The Colorado Department of Labor and Employment (CDLE) developed the Job Vacancy Survey (JVS) to meet this need. The JVS is designed to provide a snapshot estimate of job vacancies along with detailed information and analysis on accompanying wages, skill requirements and work experience.

The CDLE's survey unit collects original data by conducting phone interviews with a representative sample of employers in a given region. The department's economists analyze the raw data, estimate the number of

Figure 1: Colorado Job Vacancy Survey Regions



vacancies in the area and publish the report within weeks of the original data collection, providing a timely portrait of the employment situation.

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

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

Executive Summary

The Summer 2004 Western & Southwest Job Vacancy Survey was conducted from June 15th through 29th, 2004. The goal of the survey is to provide current information on the demand for workers so that employers, job seekers, economic developers, educators, and workforce centers can make more informed decisions in this region.

A random sample of small to mid-size private employers with at least five employees was contacted over the survey period. Additionally, the Colorado Department of Labor and Employment (CDLE) survey unit attempted to interview all large employers and Government entities. Employers were asked if they were actively hiring during the survey, along with a variety of questions about the positions that they were seeking to fill.

A total of 1,135 employers, representing approximately 39% of the region's total employment, responded to the survey. Out of these, 124 are Government, 55 are large, and 956 are small to mid-sized employers. The survey has a response rate of 82%. The margin of sampling error is plus or minus 29 vacancies.

Major Findings of Survey:

- ◆ An estimated 1,064 jobs are open for immediate hire, up from 576 a year ago.Page 4
- ◆ The unemployment rate in June, 2004 is 4.2%, compared to 5.4% in June, 2003.Page 4
- ◆ Leisure & Hospitality has the most vacancies, with 425.Page 8
- ◆ The overall average wage offered is \$11.90 per hour.Page 10
- ◆ At least a high school diploma or GED is required by 57% of all vacancies.Page 13
- ◆ Employers have more difficulty filling vacancies than last year.Page 16
- ◆ Most of the 62% of openings offering medical insurance pay part of the premium.Page 18
- ◆ None of the employers in this survey offer sign-on bonuses.Page 18
- ◆ Management and Healthcare Practitioner & Technical occupations offer the highest average wages.Page 20
- ◆ Cashiers, Registered Nurses, and Retail Salespersons are in highest demand.Page 22



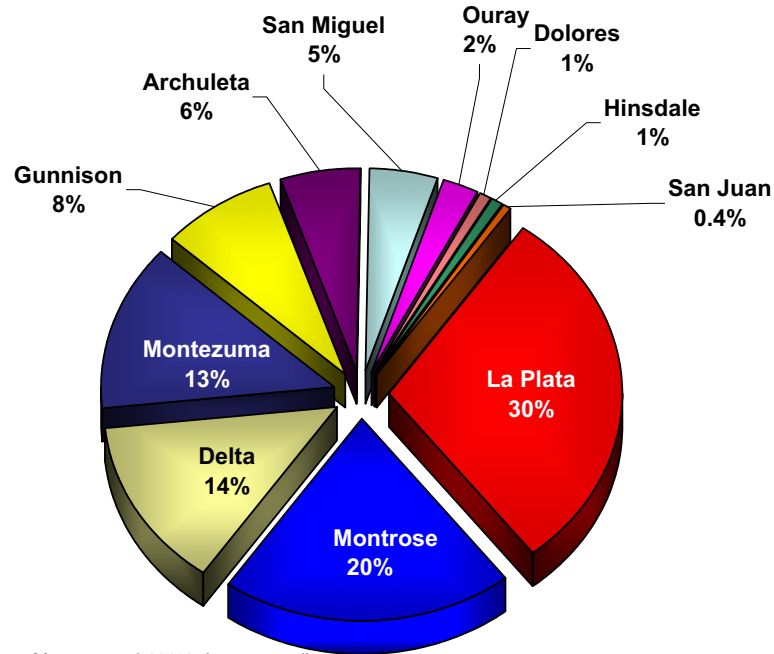
Regional Information

The Western & Southwest Region consists of Archuleta, Delta, Dolores, Gunnison, Hinsdale, La Plata, Montezuma, Montrose, Ouray, San Juan, and San Miguel counties. The region contains a wide variety of geographic and economic areas that contribute to its beauty and appeal. The Western & Southwest region contains world-class ski resorts, historic and quaint small towns, productive agricultural resources, and growing metropolitan areas. The Demography Section of the Colorado Department of Local Affairs estimates the region's 2004 population at 180,551. The region's estimated population increased by 3,303 or 1.9% from 2003 to 2004, primarily due to migration into the area. The region employed

92,669 in June 2004 out of a labor force of 96,760. La Plata and Montrose counties make up 50% of the employment and contain the two largest cities in the region, Durango and Montrose.

Western & Southwest Colorado has a growing Hispanic community that increased to 17% of the population by the year 2000. The region also has one of the largest Native American concentrations in the state. One percent of the population in Colorado considers itself Native American, but almost four percent of the population in the Western & Southwest Region is Native American. The Southern Ute tribe is not only an important social and cultural part of the region; it is also one of its largest employers.

Figure 2: Employment by County

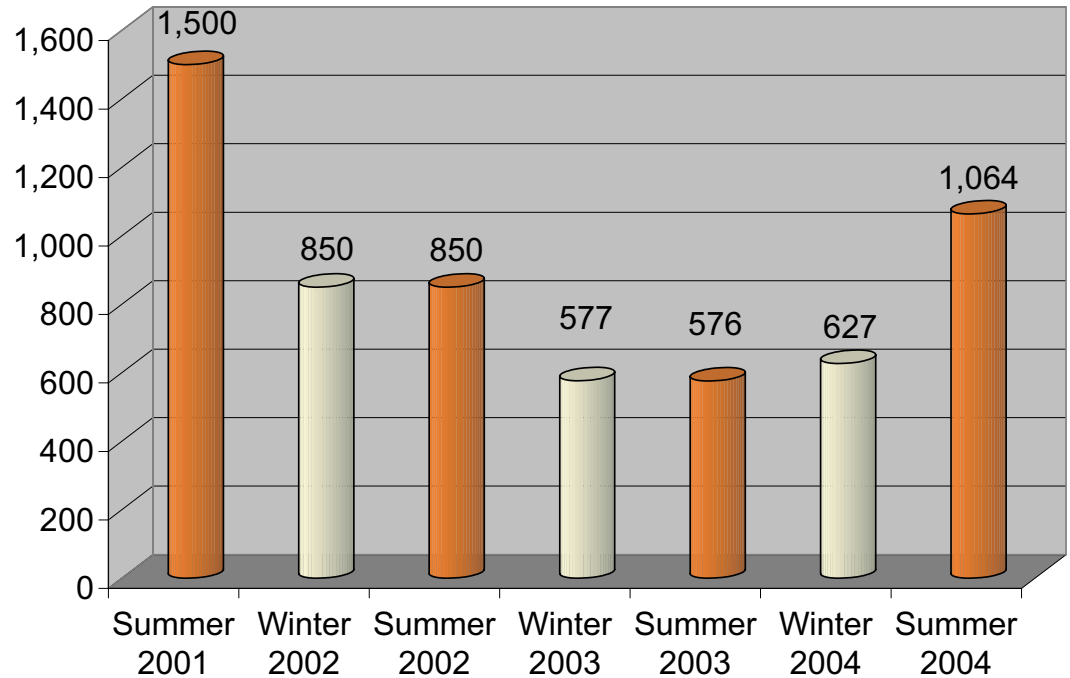


May not total 100% due to rounding.
Source: CDLE, Local Area Unemployment Statistics, Released July 2004

Regional Information *—continued*

For the last four years, the Western & Southwest Job Vacancy Survey has attempted to measure the demand for new workers in the region. From the summer of 2001 to the summer of 2003, the estimated number of vacancies in the region gradually dropped. This drop was consistent with the loss of jobs and rising unemployment in both the state and nation. The tide is reversing in the national and state economies, and this is helping to improve conditions for job seekers in the Western & Southwest Region as well. The number of estimated vacancies increased 85% from 576 in the summer 2003 survey to 1,064 in the summer 2004 survey. The unemployment rate also dropped from 5.4% to 4.2% during the same period. The region saw a large increase in the size of the labor force, probably due to better job prospects in the labor market.

Figure 3: Historical Vacancies—Western & Southwest Region

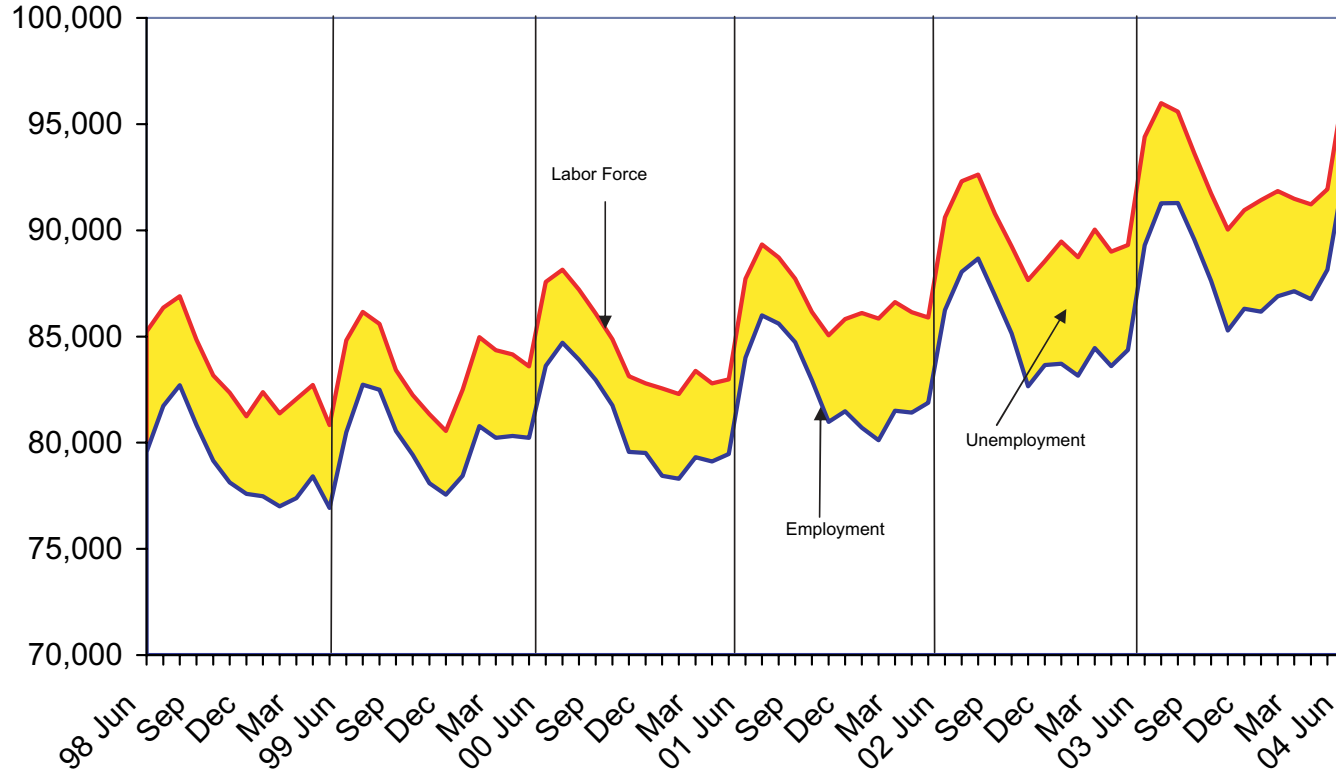


	Summer 2001	Winter 2002	Summer 2002	Winter 2003	Summer 2003	Winter 2004	Summer 2004
Vacancies	1,500	850	850	577	576	627	1,064
Employment	85,996	80,710	86,242	83,712	89,293	86,165	92,669
Unemployed	3,340	5,395	4,371	5,754	5,100	5,254	4,091
Unemployment Rate	3.7%	6.3%	4.8%	6.4%	5.4%	5.7%	4.2%

Source: CDLE, Local Area Unemployment Statistics, July 2004

Regional Information —continued

Figure 4: Employment and Labor Force Trends for the Western & Southwest Region
(Not Seasonally Adjusted)



Source: CDLE, Local Area Unemployment Statistics, July 2004

Figure 4 illustrates the historical progression of both the Western & Southwest's labor force and employment levels. The slightly positive trend illustrates growth in both the labor force and employment levels over time. The region's labor force has grown at 2.1% while employment has experienced a compound annual growth rate of 2.6% per year from June 1998 to June 2004. The net growth in the labor force over the six-year period is about 13%. When employment growth outpaces increases in the labor force, the unemployment rate declines. In June of 1998 the unemployment rate stood at 6.6%, much higher than the June 2004 rate of 4.2%

Both employment levels and the labor force peak in late summer and bottom out in late winter. The Job Vacancy Survey is conducted semi-annually in

the winter and summer in order to measure the demand for labor at both the high and low employment periods.

Winter vacancies represent the demand for labor at a time of year when employment is at its seasonal low. Surveys conducted in summer represent the demand for labor at a time when employers are nearing peak employment, yet are still in the process of actively recruiting. A study at this time indicates the type of occupations for which a labor shortage exists even when the labor supply is greatest.

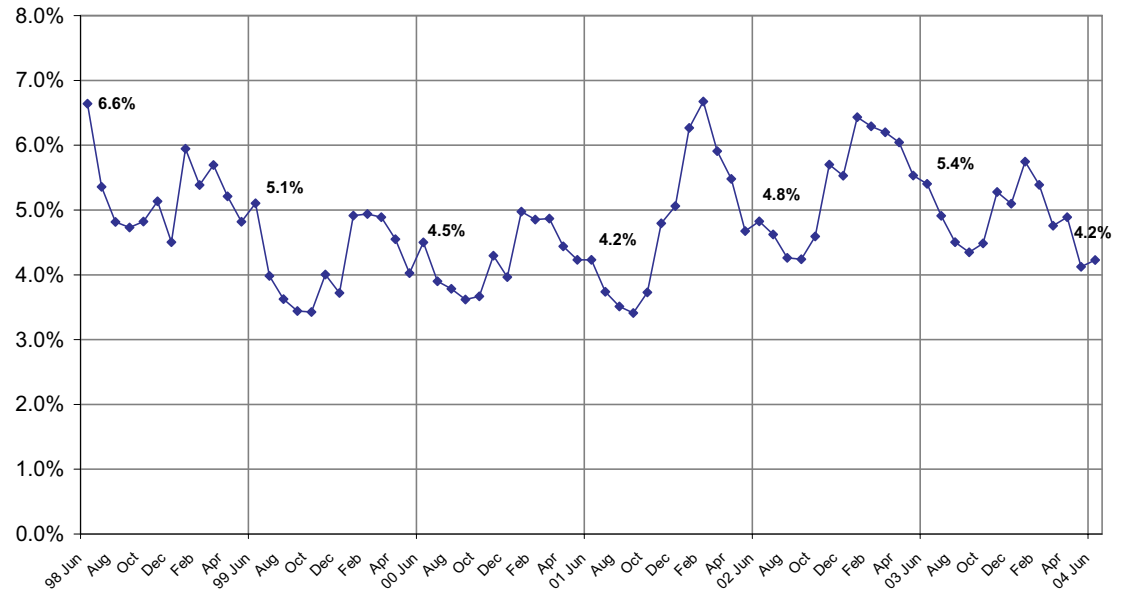
Regional Information *—continued*

Over the last six years, the unemployment rate decreased from 6.6% to 4.2%. Over that period, the rate peaked at 6.7% in February of 2001 and bottomed in September and October of 1999, as well as September of 2001 at 3.4%. The current 4.2% rate is lower than the 5.4% rate in June of 2003 and the 4.8% rate in June of 2002.

The month-to-month changes of the unemployment rate are less accurate and important than the overall pattern of the unemployment rate over several years. Within a six month to one-year period (July 1998 to July 1999 is a good example), the unemployment rate moves somewhat erratically. Over several years, however, clear trends in the unemployment rate emerge. The unemployment rate accurately measures the general employment and unemployment trends. After increased unemployment in 2002 and most of 2003, it appears that the Western & Southwest Region unemployment rate has recently declined.

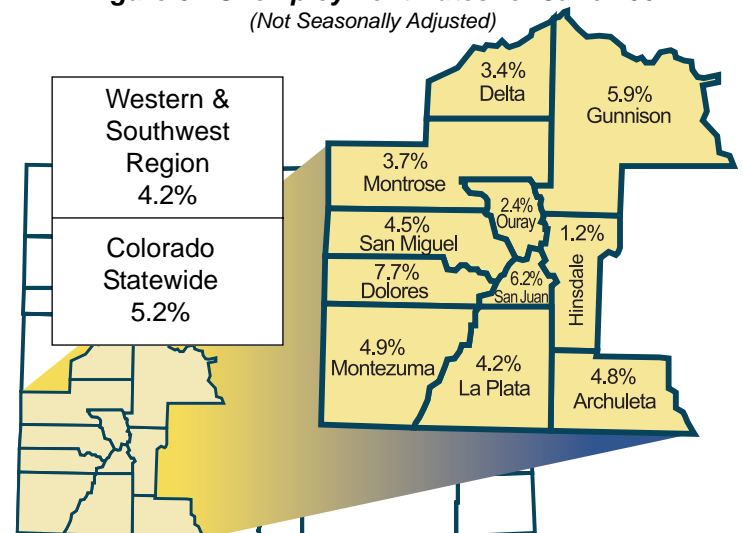
The overall unemployment rate in the Western & Southwest Region is currently lower than the statewide rate of 5.2%. The lowest rate of unemployment occurs in Hinsdale County at 1.2%, while the highest rate is in Dolores County at 7.7%. Because both counties have a very small labor force of less than 1,000 people, a small change in the number of unemployed has a large effect on the unemployment rate. Dolores County only has 57 more people unemployed than Hinsdale County. Of the larger counties in the region, Montezuma has the highest rate and Delta has the lowest.

Figure 5: Western & Southwest Region Unemployment Rate Trend
(Not Seasonally Adjusted)



Source: CDLE, Local Area Unemployment Statistics, Released July 2004

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



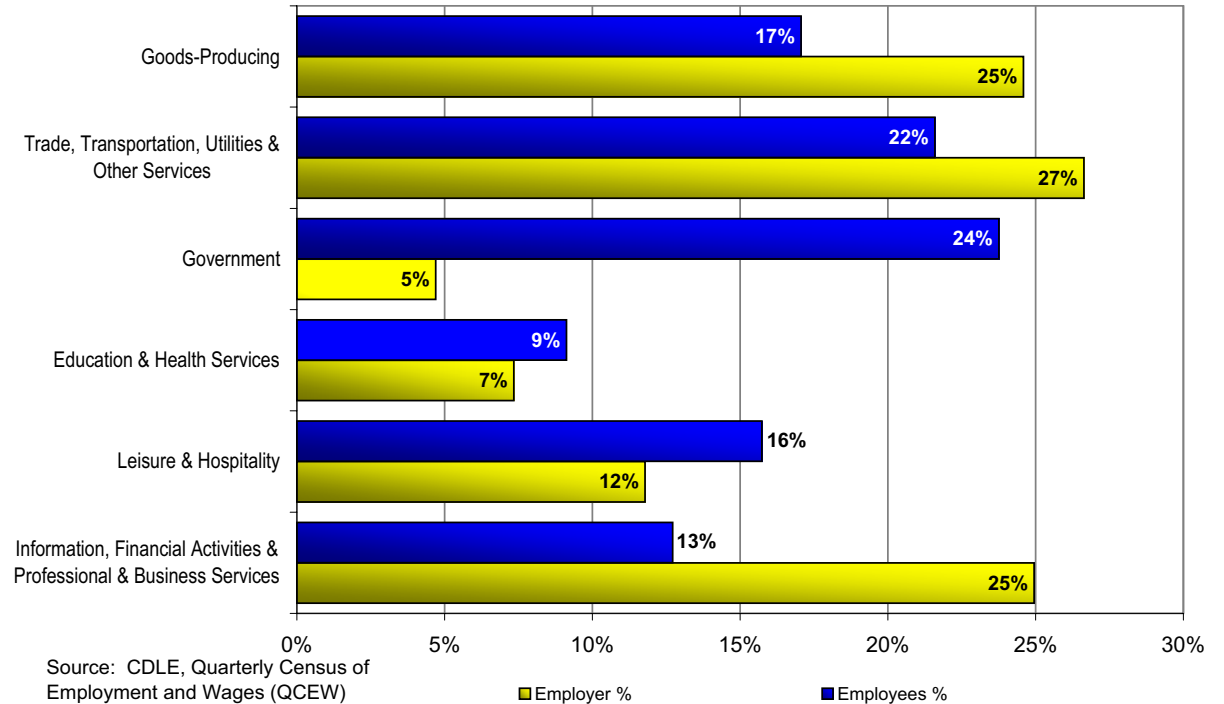
Source: CDLE, Local Area Unemployment Statistics, July 2004

Regional Information —continued

Figure 7 presents employer and employee data for the six JVS sectors used in the rural areas of Colorado. The JVS sectors are based on the 2002 manual of the North American Industry Classification System (NAICS). This new classification system presents vacancies in a more relevant and detailed manner that better reflects today's service based economy¹. This employer and employee data is gathered under the Quarterly Census of Employment & Wages (QCEW) Program that includes employers who pay unemployment insurance tax. Although 98%² of the nation's jobs are covered under the Unemployment Insurance Program, positions typically excluded are in the fields of agriculture and railroad, some state and local government, certain non-profits, domestic workers, unpaid family workers, and the self-employed. The Unemployment Insurance Program exemptions have the largest affect on the Goods Producing Sector, which includes agriculture, in the Western & Southwest Region. Because of this, the Goods Producing Sector most likely represents a much larger part of the region's labor market than is indicated by the 17% of employment reported under the QCEW program.

Government employs more people in the Western & Southwest Region than any other JVS sector. Trade, Transportation, Utilities, & Other Services is the second largest employer, and has the highest number of firms. The

Figure 7: Western & Southwest Region Employers and Employees, 1st Quarter, 2003



majority of employment in this JVS sector is in retail trade that includes general merchandisers, car dealerships, grocery stores, and gas stations. Leisure & Hospitality, which is closely linked to tourism, is the fourth largest JVS sector in the region in terms of employment. One of the advantages of the new NAICS classification system is that it allows for in-depth study and reporting of tourism related employment.

1. For more information on the industry changes, please see North American Industry Classification System, Page 35.
 2. U.S. Department of Labor, Bureau of Labor Statistics. [Http://www.bls.gov/cew/home.htm](http://www.bls.gov/cew/home.htm).



Survey Findings

Estimated Vacancies: JVS Sectors and Employer Size

During the survey period, an estimated 1,064 vacancies were open for immediate hire with private firms having at least five employees and all government employers in the Western & Southwest Region. The total number of estimated vacancies is up from the 576 found in the summer of 2003. Both surveys were conducted in late June using similar methods. The large increase in vacancies from a year ago is a positive sign for job seekers in the Western & Southwest Region.

The region's estimated vacancy rate is 1.6%, meaning that there are approximately 16 vacancies in the survey for every 1,000 positions. The vacancy rate increased from .9% a year ago and 1.3% in the summer 2002 survey. The overall vacancy rate is calculated by dividing the estimated number of vacancies by the sum of the estimated number of vacancies and total employment. 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 the demand for workers has increased significantly from June 2003 to June 2004. There are approximately 3,376 more people employed in the region than a year ago and the number of current job vacancies has increased as well. Job seekers have benefited from the increased labor demand, as there are 1,009 fewer people unemployed, despite more than 2,000 additional members of the labor force.

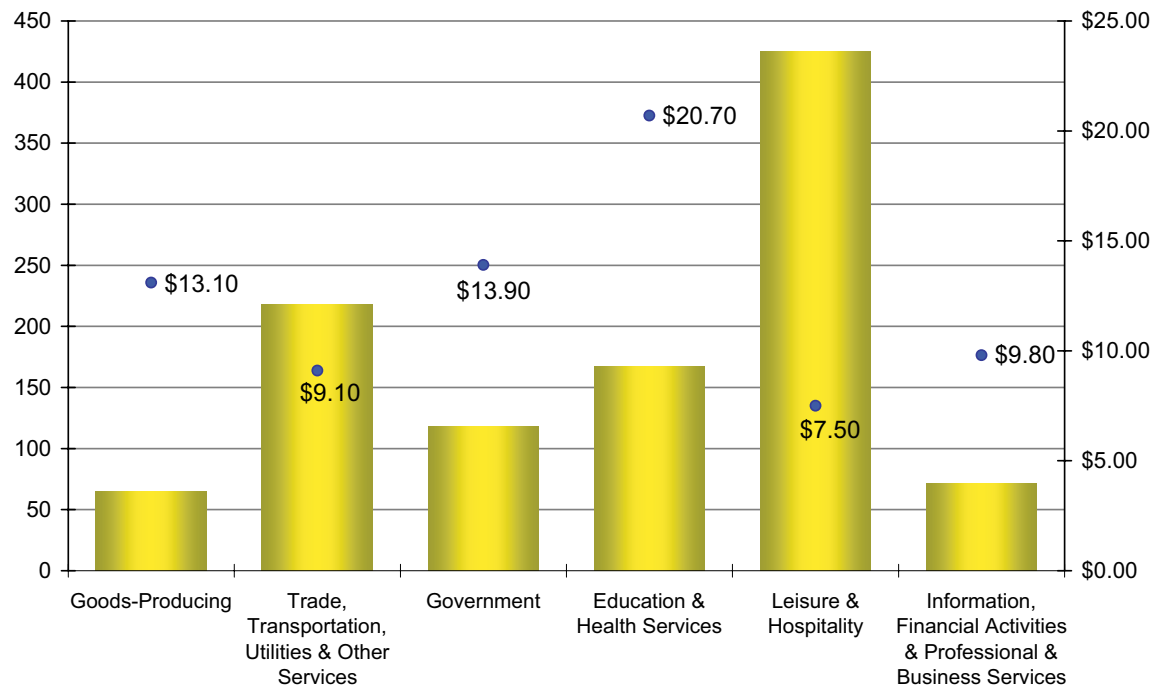
In this survey, the most openings occur in Leisure & Hospitality. Trade, Transportation, Utilities, & Other Services and Education & Health Services also have many vacancies. *Figure 8* shows the estimated vacancies and overall average wage offered in each JVS sector. The highest wages are offered in Education & Health Services, Government and Goods-Producing

JVS sectors. The lowest wages are offered in Leisure & Hospitality, while the second lowest are in Trade, Transportation, Utilities & Other Services. Compared to a year ago, the vacancy rates by JVS sector are:

- Goods-Producing:** .8%, up from .5% in 2003
- Trade, Transportation, Utilities & Other Services:** 1.4%, up from .8% in 2003
- Government:** .8% in both the summer 2003 and 2004 surveys
- Education and Health Services:** 2.2%, up from 1.6% in 2003
- Leisure & Hospitality:** 2.5%, up from 1.1% in 2003
- Information, Financial Activities and Professional & Business Services:** 1.2% in both the summer 2003 and 2004 surveys

The increase in job vacancies has occurred throughout much of the region's economy, as a majority of the industry groups have contributed to the growth. The preceding figures are the most dramatic indication of the

Figure 8: Estimated Vacancies and Average Wages by JVS Sectors



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

improvements in the Western & Southwest Region labor market since the Job Vacancy Survey began three years ago. There is both depth and breadth to the increase in vacancies. While no JVS sector has declined, some have shown a dramatic increase, such as Leisure & Hospitality's 127% increase from 1.1% to 2.5%. As described in previous reports, Government will typically be the most stable of any JVS sector. Population and tax revenues primarily drive Government employment. Neither of these two factors is as sensitive to business cycle fluctuations as private industry. During the difficult labor market of the past two and half years, Government hiring levels declined the least. Likewise, during a recovery, Government hiring levels will increase the least.

Differences in demand among JVS sectors illustrate the importance of conducting a job vacancy survey. People in the Western & Southwest Region need to know which JVS sectors are demanding the most new workers and which are demanding the least. This information helps job seekers to determine which industries are demanding and hiring the most workers and the average wages paid in the industry groups.

Why is the average wage so much higher in some JVS Sectors and lower in others? While increasing or decreasing demand for labor will put pressure on the average wage offered, the mix of occupations probably has the greatest impact. Vacancies in a particular occupation tend to offer similar wages, regardless of the JVS sector. For example, Maids & Housekeeping Cleaners are offered an average of \$7.60 from employers in the Education & Healthcare Sector, and \$7.90 in the Leisure and hospitality sector. If occupations found across different industries offer similar wages, then the large divergence in average wages across JVS sectors must be due to different occupations found in each industry category.

Occupations with the most vacancies by JVS sectors are as follows:

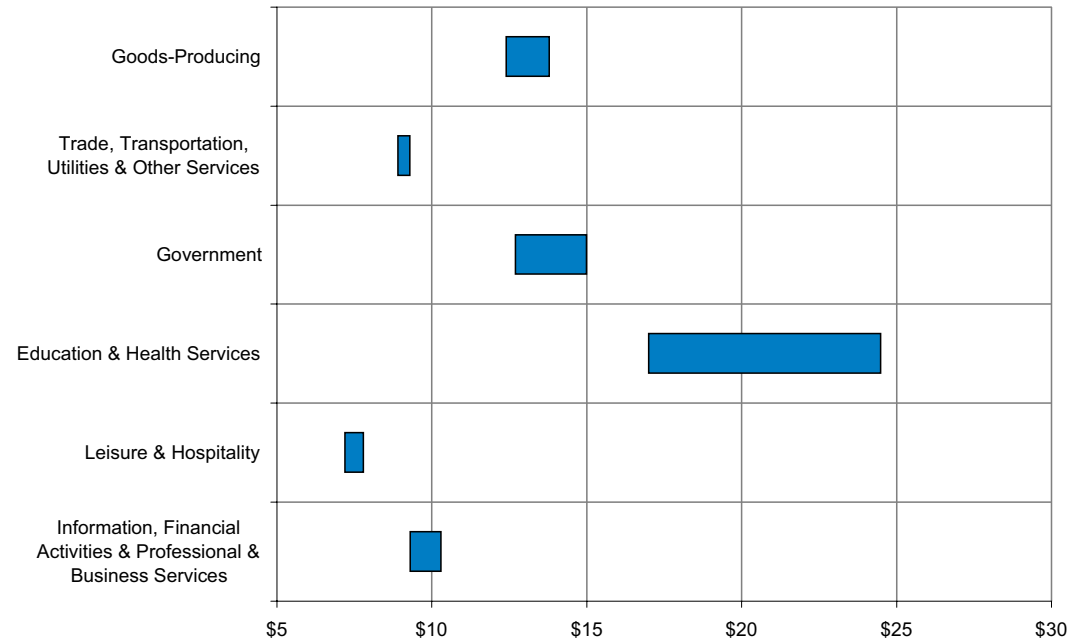
Goods-Producing

—Truck Drivers (Heavy & Extraction) and Construction Laborers

Trade, Transportation, Utilities & Other Services

—Food Batchmakers (i.e. Candy maker) followed by Retail Salespersons

Figure 9: Reported Average Wage Ranges by JVS Sectors



Government

—Elementary School Teachers, followed by Secondary School Teachers, and Janitors & Cleaners

Education & Health Services

—Registered Nurses, followed by Nursing Aides, Orderlies & Attendants

Leisure & Hospitality

—Combined Food Preparation & Serving Related (Includes Fast Food) and Dining Room & Cafeteria Attendants.

Information, Financial Activities & Professional & Business Services

—Tellers, followed by Customer Service Representatives, Writers, and Refuse Material Collectors

Top occupations demanded in each JVS sector illustrate why the average wages are so different across industry groups. Government and Education & Health Services demand skilled, higher paying employees, such as teachers

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

or Registered Nurses, while Trade, Transportation, Utilities & Other Services tend to demand lower paying employees, such as Retail Salespersons.

Because wages vary according to an individual's qualifications, employers are asked to provide the range of wages offered for their vacancies. The average wage is then calculated based on the mid-point of that range. The overall average wage offered for all vacancies in the region is \$11.90 per hour. The average minimum wage offered is \$10.80, and the average maximum is \$13.00. This implies that the range of average wages offered for vacancies is small. Employers are willing to adjust wages for a particular candidate's skill and experience, but primarily, wages are set by the position.

Underemployment is typical in the mountainous rural regions of Colorado. Many educated and experienced people flock to these areas due to the high quality of life, but are frustrated with the low wages. Smaller communities do not have the population or governmental and corporate headquarters to support large numbers of high paying professional jobs. Despite economic development efforts, it is almost impossible to drastically change this phenomenon in the short term. Government agencies, corporate headquarters, and large manufacturing operations, where many of the high paying positions are located, will probably always cluster in the larger metropolitan areas.

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

Most vacancies are found in the small to mid-size categories that employ 5 to 99 people. Large employers and Government agencies combined make up 41% of the vacancies. Does this imply that job seekers should target small to mid-size firms? Not necessarily. It is important to consider that while large firms, which are private companies with 100 or more employees, make up less than 1% of all firms in the region, they have a large number of vacancies per employer. Overall, there are more vacancies in small to mid-size firms, but because there are more small to mid-size firms, there are actually fewer vacancies per employer than with Government or large employers. There are 5.1 vacancies per large private employer, 0.6 vacancies per Government entity, and 0.2 vacancies per small to mid-size employer.

The estimated vacancies by size class, compared to a year ago:

Small to mid-size: 626, up 91% from 328 in 2003

Large: 320, up 116% from 148 in 2003

Government: 118, up 18% from 100 in 2003

Most of the increase in vacancies from a year ago is the result of increased demand in the private sector. Large employers responded somewhat stronger than small to mid-size employers, but both showed large gains. In the Winter and Summer 2004 surveys, hiring activity of large employers increased faster than at small to mid-size companies.

In this survey, Government agencies offer higher wages than small to mid-size, and large firms. Like all the categories discussed in this report, the particular occupations found in a size class play a major role in determining the average wage in that category. Vacancies in Government are dominated by Education, Training & Library occupations, which are demanded by public school systems including public colleges and universities. Public schools are included in Government instead of in Education & Healthcare because they are publicly funded and operated. The vast majority of healthcare related occupations are found in the large size category. These relatively high paying positions push up the average wage. The most prominent occupational group in the small to mid-size category is Food Preparation & Serving Related. While most wages in the small to mid-size category fall toward the bottom of the range, there are several extremely high paying positions in the healthcare field. Two doctors, a surgeon, and a psychiatrist were found in medium-sized businesses and brought up the average for the entire category.

Figure 10: Estimated Vacancies and Average Wages by Employer Size

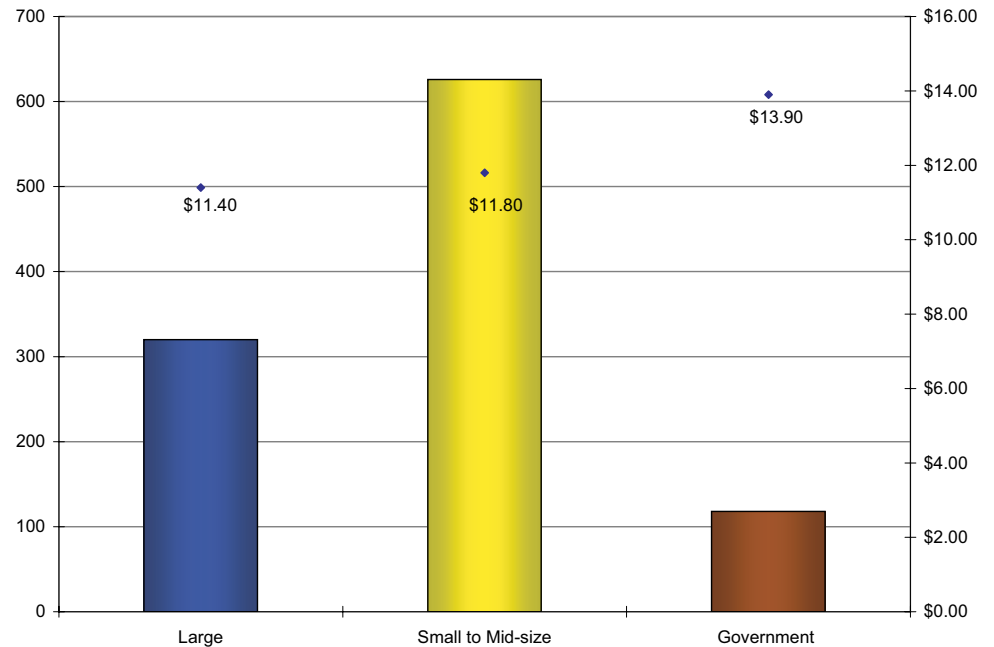
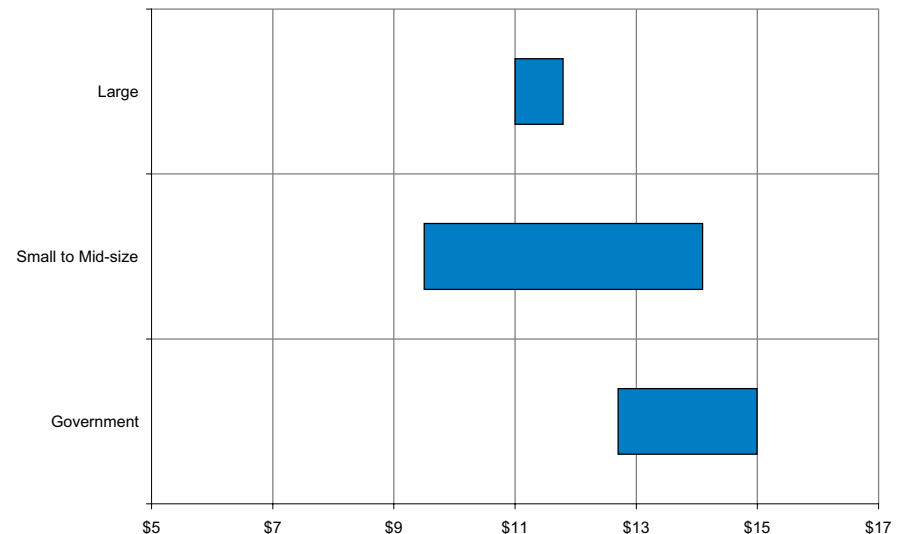


Figure 11: Reported Average Wage Ranges by Employer Size



Survey Findings

The remainder of this report provides descriptive statistics of the vacancies reported in and unique to this survey. 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.

Of the vacancies reported, 96% are permanent employment opportunities, 68% are full-time/permanent positions, 28% are part-time/permanent positions, and 4% are temporary.

In this survey, full-time/permanent positions offer the highest average wage. Theoretically, wages are determined by the productivity or value of an employee. The full-time/permanent positions are generally in occupations that require higher levels of skill, education, and experience. The higher the worker's skill, education, and experience, the higher their value is to the company. This view is supported by the fact that certain occupational groups figure predominantly in certain status categories. All but 2 of the 10 highest paying job vacancies in the survey are Full-time/Permanent positions, while only 2 of the 10 lowest paying occupations in the survey are Full-time/Permanent positions.

The most frequently demanded occupations by status category are:

Full-time/Permanent: Food Batchmakers (i.e. Candy Maker) followed by Registered Nurses

Part-time/Permanent: Dining Room & Cafeteria Attendants & Bartender Helpers

Full-time/Temporary: Hand Packers & Packagers followed by Maids & Housekeeping Cleaners

Part-time/Temporary: Recreation workers followed by Maids & Housekeeping Cleaners

Figure 12: Vacancies by Employment Status

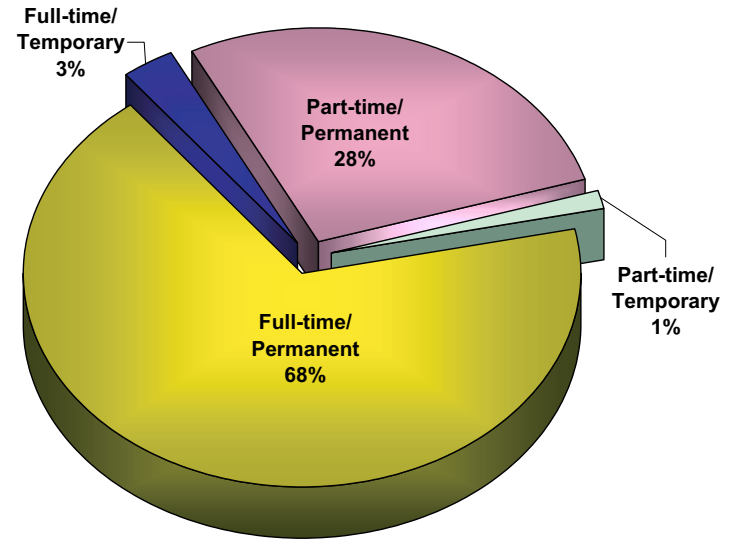
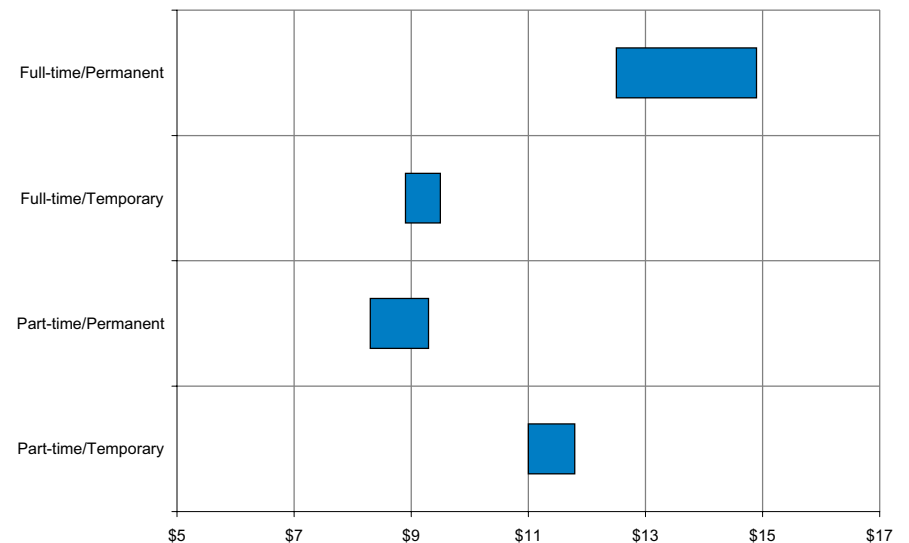


Figure 13: Reported Average Wage Ranges by Employment Status



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

During periods of high unemployment, it might be assumed that there are too many qualified candidates and too few job openings. The reality is, that even in recessions, there are many employers who cannot find qualified candidates for their open positions. It is important, therefore, that job seekers have information regarding what education and experience levels are in highest demand.

Fifty-seven percent of the vacancies require at least a high school diploma or GED. The educational requirements demanded in this survey are similar to the other summer surveys conducted in the Western & Southwest region.

The following occupations are most in demand in each education category:

Advanced Degree: There are several post-secondary teaching positions, in a variety of academic disciplines, demanded in the survey. Several Management and Healthcare Practitioner & Technical positions also require advanced degrees.

Bachelor's Degree: A large number of Registered Nurse and Elementary School Teacher positions require bachelor's degree. Many of the other Healthcare Practitioner & Technical Occupation positions, such as Pharmacists, Physician Assistants, and Dieticians also require Bachelor's degrees. Healthcare Practitioner & Technical occupations in this category tend to offer some of the highest wages.

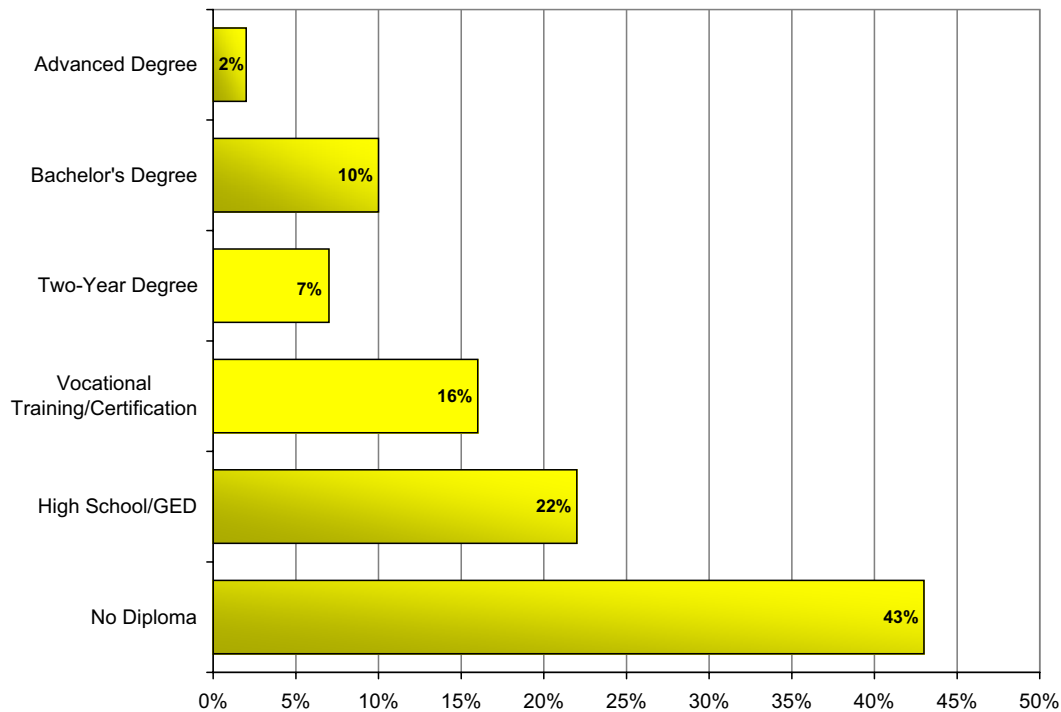
Two-Year Degree: The majority of Healthcare Practitioner & Technical openings require Two-Year degrees. Registered Nurses are the most dominant occupation in this category with a few more Registered Nurse positions requiring a Two-Year Degree than a Bachelor's degree. The Bachelor degree positions offer higher wages, however. Registered Nurse positions requiring a Bachelor's degree offer on average \$23.30, while positions requiring a Two-Year Degree offer \$19.60.

Vocational Training/Certification: The most dominant occupation in this category is Nursing Aides, Orderlies & Attendants followed by Heavy & Tractor Trailer Truck Drivers.

High-School/GED: Many of the Office & Administrative Support positions are found in this category, with the most prominent being bank tellers. There are several Janitorial positions open as well.

No Diploma: The top four most frequently found occupations in this category are all food related. Food Batchmakers, Combined Food Preparation & Serving Related Workers, Dining Room Attendants, and Fast Food Cooks all had over a dozen vacancies reported requiring no educational attainment.

Figure 14: Vacancies by Education



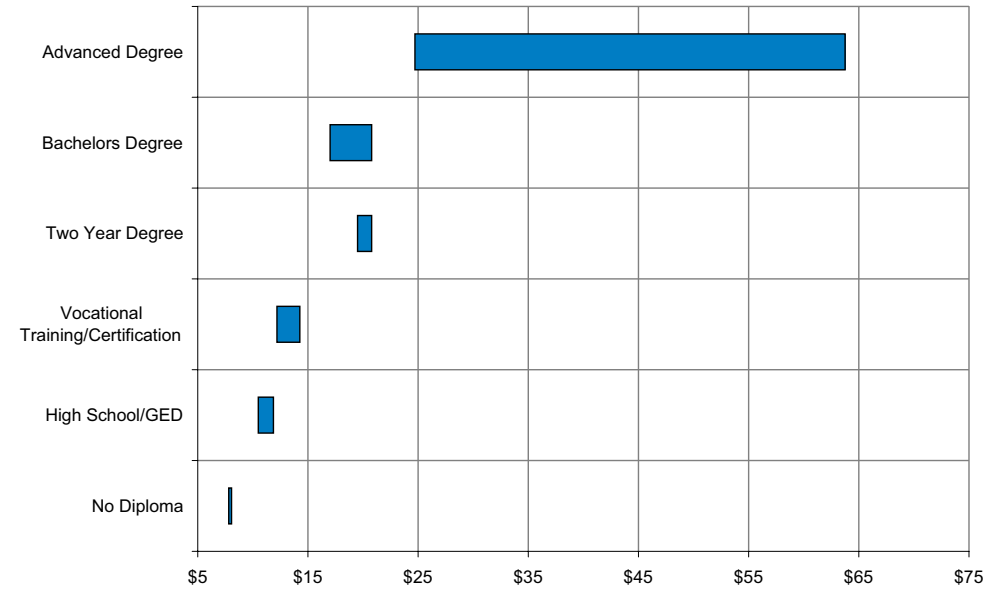
Survey Findings *Vacancies: Employment Status, Education and Experience Requirements—continued*

Generally, the higher the education required for a position, the higher the wage offered. It is important for people considering whether or not to continue their education to have an idea of how it will affect their potential earnings. Bachelor's degrees commands on average between \$17.00 and \$20.80 an hour in this survey, while a high school diploma or GED commands on average between \$10.50 and \$11.90 an hour. While obtaining higher levels of education is expensive and difficult, the difference in pay offers a powerful incentive.

As vacancies require higher levels of education, wage ranges widen. This is most likely due to a wider range of skill and experience requirements for these occupations.

As education levels increase, the difference in pay between various occupations becomes more pronounced. A starting teacher's salary for a recent college graduate will only be slightly less than a recent graduate entering a management training program in a bank. As people progress in their fields, however, the compensation differences increase dramatically. In this category, physicians increased the high end of the average wage scale, while substance abuse counselors and temporary post-secondary teachers made up the low end.

Figure 15: Reported Average Wage Ranges by Education



Survey Findings

Vacancies: Employment Status, Education and Experience Requirements—continued

Employers demand a wide range of experience levels, with 37% of the vacancies requiring no previous experience, 32% requiring experience in a related field, and 19% requiring experience in the particular occupation for which the job is posted.

Following is the percentage of all vacancies for each required experience level, compared to the summer 2001, 2002 and 2003 surveys:

No Experience Required: 36% in 2001, 14% in 2002, 29% in 2003 and 37% in 2004

General Work Experience: 10% in 2001, 14% in 2002, 7% in 2003 and 12% in 2004

Experience in a Related Field: 30% in 2001, 36% in 2002, 33% in 2003 and 32% in 2004

Experience in This Occupation: 24% in 2001, 36% in 2002, 31% in 2003 and 19% in 2004

In 2002 and 2003, employers demanded increasingly higher levels of experience. Fifty-four percent of the vacancies required more than general work experience in 2002, compared to 72% in 2003. The number of unemployed people increased in 2002 and 2003, which allowed employers to raise job requirements. This trend is now reversing. Only 51% of the vacancies required more than general work experience. As *Figure 3* demonstrates, greater demand for labor in the region increased the number of people

employed and lowered the unemployment rate. With fewer workers for employers to choose from, employers will tend to relax experience requirements to fill their vacancies.

Positions requiring higher levels of experience generally pay higher wages. The primary reason for this is that workers with higher levels of experience are often more productive. Also, higher-level positions, such as management, require related experience to be effective. In this survey, the average wage for positions

Figure 16
Vacancies by Experience

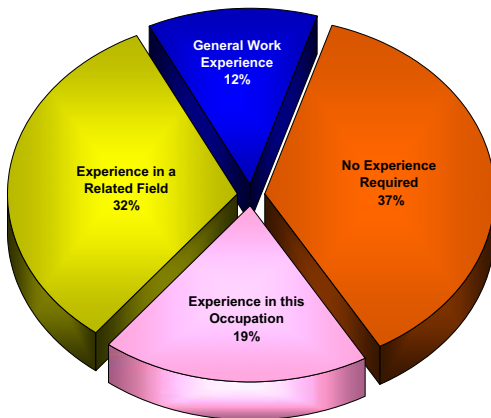
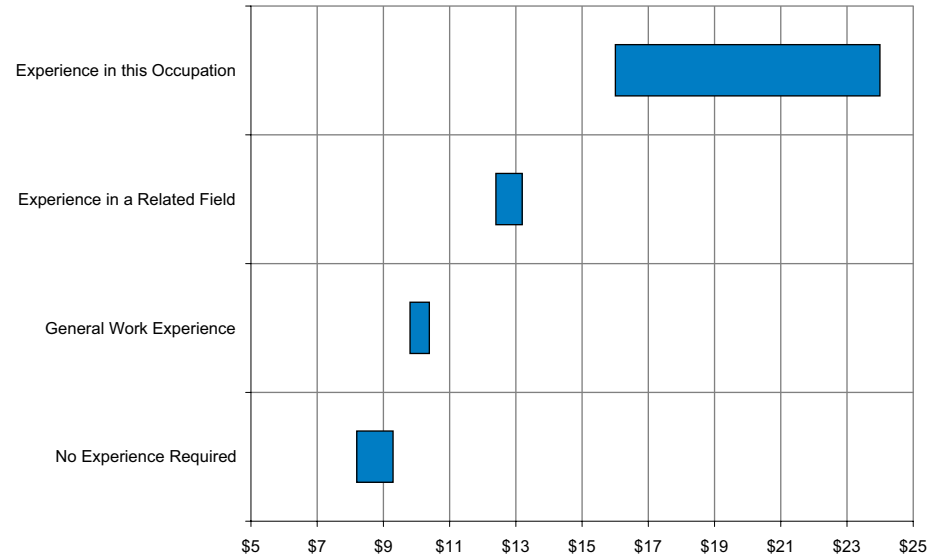


Figure 17: Reported Average Wage Ranges by Experience



requiring experience in a particular occupation is more than twice as high as for those not requiring experience.

In most of the surveys conducted in the Western & Southwest region, the wage ranges are larger for positions requiring more work experience. The skills in occupations requiring higher levels of experience vary to a greater degree than entry-level jobs requiring no experience.

Following are the occupations most in demand in each experience category:

Experience in This Occupation:

—Registered Nurses, followed by Janitors & Cleaners

Experience in a Related Field:

—Nursing Aides, Orderlies & Attendants, followed by Registered Nurses

General Work Experience:

—Construction Laborers and Recreation Workers

No Experience Required:

—Food Batchmakers, followed by Combined Food Preparation & Serving Workers, including Fast Food

Vacancies: Difficulty to Fill and Time Open for Hire

Survey Findings

The level of difficulty an employer experiences when filling a vacancy can vary dramatically depending on the nature of the individual vacancy as well as the prevailing labor market conditions. For example, finding a high-level executive with the right qualifications is usually more difficult than a waiter or waitress. In tight labor markets, such as the one in Colorado during the late 1990s, it may be difficult to fill vacancies, no matter what the position. Who is available to work will also affect the difficulty employers experience when trying to fill vacancies. The availability of candidates suited to fill a vacancy requiring a specific skill set is not always sufficient to meet all of the region's demand. If employers are finding the same positions difficult to fill one survey after another, then local education and training institutions may want to design programs to train candidates to meet that demand.

In addition to asking employers about their perceived difficulty in filling vacant positions, the Job Vacancy Survey also measures the amount of time for which employers have been actively recruiting for positions. This additional information allows the reader to make a better judgment regarding the difficulty employers are having, than if the survey relied wholly on employers' perceptions of how difficult a vacancy is to fill.

Employers are finding it more difficult to hire qualified workers in this survey, than in the summer of 2003. A comparison of the two surveys reveals:

- The proportion of vacancies reported as very difficult to fill dropped slightly from 12% to 9%.
- Openings reported as somewhat difficult to fill increased from 27% to 45%.
- Vacancies reported as not difficult to fill decreased from 61% to 46%.

In all of the surveys in the Western & Southwest Region, a change in the perceived difficulty of hiring workers has coincided with a change in the overall number of estimated vacancies. When the number of vacancies decline, employers find it easier to fill their vacancies. When the numbers of vacancies increase, employers find it more difficult to fill their vacancies. Increased hiring activity means more competition for qualified workers. Couple this with fewer unemployed people in the region, and filling open positions becomes more difficult for employers.

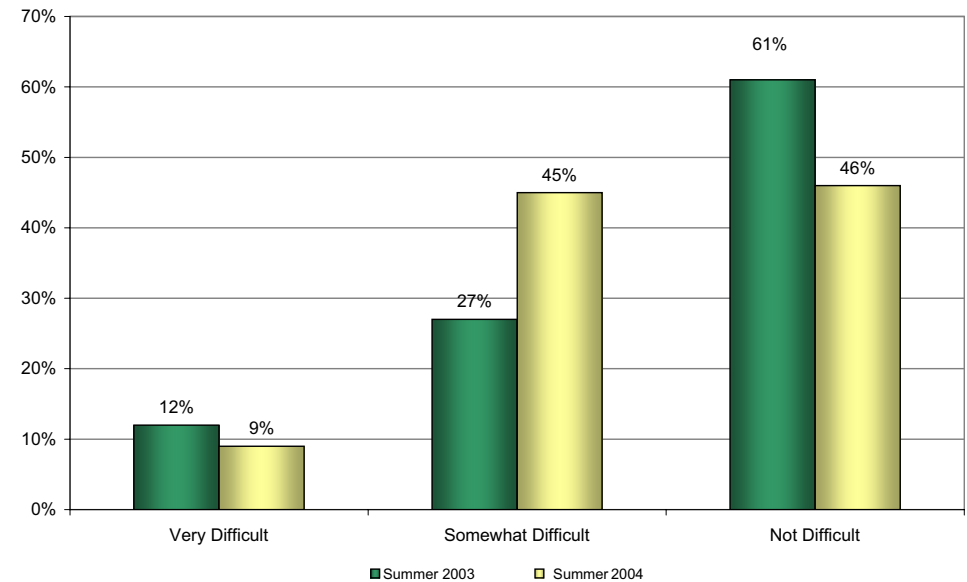
Following, are the occupations most in demand by Difficulty to Fill:

Very Difficult: Hand Packers & Packers and Extraction Workers, All Other

Somewhat Difficult: Food Batchmakers and Combined Food Preparation & Serving Workers, All Other

Not Difficult: Retail Salespersons and Cashiers

Figure 18: Vacancies by Difficulty to Fill



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

The large increase in the proportion of vacancies for which employers are always hiring makes it difficult to determine if, overall, positions have been open for longer periods of time, than a year ago. While lower unemployment likely leads to a greater proportion of employers continuously hiring for positions, it is unlikely that the increase, in general, is so dramatic. Most likely, during the time the survey was conducted, there were an abnormally large percentage of employers reporting this category.

Following, are the percentage changes for vacancies by the time they were open for hire, compared to the summer of 2003:

Vacancies open for less than 30 days decreased from 72% to 44%.

Positions open between 30 and 59 days decreased from 17% to 8%.

Vacancies open for 60 days or more remained at 2%.

Positions for which employers are always hiring increased dramatically from 9% to 46%.

The survey found that positions open for longer periods of time often have higher associated wages. As higher wages usually accompany occupations that require specialized skills, it may take an employer longer to recruit and hire a candidate with the desired background. The physician positions in the survey once again had a dramatic affect on the upper end of the wage scale. Both positions have been open for longer than 60 days.

Figure 19: Vacancies by Time Open for Hire

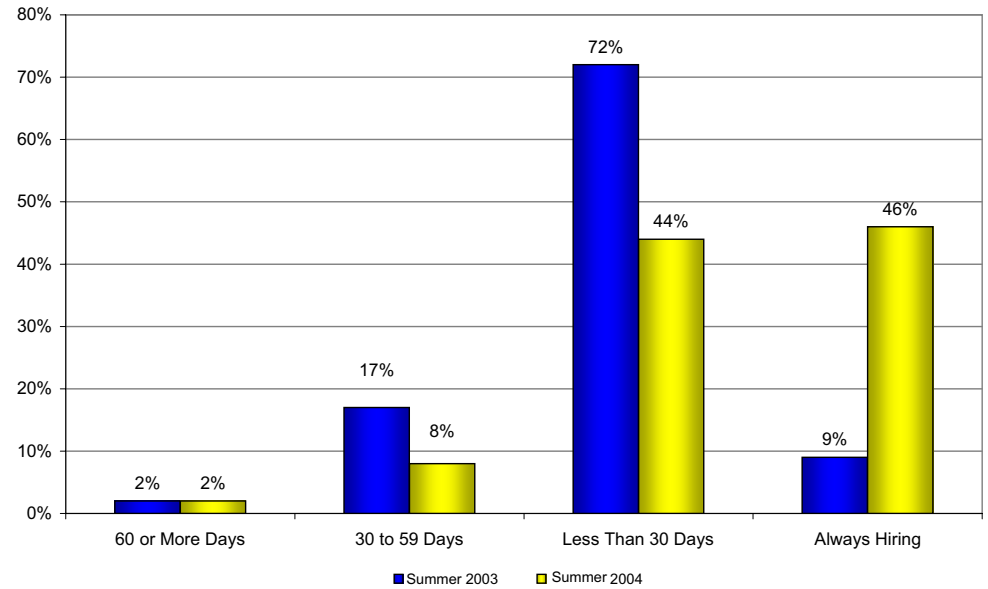
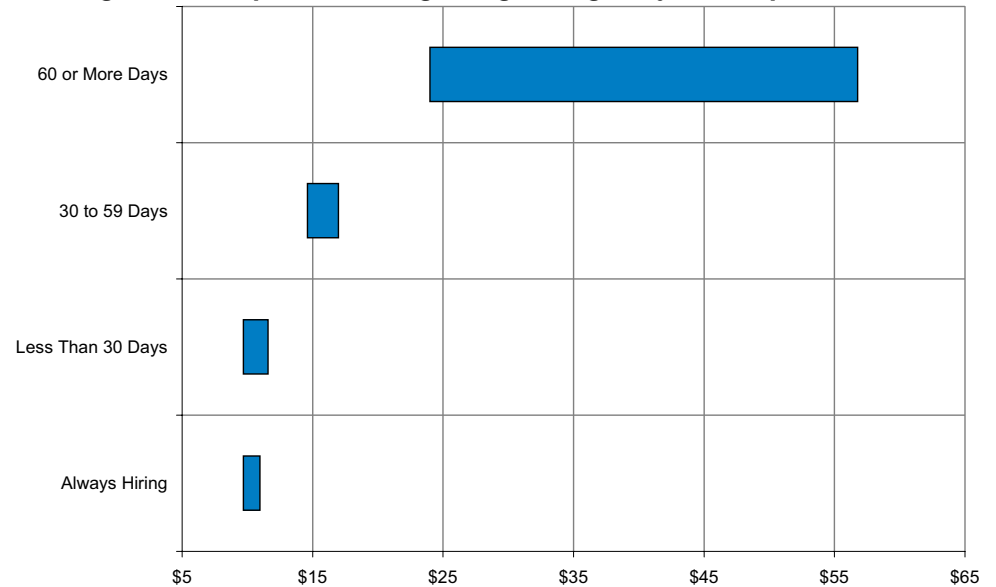


Figure 20: Reported Average Wage Ranges by Time Open for Hire



Additional
Compensation

Survey Findings

Medical Insurance

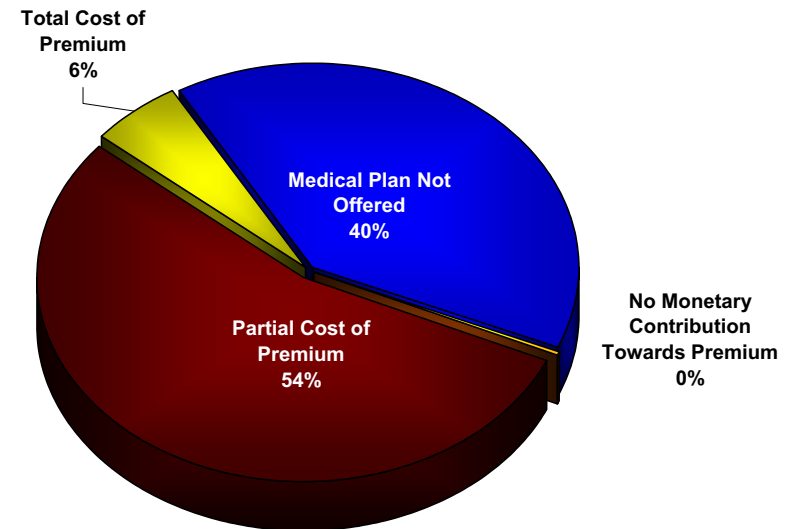
Employers frequently offer compensation related benefits to recruit qualified candidates. Some of these perks are paid time off, transportation or parking vouchers, and subsidized childcare. One of the most important benefits offered to employees is medical insurance via an employer group plan. Employers may pay all, part, or none of the monthly insurance premium. How can an employer offer medical insurance and not pay for it? While this scenario is uncommon, employers can and do offer employees the opportunity to participate in their group medical insurance plans even though they do not contribute to the premium.

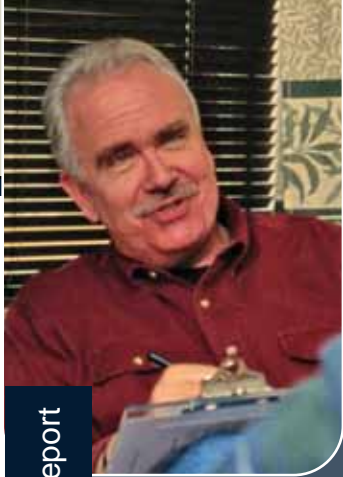
For 62% percent of the vacancies, employers offer medical insurance. In the last seven surveys, the percentage of vacancies offering medical insurance has remained fairly constant, between 60-71%. When medical insurance is offered, employers contribute a partial cost of the premium, most of the time. In this survey, 54% of the vacancies are offered with a portion of the premium paid, while 6% of the vacancies have the entire insurance premium paid.

Sign-On Bonus

No sign-on bonuses are offered in this survey. Despite the increasing demand for labor and declining unemployment, the frequency of sign-on bonuses declined. If this continues, it may imply that sign-on bonuses are rare occurrences in the Western & Southwest Region, regardless of the business cycle phase.

Figure 21: Employers' Contribution to Medical Insurance





Introduction

Occupational Details

The information reported in the Job Vacancy Survey is partly intended to provide job seekers and employers with useful and current information to help them make informed decisions about job hunting and hiring. Estimating the number of overall vacancies in a region, and breaking those numbers down by categories such as JVS sector and employer size, provides a useful overview of the job 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 participating employers.

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 (SOC)* 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 occupational groups. Vacancies found in this survey are coded into 21 of the 23 major occupational groups.

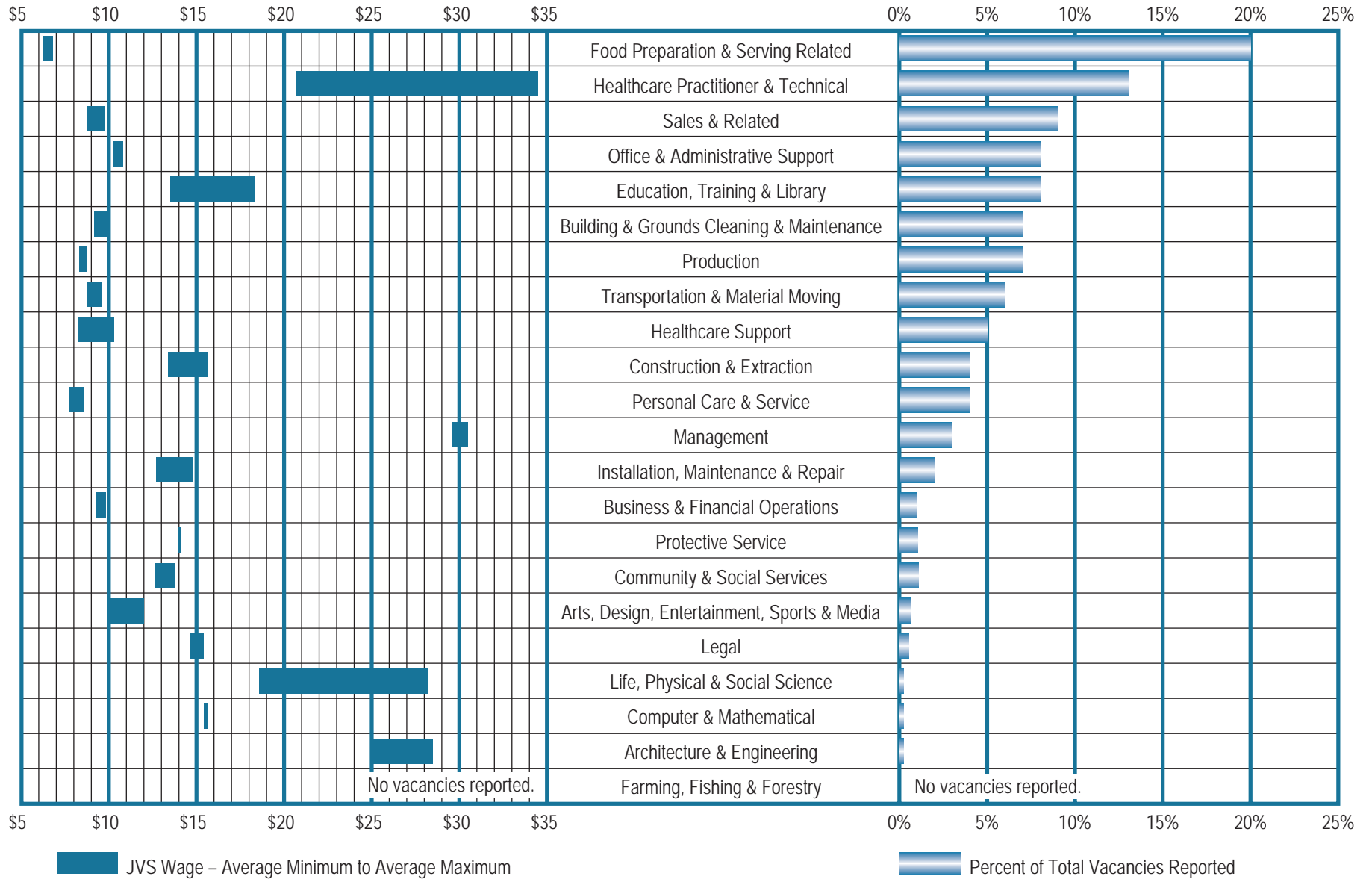
More Food Preparation & Serving related occupations are reported in the survey than any other occupational group. This occupational group also saw the second largest percentage increase in vacancies from the summer 2003 survey. Following is the year over year change for the five major occupational groups most in demand:

Food Preparation & Serving Related	+96%
Healthcare Practitioner & Technical	+99%
Sales & Related	+18%
Education, Training & Library	+93%
Office & Administrative Support	+88%

The average wages offered for open positions in these occupations differ greatly. Food Preparation & Serving Related occupations offer an average wage of \$6.60 an hour, while Healthcare Practitioner & Technical occupations offer an average wage of \$27.60 an hour. Management occupations and Business & Financial occupations also offer high wages, but they require higher levels of education and experience.

Occupational Details *—continued*

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



Occupational Details *—continued*

Occupational Estimates

Tables 1 and 2 contain a list of all the detailed SOC job titles that were assigned to vacancies in this survey. Because a census of large employers and Government agencies is conducted, the list contains titles for nearly all of the vacancies available at the time of the survey for those employers. Nearly 30% of all small to mid-size employers were contacted for the random sample, so the list also includes occupations reported by those employers. Given the large size of the random sample collected, the list of occupations should be fairly comprehensive; however, it is not exhaustive. Most likely, if a different random sample had been drawn, there would be some differences in the job titles reported, but there would also be many of the same.

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

Estimated Vacancies

Because nearly all large employers and government agencies are contacted, the number of vacancies by occupation for those groups is not estimated; it is an actual accounting of the vacancies. However, in addition to the number found, vacancies are estimated for occupations reported by small to mid-size private firms. The estimated vacancies are calculated per the current mix of occupations filled in the region at the major occupational group level. Estimated vacancies by major occupational group are then proportionally distributed among the specific detailed occupations reported in the survey.

Vacancies Found

The number of vacancies by occupation found in the survey.

Average JVS Wage Offered

The average of 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 Paid

Occupational Employment Statistics (OES) wage data are provided for each occupation. OES data are based on a national survey of employers and refer to filled positions, not vacancies. The data provided here are reported for the Western & Southwest Region when available and statewide otherwise. Data are collected for the three-year rolling OES panels, concluding in May 2003. A complete description of the OES survey is available on the Internet at: <http://www.bls.gov/>.

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

Occupational Details —continued

Table 1: Occupations with Five or More Estimated Vacancies

SOC Code	SOC Occupational Title	Vacancies Estimated	Vacancies Found	Average JVS Wage	Occupational Employment Statistics Wage Data (2003)							
					Average Wages			Percentile Distribution				
					Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
41-2011	Cashiers	51	20	\$10.90	\$6.22	\$8.86	\$10.18	\$5.94	\$6.65	\$7.91	\$10.13	\$14.92
29-1111	Registered Nurses	39	32	\$20.70	\$15.61	\$21.16	\$23.94	\$14.57	\$17.26	\$21.15	\$25.06	\$28.40
41-2031	Retail Salespersons	35	20	\$7.30	\$6.96	\$9.93	\$11.41	\$6.35	\$7.46	\$8.65	\$10.60	\$14.34
37-2012	Maids and Housekeeping Cleaners	31	17	\$7.70	\$6.59	\$8.66	\$9.70	\$6.09	\$7.09	\$8.41	\$10.05	\$11.67
31-1012	Nursing Aides, Orderlies, and Attendants	29	23	\$9.20	\$7.74	\$9.73	\$10.72	\$7.33	\$8.42	\$9.67	\$10.96	\$12.66
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	29	16	\$6.40	\$6.09	\$7.35	\$7.98	\$5.77	\$6.34	\$7.22	\$8.31	\$9.51
35-2011	Cooks, Fast Food	27	15	\$5.70	\$6.06	\$7.58	\$8.35	\$5.78	\$6.39	\$7.51	\$8.71	\$10.03
* 51-3092	Food Batchmakers	26	26	\$8.00	\$7.00	\$11.00	\$12.00	\$6.00	\$7.00	\$10.00	\$14.00	\$17.00
53-3032	Truck Drivers, Heavy and Tractor-Trailer	22	11	\$12.10	\$9.64	\$13.13	\$14.87	\$9.43	\$10.71	\$13.01	\$15.37	\$17.25
35-3031	Waiters and Waitresses	22	14	\$5.70	\$6.01	\$6.90	\$7.34	\$5.55	\$5.86	\$6.38	\$6.93	\$10.02
43-3071	Tellers	21	7	\$10.00	\$7.91	\$9.92	\$10.92	\$7.49	\$8.59	\$9.89	\$11.06	\$12.97
25-9041	Teacher Assistants	20	5	\$8.00	\$16,106	\$20,234	\$22,297	\$14,967	\$17,672	\$20,181	\$22,466	\$25,717
43-9061	Office Clerks, General	19	5	\$11.80	\$6.94	\$11.23	\$13.38	\$6.32	\$7.79	\$10.76	\$14.11	\$17.11
35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	18	15	\$5.80	\$6.12	\$7.98	\$8.91	\$5.70	\$6.13	\$6.85	\$9.76	\$12.77
41-2022	Parts Salespersons	18	3	\$10.00	\$10.08	\$15.08	\$17.58	\$9.37	\$11.03	\$12.92	\$17.23	\$24.27
47-2061	Construction Laborers	18	6	\$10.50	\$9.15	\$12.29	\$13.86	\$8.67	\$9.89	\$11.79	\$13.57	\$17.17
35-2014	Cooks, Restaurant	18	12	\$9.20	\$7.42	\$9.72	\$10.87	\$7.10	\$8.02	\$9.36	\$10.93	\$13.10
11-9111	Medical and Health Services Managers	18	7	\$37.50	\$21.77	\$28.91	\$32.48	\$19.28	\$24.15	\$28.39	\$33.26	\$39.71
35-9021	Dishwashers	18	10	\$7.00	\$6.05	\$6.60	\$6.87	\$5.60	\$5.94	\$6.52	\$7.15	\$8.17
* 39-6031	Flight Attendants	17	4	\$9.00	†	†	†	†	†	†	†	†

* OES wages reported for Colorado statewide

† insufficient wage data available

Occupational Details *—continued*

Table 1: Occupations with Five or More Estimated Vacancies — Page 2

SOC Code	SOC Occupational Title	Vacancies Estimated	Vacancies Found	Average JVS Wage	Occupational Employment Statistics Wage Data (2003)							
					Average Wages			Percentile Distribution				
					Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	17	13	\$10.70	\$7.11	\$9.57	\$10.80	\$6.52	\$7.74	\$9.38	\$11.07	\$13.12
* 25-3011	Adult Literacy, Remedial Education, and GED Teachers and Instructors	16	1	†	\$11.00	\$16.00	\$19.00	\$10.00	\$12.00	\$16.00	\$20.00	\$23.00
43-6011	Executive Secretaries and Administrative Assistants	16	6	\$10.80	\$12.89	\$16.90	\$18.90	\$12.25	\$13.79	\$16.40	\$19.65	\$22.50
53-3031	Driver/Sales Workers	13	4	\$6.30	\$8.44	\$13.37	\$15.84	\$5.97	\$11.70	\$13.89	\$16.70	\$19.42
43-4081	Hotel, Motel, and Resort Desk Clerks	13	3	\$8.30	\$7.92	\$9.49	\$10.27	\$6.71	\$9.01	\$9.83	\$10.66	\$11.16
43-6014	Secretaries, Except Legal, Medical, and Executive	13	3	\$8.60	\$8.28	\$11.42	\$12.99	\$7.60	\$9.10	\$11.17	\$13.81	\$15.99
47-3019	Helpers, Construction Trades, All Other	12	4	\$10.00	\$8.49	\$9.66	\$10.24	\$7.86	\$8.79	\$9.58	\$10.37	\$10.85
51-6011	Laundry and Dry-Cleaning Workers	12	8	\$9.00	\$7	\$8	\$9	\$6	\$7	\$8	\$9	\$10
11-2021	Marketing Managers	12	1	†	\$15.67	\$28.23	\$34.50	\$14.18	\$17.34	\$25.66	\$34.37	\$50.93
53-7064	Packers and Packagers, Hand	11	11	\$7.10	\$6.79	\$7.96	\$8.54	\$6.29	\$7.22	\$7.94	\$8.62	\$9.16
51-7011	Cabinetmakers and Bench Carpenters	11	3	\$11.30	\$9.38	\$12.52	\$14.10	\$8.49	\$10.82	\$12.36	\$15.06	\$16.90
47-2073	Operating Engineers and Other Construction Equipment Operators	9	3	\$13.00	\$14.16	\$18.74	\$21.03	\$13.05	\$14.95	\$17.80	\$22.09	\$26.47
29-2061	Licensed Practical and Licensed Vocational Nurses	9	6	\$14.40	\$12.72	\$15.75	\$17.26	\$11.93	\$13.82	\$15.79	\$17.98	\$20.25
25-2021	Elementary School Teachers, Except Special Education	8	8	\$15.70	\$28,955	\$37,595	\$41,916	\$26,718	\$31,080	\$36,776	\$43,906	\$51,901
43-3031	Bookkeeping, Accounting, and Auditing Clerks	8	3	\$12.50	\$8.29	\$12.50	\$14.61	\$7.18	\$9.68	\$12.32	\$14.73	\$18.09
43-4171	Receptionists and Information Clerks	8	3	\$8.00	\$7.30	\$9.69	\$10.89	\$6.66	\$8.18	\$9.85	\$11.03	\$12.60
35-2012	Cooks, Institution and Cafeteria	8	6	\$7.80	\$7.94	\$9.91	\$10.89	\$7.55	\$8.27	\$9.35	\$11.02	\$13.53
35-3011	Bartenders	8	5	\$7.10	\$5.90	\$6.61	\$6.97	\$5.45	\$5.78	\$6.32	\$6.93	\$8.38

* OES wages reported for Colorado statewide

† insufficient wage data available

Occupational Details —continued

Table 1: Occupations with Five or More Estimated Vacancies — Page 3

SOC Code	SOC Occupational Title	Vacancies Estimated	Vacancies Found	Average JVS Wage	Occupational Employment Statistics Wage Data (2003)							
					Average Wages			Percentile Distribution				
					Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
13-2011	Accountants and Auditors	7	2	†	\$14.85	\$23.01	\$27.08	\$14.18	\$16.99	\$20.92	\$26.79	\$38.11
21-1011	Substance Abuse and Behavioral Disorder Counselors	7	3	\$12.60	\$10.63	\$13.50	\$14.93	\$9.77	\$11.19	\$12.53	\$13.87	\$20.09
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	7	5	\$9.70	\$7.09	\$9.82	\$11.18	\$6.54	\$7.57	\$8.82	\$11.47	\$15.06
37-3011	Landscaping and Groundskeeping Workers	7	3	†	\$8.61	\$11.29	\$12.63	\$7.94	\$9.13	\$10.76	\$13.24	\$15.46
31-1011	Home Health Aides	7	1	†	\$6.62	\$7.71	\$8.26	\$6.18	\$6.97	\$7.61	\$8.36	\$9.62
25-2031	Secondary School Teachers, Except Special and Vocational Education	7	7	\$17.30	\$29,524	\$41,087	\$46,869	\$28,027	\$32,474	\$39,452	\$48,283	\$59,538
43-4051	Customer Service Representatives	7	2	†	\$9.36	\$12.30	\$13.76	\$8.86	\$10.08	\$11.92	\$13.94	\$16.76
49-3023	Automotive Service Technicians and Mechanics	7	2	\$9.10	\$8.53	\$13.16	\$15.48	\$7.92	\$9.03	\$11.05	\$17.37	\$20.72
13-2072	Loan Officers	6	1	†	\$16.39	\$29.60	\$36.20	\$15.17	\$18.19	\$26.82	\$39.32	\$46.31
53-7081	Refuse and Recyclable Material Collectors	6	2	†	\$8.96	\$11.36	\$12.57	\$8.65	\$9.81	\$11.29	\$13.03	\$14.97
29-1123	Physical Therapists	6	5	\$22.60	\$21.18	\$26.15	\$28.64	\$19.23	\$22.76	\$25.75	\$29.47	\$34.57
41-2021	Counter and Rental Clerks	6	1	†	\$6.01	\$8.37	\$9.55	\$5.71	\$6.25	\$7.52	\$9.70	\$11.26
41-9022	Real Estate Sales Agents	6	1	†	\$15.37	\$22.26	\$25.71	\$12.82	\$18.81	\$24.23	\$26.93	\$28.64
25-2011	Preschool Teachers, Except Special Education	6	6	\$14.90	\$9.20	\$12.26	\$13.79	\$8.72	\$9.90	\$11.41	\$13.73	\$17.33
* 29-2032	Diagnostic Medical Sonographers	6	6	\$20.30	\$17.00	\$27.00	\$32.00	\$13.00	\$22.00	\$26.00	\$32.00	\$41.00
47-2081	Drywall and Ceiling Tile Installers	6	2	\$15.00	\$14.97	\$16.86	\$17.81	\$14.22	\$15.05	\$16.44	\$18.80	\$21.29
43-6012	Legal Secretaries	6	1	†	\$10.93	\$14.89	\$16.87	\$10.20	\$11.56	\$14.23	\$18.66	\$20.46
* 43-9051	Mail Clerks and Mail Machine Operators, except Postal Service	6	1	†	\$8.00	\$11.00	\$13.00	\$8.00	\$9.00	\$11.00	\$13.00	\$15.00

* OES wages reported for Colorado statewide

† insufficient wage data available

Occupational Details *—continued*

Table 1: Occupations with Five or More Estimated Vacancies — Page 4

SOC Code	SOC Occupational Title	Vacancies Estimated	Vacancies Found	Average JVS Wage	Occupational Employment Statistics Wage Data (2003)							
					Average Wages			Percentile Distribution				
					Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
35-1012	First-Line Supervisors/Managers of Food Preparation and Serving Workers	6	4	\$6.60	\$9.58	\$13.71	\$15.78	\$8.18	\$11.17	\$13.34	\$16.39	\$19.60
35-2021	Food Preparation Workers	6	4	\$6.40	\$6.64	\$8.70	\$9.72	\$6.17	\$7.08	\$8.15	\$10.50	\$12.51
35-3022	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	6	4	\$7.30	\$6.07	\$6.29	\$6.40	\$5.55	\$5.83	\$6.30	\$6.76	\$7.20
49-3021	Automotive Body and Related Repairers	6	1	†	\$13.82	\$21.70	\$25.63	\$12.37	\$15.40	\$22.20	\$27.32	\$32.12
49-3093	Tire Repairers and Changers	6	1	†	\$6.61	\$9.15	\$10.42	\$6.22	\$6.94	\$7.83	\$12.04	\$14.11
49-9052	Telecommunications Line Installers and Repairers	6	1	†	\$11.73	\$16.22	\$18.46	\$9.82	\$14.08	\$16.60	\$19.26	\$21.01
29-1126	Respiratory Therapists	5	5	\$20.30	\$15.51	\$19.36	\$21.28	\$14.48	\$17.13	\$19.59	\$22.00	\$24.97
39-9032	Recreation Workers	5	5	\$7.90	\$6.69	\$10.27	\$12.07	\$6.13	\$7.14	\$8.28	\$11.69	\$19.35
* 47-5099	Extraction Workers, All Other	5	5	\$19.50	†	†	†	†	†	†	†	†
* 51-2021	Coil winders, tapers, and finishers	5	1	†	\$9.00	\$13.00	\$15.00	\$9.00	\$10.00	\$12.00	\$14.00	\$20.00

* OES wages reported for Colorado statewide

† insufficient wage data available

Occupational Details *—continued*

Table 2: Occupations with Fewer than Five Estimated Vacancies

SOC Code	SOC Occupational Title	Occupational Employment Statistics Wage Data (2003)							
		Average Wages			Percentile Distribution				
		Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
* 53-3011	Ambulance Drivers and Attendants, except Emergency Medical Technicians	\$7.00	\$12.00	\$14.00	\$7.00	\$8.00	\$10.00	\$14.00	\$24.00
13-2021	Appraisers and Assessors of Real Estate	\$14.89	\$19.96	\$22.49	\$13.78	\$15.78	\$17.91	\$22.03	\$32.65
* 25-1121	Art, Drama, and Music Teachers, Postsecondary	\$33,540	\$51,280	\$60,150	\$30,850	\$39,490	\$49,270	\$60,950	\$77,150
39-6011	Baggage Porters and Bellhops	\$6.27	\$9.45	\$11.04	\$6.04	\$6.79	\$9.79	\$10.92	\$12.18
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	\$12.77	\$16.89	\$18.95	\$11.72	\$14.14	\$16.92	\$19.71	\$21.64
47-2031	Carpenters	\$11.10	\$16.66	\$19.44	\$10.15	\$12.28	\$17.30	\$20.40	\$22.18
35-1011	Chefs and Head Cooks	\$9.84	\$13.71	\$15.64	\$9.37	\$10.34	\$11.74	\$13.38	\$24.89
17-2051	Civil Engineers	\$23.98	\$32.88	\$37.32	\$22.58	\$26.87	\$32.58	\$39.22	\$45.51
* 25-1122	Communications Teachers, Postsecondary	\$35,110	\$51,890	\$60,280	\$31,600	\$39,700	\$48,600	\$61,930	\$80,430
15-1041	Computer Support Specialists	\$13.42	\$19.08	\$21.91	\$11.62	\$15.29	\$18.33	\$24.01	\$27.13
39-6012	Concierges	\$9.93	\$12.63	\$13.98	\$9.49	\$10.70	\$12.66	\$14.33	\$16.48
33-3012	Correctional Officers and Jailers	\$13.58	\$18.03	\$20.25	\$12.50	\$14.89	\$17.84	\$21.16	\$24.90
* 29-2051	Dietetic Technicians	\$7.00	\$11.00	\$13.00	\$6.00	\$8.00	\$10.00	\$13.00	\$16.00
* 29-1031	Dietitians and Nutritionists	\$13.00	\$19.00	\$22.00	\$12.00	\$15.00	\$19.00	\$24.00	\$27.00
11-9032	Education Administrators, Elementary and Secondary School	\$48,628	\$60,975	\$67,148	\$46,394	\$52,295	\$60,432	\$70,082	\$76,868
29-2041	Emergency Medical Technicians and Paramedics	\$7.21	\$13.15	\$16.12	\$6.07	\$8.92	\$12.62	\$18.05	\$21.13
43-4071	File Clerks	\$8.17	\$11.08	\$12.53	\$7.33	\$9.29	\$11.88	\$13.03	\$13.74
37-1011	First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	\$8.52	\$13.63	\$16.19	\$7.68	\$9.75	\$13.42	\$16.78	\$20.25
37-1012	First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	\$11.01	\$17.90	\$21.34	\$10.01	\$12.32	\$16.32	\$22.73	\$29.86
49-1011	First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	\$16.33	\$23.67	\$27.34	\$14.78	\$18.57	\$22.92	\$30.36	\$33.90
39-9031	Fitness Trainers and Aerobics Instructors	\$6.76	\$12.01	\$14.64	\$6.10	\$7.57	\$10.60	\$15.84	\$20.12

* OES wages reported for Colorado statewide

† insufficient wage data available

Occupational Details *—continued*

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

SOC Code	SOC Occupational Title	Occupational Employment Statistics Wage Data (2003)							
		Average Wages			Percentile Distribution				
		Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
35-3041	Food Servers, Nonrestaurant	\$6.19	\$8.81	\$10.12	\$5.96	\$6.74	\$8.98	\$10.47	\$11.42
11-9051	Food Service Managers	\$16.40	\$21.12	\$23.48	\$15.14	\$17.67	\$19.60	\$21.62	\$32.30
* 43-3041	Gaming Cage Workers	\$10.00	\$12.00	\$14.00	\$9.00	\$11.00	\$12.00	\$14.00	\$16.00
* 41-2012	Gaming Change Persons and Booth Cashiers	\$9.00	\$12.00	\$13.00	\$9.00	\$10.00	\$12.00	\$13.00	\$15.00
* 39-3011	Gaming Dealers	†	†	†	†	†	†	†	†
* 39-1011	Gaming Supervisors	\$14.00	\$18.00	\$20.00	\$14.00	\$15.00	\$18.00	\$21.00	\$23.00
11-1021	General and Operations Managers	\$17.01	\$35.40	\$44.59	\$14.80	\$20.22	\$29.26	\$45.58	\$66.36
* 29-2099	Health Technologists and Technicians, All Other	†	†	†	†	†	†	†	†
* 49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	\$12.00	\$17.00	\$19.00	\$11.00	\$13.00	\$16.00	\$20.00	\$24.00
47-3012	Helpers--Carpenters	\$11.10	\$12.83	\$13.69	\$8.83	\$11.86	\$12.95	\$14.05	\$16.22
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	\$6.00	\$7.00	\$7.50	\$5.64	\$6.09	\$6.84	\$7.90	\$8.76
* 13-1079	Human Resources, Training, and Labor Relations Specialists, All Other	†	†	†	†	†	†	†	†
53-7051	Industrial Truck and Tractor Operators	\$9.50	\$12.46	\$13.94	\$9.07	\$10.19	\$11.70	\$13.48	\$17.20
* 43-4199	Information and Record Clerks, All Other	†	†	†	†	†	†	†	†
23-1011	Lawyers	\$20.84	\$32.58	\$38.45	\$19.77	\$22.19	\$31.95	\$39.49	\$43.98
25-4031	Library Technicians	\$7.69	\$11.48	\$13.38	\$6.75	\$8.76	\$11.53	\$14.04	\$16.72
11-9081	Lodging Managers	\$11.62	\$16.28	\$18.60	\$10.74	\$12.33	\$15.31	\$18.46	\$25.22
49-9042	Maintenance and Repair Workers, General	\$9.01	\$14.23	\$16.84	\$8.13	\$10.21	\$13.75	\$18.21	\$21.35
49-9043	Maintenance Workers, Machinery	\$11.04	\$19.64	\$23.94	\$10.16	\$12.26	\$23.44	\$26.48	\$28.30
11-9199	Managers, All Other	\$19.29	\$28.43	\$33.00	\$18.22	\$21.13	\$26.53	\$33.66	\$40.89
31-9011	Massage Therapists	\$7.52	\$19.29	\$25.18	\$7.01	\$8.44	\$13.12	\$30.94	\$34.71
* 25-1022	Mathematical Science Teachers, Postsecondary	\$33,030	\$52,410	\$62,100	\$30,340	\$37,090	\$45,830	\$63,190	\$84,760

* OES wages reported for Colorado statewide

† insufficient wage data available

Occupational Details *—continued*

Table 2: Occupations with Fewer than Five Estimated Vacancies — Page 3

SOC Code	SOC Occupational Title	Occupational Employment Statistics Wage Data (2003)							
		Average Wages			Percentile Distribution				
		Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
31-9092	Medical Assistants	\$9.13	\$10.94	\$11.85	\$8.29	\$9.60	\$10.86	\$12.45	\$13.65
43-6013	Medical Secretaries	\$8.85	\$10.41	\$11.19	\$8.17	\$9.24	\$10.31	\$11.38	\$12.71
25-2022	Middle School Teachers, Except Special and Vocational Education	\$29,850	\$37,870	\$41,879	\$27,669	\$31,455	\$36,526	\$43,651	\$51,663
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	\$14.84	\$18.23	\$19.92	\$13.77	\$15.76	\$17.98	\$20.84	\$22.96
39-2021	Nonfarm Animal Caretakers	\$6.11	\$7.67	\$8.45	\$5.64	\$6.01	\$6.64	\$8.22	\$12.62
29-2033	Nuclear Medicine Technologists	\$19.50	\$24.97	\$27.71	\$18.63	\$20.54	\$23.98	\$29.25	\$33.52
29-1122	Occupational Therapists	\$20.65	\$25.06	\$27.27	\$18.24	\$22.62	\$24.82	\$26.98	\$34.75
* 29-1041	Optometrists	\$28.00	\$41.00	\$47.00	\$25.00	\$32.00	\$39.00	\$45.00	\$58.00
23-2011	Paralegals and Legal Assistants	\$15.97	\$16.58	\$16.88	\$14.77	\$15.41	\$16.47	\$17.53	\$18.23
* 37-2021	Pest Control Workers	\$7.00	\$13.00	\$15.00	\$7.00	\$8.00	\$11.00	\$16.00	\$22.00
29-1051	Pharmacists	\$28.29	\$36.25	\$40.22	\$29.67	\$33.46	\$37.78	\$42.22	\$45.29
29-2052	Pharmacy Technicians	\$8.98	\$11.35	\$12.54	\$8.26	\$9.67	\$11.55	\$13.06	\$14.20
* 31-2022	Physical Therapist Aides	\$8.00	\$11.00	\$13.00	\$8.00	\$9.00	\$11.00	\$13.00	\$15.00
31-2021	Physical Therapist Assistants	\$8.19	\$9.87	\$10.71	\$7.52	\$7.89	\$8.50	\$9.11	\$15.90
29-1071	Physician Assistants	\$24.76	\$28.20	\$29.92	\$23.23	\$24.88	\$27.59	\$32.41	\$34.97
47-2152	Plumbers, Pipefitters, and Steamfitters	\$14.31	\$21.37	\$24.91	\$12.92	\$16.85	\$20.66	\$24.39	\$32.37
33-3051	Police and Sheriff's Patrol Officers	\$15.02	\$19.70	\$22.04	\$14.42	\$16.12	\$18.87	\$22.49	\$27.59
* 25-1065	Political Science Teachers, Postsecondary	\$38,810	\$61,670	\$73,100	\$36,320	\$43,770	\$56,580	\$74,300	\$97,510
21-1092	Probation Officers and Correctional Treatment Specialists	\$16.02	\$22.55	\$25.81	\$14.87	\$17.11	\$20.91	\$27.50	\$33.41
* 29-1066	Psychiatrists	\$45.00	\$74.00	†	\$40.00	\$53.00	\$70.00	†	†
* 11-2031	Public Relations Managers	\$19.00	\$35.00	\$43.00	\$16.00	\$23.00	\$31.00	\$44.00	\$65.00
13-1023	Purchasing Agents, Except Wholesale, Retail, and Farm Products	\$13.05	\$19.21	\$22.29	\$12.37	\$14.19	\$17.30	\$24.37	\$29.89

* OES wages reported for Colorado statewide

† insufficient wage data available

Occupational Details *—continued*

Table 2: Occupations with Fewer than Five Estimated Vacancies — Page 4

SOC Code	SOC Occupational Title	Occupational Employment Statistics Wage Data (2003)							
		Average Wages			Percentile Distribution				
		Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
29-2034	Radiologic Technologists and Technicians	\$20.78	\$23.48	\$24.82	\$19.28	\$21.88	\$23.85	\$25.88	\$27.09
* 27-3022	Reporters and Correspondents	†	†	†	†	†	†	†	†
43-4181	Reservation and Transportation Ticket Agents and Travel Clerks	\$8.37	\$11.29	\$12.74	\$7.97	\$8.85	\$10.80	\$12.40	\$17.69
47-2181	Roofers	\$11.49	\$13.90	\$15.11	\$10.99	\$11.80	\$13.09	\$15.78	\$19.07
* 41-3099	Sales Representatives, Services, All Other	†	†	†	†	†	†	†	†
33-9032	Security Guards	\$8.40	\$10.91	\$12.17	\$7.68	\$9.09	\$10.53	\$12.72	\$14.62
47-2211	Sheet Metal Workers	\$13.53	\$16.60	\$18.14	\$12.40	\$14.44	\$16.43	\$18.82	\$21.38
25-2041	Special Education Teachers, Preschool, Kindergarten, and Elementary School	\$29,428	\$40,734	\$46,387	\$27,187	\$32,076	\$40,097	\$49,384	\$55,853
29-1127	Speech-Language Pathologists	\$17.03	\$23.82	\$27.22	\$15.90	\$17.96	\$22.90	\$27.78	\$34.98
* 29-1067	Surgeons	†	\$99.00	†	†	†	†	†	†
* 25-3099	Teachers and Instructors, All Other	†	†	†	†	†	†	†	†
* 37-3013	Tree Trimmers and Pruners	\$10.00	\$14.00	\$15.00	\$9.00	\$11.00	\$13.00	\$17.00	\$20.00
53-3033	Truck Drivers, Light or Delivery Services	\$8.92	\$13.43	\$15.69	\$8.32	\$9.74	\$11.87	\$15.82	\$23.78
29-2056	Veterinary Technologists and Technicians	\$10.28	\$11.62	\$12.29	\$9.62	\$11.03	\$11.88	\$12.89	\$13.49
25-1194	Vocational Education Teachers, Postsecondary	\$14.47	\$21.35	\$24.79	\$12.63	\$16.55	\$23.65	\$26.37	\$28.01
13-1022	Wholesale and Retail Buyers, Except Farm Products	\$11.43	\$15.77	\$17.94	\$10.66	\$12.25	\$15.24	\$17.25	\$19.82
* 27-3043	Writers and Authors	\$12.00	\$21.00	\$26.00	\$12.00	\$14.00	\$19.00	\$26.00	\$35.00
19-1023	Zoologists and Wildlife Biologists	\$20.80	\$24.75	\$26.72	\$18.66	\$22.24	\$24.86	\$27.86	\$31.84

* OES wages reported for Colorado statewide

† insufficient wage data available



Education & Health Services

Sector Briefs

The Education & Health Services JVS sector represents a mix of private-sector businesses that offer Education Services as well as Health Care & Social Assistance in the region. This sector represents the smallest proportion of employment, as compared to the other six JVS Sectors; only 9% percent of the region's employment was associated with this sector in the 2nd quarter of 2003. Likewise, there are few employers in this industry group.³ However, Education & Health Services has one of the highest vacancy rates for this survey, 2.2%.

While Education & Health Services has the lowest proportion of employment, it has the third highest number of vacancies.

Looking at the subsector classifications within the NAICS system, allows us to take a more detailed look at the Education & Health Services JVS sector.

Ambulatory Health Care Services is the largest subsector with 38% of the employment. This group also accounts for the majority of businesses, 69% of the firms in this JVS sector. Doctor and dentist offices, along with outpatient care centers, represent this subsector. Healthcare Support, Healthcare Practitioner & Technical, Office & Administrative, and Community & Social Service occupational vacancies are reported for this industry subsector in this summer survey.

Hospitals support 17% of the employment, but are less than 1% of the businesses operating in this subsector. Hospitals are usually large regional facilities that rely on the skills and work of many people. The majority of the job vacancies reported for the Education & Health Services sector are with

hospitals. Registered Nurses are the most demanded hospital occupation, but 23 other detailed occupations are represented in this survey of job vacancies.

Educational Services represents 6% of employment and 10% of the employers in the Education & Health Services JVS sector. Since publicly funded schools are included in the Government sector, the institutions represented here tend to be smaller. On average, there are seven employees per private educational institution in the region. Limited job openings are reported by these businesses, since most of the teaching positions in the region are reported by government entities.

Social Assistance is another subsector of this JVS industry group, and represents 19% of the employment. Job openings are in Food Preparation & Serving Related, as well as Education, Training & Library occupations.

Nursing and Residential Care Facilities is the remaining subsector. The group represents 21% percent of employers and 6% percent of the jobs within Education & Health Services. Assisted Living, Hospice, and Group Homes are typical within this subsector. There are several openings in the Healthcare Practitioner & Technical, Healthcare Support, and Food Preparation & Serving Occupations.

Overall, the prospects for job seekers in the Education & Health Services field are extremely strong. The labor shortages in the healthcare field are unlikely to end in the near future, and with the baby boomer generation reaching retirement age soon, demand for healthcare services will only increase. While workers in many industries, such as manufacturing, must worry about outsourcing of jobs to foreign countries, Education & Health Service Jobs involve personal contact with customers and are almost impossible to outsource.

3. CDLE, Quarterly Census of Employment and Wages Program (QCEW)



Appendix

How to Use This Report

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

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

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

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

Employers

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

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

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

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

Job Seekers

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

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

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

Workforce Centers

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

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

Economic Developers

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

Appendix

Caveats

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

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

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

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

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

The occupational detail provided is supplemental data believed to be of interest to the reader. The survey design does not allow for application of this detail to the region as a whole, but it can be used to understand characteristics of those job vacancies reported. These vacancy characteristics are not estimated and therefore do contain significant bias. Approximately 65% of the non-estimated information comes from large employers and government agencies, but they represent approximately 30% of the employment in the region. The vacancy characteristics therefore are heavily influenced by what is being demanded by large employers and government agencies. This information is still useful and important, but the user of this data needs to keep in mind its inherent bias.

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

Methodology

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

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

Survey Design

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

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

Stratifications containing small and medium sized private employers are randomly sampled. In order to report vacancy characteristics such as education and experience requirements demanded, the survey must contact more employers than would be necessary if the survey only estimated the total number of vacancies. For this reason all of the large employers and government agencies are contacted in the region. These employers provide the most cost effective means of obtaining large amounts of vacancy information. Approximately 30% of the employment in the region is found in large and government employers that make up only 2% of the total number of firms. Conducting a census of these entities allows us to cover a large portion of the region's employment while contacting relatively few entities.

Appendix: Methodology —continued

Survey Sample

The Western & Southwest Region survey was conducted from June 15th through 29th, 2004. For the purpose of this report, private and government employers with five or more employees are referred to as the sample frame. Firms with fewer than five employees make up a very large portion of all employers in the region, but provide only a small proportion of the total employment. Employment in the sample frame accounts for 77% 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 100 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 21% of the employment in the sample frame, while private industry employers make up the remaining 79%. Large firms account for 24% of private industry employment in the sample frame. Firms employing from five to 99 individuals are considered small to mid-size employers, and account for the remaining 76% of private industry employment.

The margin of error for the overall vacancy estimate is plus or minus 2.7% or about 29 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 1,035 and 1,093 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 82%. 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 Western & Southwest 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 group 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 34.

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

Appendix: Methodology —continued

North American Industry Classification System

Data Collection

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

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

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

Occupational Coding

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

Data Editing

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

Wage Conversion

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

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

North American Industry Classification System (NAICS)

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

History of Process

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

Industrial Classification vs. Occupational Classification

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

Benefits

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

Relevant— NAICS recognizes hundreds of new businesses in the economy with 20

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

²EPC is chaired by the Bureau of Economic Analysis, U.S. Department of Commerce, with representatives from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor

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

Appendix: NAICS —continued

broad industry sectors, up from SIC’s 10. Some new industry categories include an Information sector and a Health Care & Social Assistance sector formerly lumped into Services under SIC.

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

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

Things to Consider

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

New Industries Reflected in NAICS

- ◆ NAICS heralds the creation of a new Information sector that pulls businesses from communications, publishing, motion picture and sound recording and online services to recognize an information-based economy.
- ◆ Formerly, under SIC, corporate headquarters were not distinguished from the industry category of the product or service they produced. Now corporate headquarters are recognized in the new Management sector.

Comparison of NAICS and SIC Major Industry Groups

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

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

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

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

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

Appendix

Glossary

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

Average Maximum Wage

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

Average Minimum Wage

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

Computer Assisted Telephone Interviewing (CATI)

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

Cooperation Rate

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

Educational Attainment

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

Effective Response Rate

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

Employed Persons (Employment)

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

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

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

Employer

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

Full-time Employee

Employees who usually work 35 hours per week or more.

Goods Producing Industries (NAICS)

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

Industry

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

Job Seeker

A person actively looking for employment or researching career options.

Job Vacancy

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

Job Vacancy Rate

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

Labor Force

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

Medical Insurance

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

Medical Insurance Premium

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

North American Industry Classification System (NAICS)

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

Appendix: Glossary —continued

Not Seasonally Adjusted

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

Occupation

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

Part-time Employee

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

Percentile Wage Estimate

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

Permanent Employment

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

Sample

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

Sample Frame

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

Seasonally Adjusted

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

Service Producing Industries (NAICS)

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

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

Sign-on Bonus

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

Standard Occupational Classification (SOC) System

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

Temporary Employment

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

Unemployed Persons

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

Unemployment Rate

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

Wages

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

Workforce Centers in the Western & Southwest JVS Region



Delta Workforce Center

206 Ute Street
Delta, CO 81486
Phone: 970-874-5781
Fax: 970-874-0091
delta@cwfc.net

Dove Creek Satellite Office

Dolores County Dept. of Human Services
409 N. Main
Dove Creek, CO 81324

Gunnison Workforce Center

109 E. Georgia Avenue
Gunnison, CO 81230
Phone: 970-641-0031
Fax: 970-641-5258
gunnison@cwfc.net

Montrose Workforce Center

504 North 1st
Montrose, CO 81401
Phone: 970-249-7783
Fax: 970-249-0445
montrose@cwfc.net

Cortez Workforce Center

217 West Main Street
Cortez, CO 81321
Phone: 970-565-3759
Fax: 970-565-0916
cortez@cwfc.net

Durango Workforce Center

331 South Camino Del Rio #C
Durango, CO 81301
Phone: 970-247-0308
Fax: 970-247-0328
durango@cwfc.net

Pagosa Springs Workforce Center

449 San Juan Street
Pagosa Springs, CO 81147
Phone: 970-264-4133
Fax: 970-264-4134
pagosasprings@cwfc.net

Ridgway Satellite Office

112 Village Square, #202
Ridgway, CO 81432
Phone: 970-626-2555



Silverton Satellite Office

Silverton Library
1111 Reese Street
Silverton, CO 80433
Phone: 970-387-5770

Telluride Satellite Office

100 W. Colorado Ave., #213
Telluride, CO 81435
Phone: 970-728-5585



For a listing of all Colorado Workforce Centers:

www.coworkforce.com/emp/wfcs.asp