





Survey Conducted September 27 – October 5, 2004

Released Winter 2005

Funding Provided in Part by The Colorado Workforce Development Council

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

Analyst for this region: Allyson Reedy

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

# San Luis Valley Region

Job Vacancy Survey



### Contents

| Introduction                      | 1  |
|-----------------------------------|----|
| Executive Summary                 | 2  |
| Regional Information              | 3  |
| Survey Findings                   | 8  |
| Occupational Details              | 17 |
| Sector Briefs                     | 23 |
| Appendix                          | 24 |
| How to Use This Report            | 24 |
| Caveats                           | 25 |
| Methodology                       | 25 |
| NAICS                             | 27 |
| Glossary                          | 29 |
| San Luis Valley Workforce Centers | 31 |

State of Colorado Bill Owens, *Governor* 



#### **Colorado Department of Labor & Employment** Leroy J. Williams, Jr., *Acting Executive Director*

This report is published annually. Comments, suggestions, and questions regarding content and format are welcome and may be addressed to the Workforce Research & Analysis unit, Labor Market Information, Colorado Department of Labor and Employment. Material presented here is in the public domain and, with appropriate credit, may be reproduced without permission. Please reference: *Colorado Department of Labor and Employment*, *Labor Market Information, Workforce Research and Analysis*.



# Introduction

The unemployment rate and the level and growth rate of employment have been used as indicators of labor market conditions for decades. While these indicators provide information about changes in the supply and demand for labor, they reveal nothing about the skills most sought after by employers. As such, individuals preparing themselves for the job market have done so with limited knowledge of what skills are necessary to successfully compete in the contem-

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

# Executive Summary

The Fall 2004 San Luis Valley Job Vacancy Survey was conducted from September 27th through October 5th, 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 the San Luis Valley Region.

A random sample of small to mid-size private employers with at least five employees were 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 at the time of the survey along with a variety of questions about the positions they were seeking to fill.

A total of 420 employers, representing approximately 53% of the region's total employment, responded to the survey. Out of these, 77 were government agencies, 13 were large employers and 330 were small to midsized entities. The survey had an 88% response rate and a 99% cooperation rate. The margin of sampling error for the overall result is plus or minus 8%, or about 8 vacancies.

#### *Major Findings of the Survey:*

| An estimated 97 jobs were open for immediate hire in the region during<br>the survey period, down from 122 a year ago   |
|---|
| The Education & Health Services JVS sector offers the most vacancies, 32,<br>and the second highest average wages of \$10.80.   |
| • Eight percent of surveyed employers report at least one job vacancy   |
| • Employers offer an overall average wage of \$8.80 <i>Page 9</i>   |
| ♦ Just 19% of vacancies require education beyond the high school level, compared to 64% a year agoPage 12   |
| <ul> <li>This year 52% of vacancies require related or occupation specific experience,<br/>down from 81% last year</li></ul>  |
| • Employers find open positions less difficult to fill than in last year's surveyPage 14  |
| <ul> <li>Seventy-one percent of vacancies offer medical insurance with most of them<br/>offering to pay a portion of the policy premium</li></ul>   |
| <ul> <li>Healthcare Practitioner &amp; Technical occupations account for most vacancies with<br/>21% of openings; Registered Nurses provide the most vacancies once againPage 18</li> </ul> |



### **Regional Information**

The San Luis Valley Region, considered one of

the largest high desert valleys in the world at an average elevation of over 7,500 feet, consists of Alamosa, Conejos, Costilla, Mineral, Rio Grande and Saguache counties. The San Juan and Sangre de Cristo Mountains surround the valley and protect Alamosa county's Sand Dunes National Monument, the tallest dunes in North America.

Rio Grande and Saguache counties are agricultural hubs for the region, which is known for its beauty and fertile soil.

The main crops grown in the region are potatoes, alfalfa, wheat and barley. Of Colorado produce, the San Luis Valley harvests 92% of potatoes, 81% of spring wheat and 73% of barley. It is considered one of the top five potato producing areas in the United States<sup>1</sup>.

The U.S. Census Bureau estimated the region's population at 47,027 as of 2003<sup>2</sup>. With the exception of Mineral and Saguache counties, San Luis Valley grew at a rate much lower than that of the rest of Colorado between 2000 and 2003<sup>3</sup>. In September 2004 the region employed 27,864 people out of a labor force of 29,332<sup>4</sup>.

#### Figure 2: Employment by County, September 2004



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

<sup>1</sup>Mountain Valley Produce, mvproduce.com

<sup>2</sup>U.S. Census Bureau 2003 Population Estimates

<sup>3</sup>U.S. Census Bureau: State and County QuickFacts 2000

<sup>4</sup>The Fall 2004 labor force numbers published in this report are slightly different from the labor force numbers published in the Summer 2003 Job Vacancy Survey. Every year the labor force numbers are benchmarked and adjusted to reflect information obtained since the original numbers were published. This report uses these revised numbers which are the most accurate available.

### Regional Information - continued

Since the first San Luis Valley Job Vacancy Survey was conducted in early fall 2001, the number of estimated vacancies has decreased steadily. It is clear that the drop from 270 vacancies in 2001 to 97 vacancies in 2004 suggests a decline in employer hiring levels during the survey period<sup>5</sup>.

Since last survey, the number of unemployed people has decreased and the labor force has increased, thus lowering the unemployment rate to 5%. Because 2003's survey was conducted in August and this year's in September and October, the two cannot be directly compared in terms of unemployment rates. As will be illustrated in *Figure 5*, San Luis Valley's unemployment rate peaks in August and then decreases substantially in September. Therefore, the large difference in unemployment rates between last survey and this survey can be attributed to both seasonal fluctuations as well as to an improving economy.

One of the reasons for the improvement in San Luis Valley's economy over last year may be the easement of one of the worst droughts in Colorado history. The drought adversely affected agriculture, one of the most important drivers of the local economy. Also, the national economy's rebound has helped strengthen the region's tourism industry. Although there is typically a lag, overall economic improvement usually creates more opportunities for job seekers in the labor market. Even though vacancies are down for the survey period from last year, the lower unemployment rate is an encouraging sign for San Luis Valley.



#### Figure 3: Historical Vacancies – San Luis Valley Region

# Regional Information - continued

*Figure 4* shows a 5-year history of both the region's labor force and the employment levels between September 1999 and September 2004. Many conclusions may be drawn from this graph:

# • The labor force and employment levels have grown over the past five years.

Because labor force and employment levels vary from season to season, change does not occur smoothly. A large increase in employment between March and April 2002 drove up the labor force and decreased the unemployment level. Rio Grande and Saguache counties are primarily responsible for the jump in employment. The region's labor force

grew at a compound annual rate of 7.3% while employment grew 7.4% from September of 1999 through September of 2004.

### •The unemployment level has decreased.

The unemployment level is the gap between labor force and employment. The larger the distance between the two lines, the larger the number of unemployed. The highest unemployment rate for the 5-year period graphed came in January 2002 at 8.7%. The lowest was 4.4% in October 1999 and May 2000. This survey's unemployment rate of 5% is the lowest San Luis Valley has seen in almost four years.

•In addition, *Figure 4* demonstrates the region's seasonal trend. Both employment levels and the labor force peak in early fall and then bottom out in winter. The Job Vacancy Survey is conducted in late summer or early fall, when employment is increasing but has not yet reached its seasonal highs. A survey at this time gives a good indication of the jobs in demand as the labor market nears its peak. The region's labor force does not fluctuate as much as its employment level, which leads to an unemployment rate highly affected by seasonal fluctuations.

#### Figure 4: Employment and Labor Force Trends for San Luis Valley (Not Seasonally Adjusted)



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

### **Regional Information** – continued

The unemployment rate, the ratio of unemployed people actively seeking work to the labor force as a whole, in San Luis Valley is highly seasonal. As shown in *Figure 5*, the rate tends to peak in January and August of each year. January 2004 had the highest rate of the past year, at 7.3%. This September's rate of 5% is the lowest it has been for September in several years. Harvest season decreases the unemployment rate after August until October, when it rises again into winter. This seasonal fluctuation is expected in economies dominated by agriculture. On the whole, unemployment rates have been decreasing over the past two years.





#### Figure 5: San Luis Valley Region Unemployment Rate Trend (Not Seasonally Adjusted)

ource: CDLE, Local Area Unemployment Statistics, Released September 2004

The overall unemployment rate in the San Luis Valley region in September 2004 is higher than the statewide rate of 4.6% but just under the U.S. level of 5.1%<sup>6</sup>. Mineral has the lowest unemployment rate while Costilla County has the highest. The two counties with the largest labor forces, Alamosa and Rio Grande, have unemployment rates of 5.8% and 3.1% respectively.

### Regional Information - continued

*Figure 7* illustrates the distribution of employer and employee data for San Luis Valley. For rural regions, establishments are broken down into six JVS sectors derived from the North American Industry Classification System (NAICS) (page 26).

Data for *Figure 7* are gathered under the Quarterly Census of Employment and Wages program and include employers required to pay Unemployment Insurance Tax. Despite the fact that 98% of the nation's jobs are covered under the Unemployment Insurance program<sup>7</sup>, the San Luis Valley reveals a shortcoming of this data. Agriculture, a primary driver of this region's economy, is an industry in which much of the employment is not covered. Many agricultural employers are exempt from paying unemployment insurance tax, and therefore are not represented in QCEW numbers.

Since agriculture is part of the Goods-Producing category, that JVS sector actually represents more than the 25% of the labor market shown in *Figure 7*. Mining, Construction, Manufacturing and Agriculture, Forestry, Fishing & Hunting all fall under the Goods-Producing sector.



#### Figure 7: San Luis Valley Region Employers and Employees, Third Quarter, 2003

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



Vacancies:

JVS Sectors and

**Employer Size** 

# **Survey Findings**

**During the survey period, 97 vacancies were** estimated for private firms having at least 5 employees and all government employers in the San Luis Valley Region. The total number of estimated vacancies is down from the 122 found in the last survey in summer of 2003.

The region's estimated vacancy rate is 0.7%, meaning that there are approximately 7 vacancies in the survey for every 1,000 positions. This vacancy rate does not vary much from last year's rate of 0.8%. The total and JVS sector-specific vacancy rates are two of the most important

pieces of information that the Job Vacancy Survey produces. However,

because the survey has only been conducted for four years it is difficult to determine exactly what an overall vacancy rate of 0.7% tells us about the demand for workers in the economy. Watching the change in the vacancy rates through several economic expansions and contractions will help to better gauge the level of demand for labor.

The amount of employment in a JVS sector is not necessarily a good predictor of which sector will have the most vacancies. For example, Government and Goods-Producing JVS sectors employ 50% of the region's workers, but account for only 21% of vacancies. The Education & Health Services JVS sector, on the other hand, makes up 11% of employment in the region, but claims one-third of the vacancies. People in the San Luis Valley Region need to know which JVS sectors are demanding new workers and which are not.





Of employers contacted during the survey, eight percent reported having at least one vacant position at that time. That said, the likelihood of finding an open position at a business varies with the JVS sector.

*Figure 8* shows estimated vacancies and the overall average wage offered by each JVS sector. In this survey, as in last year's as well, the most openings occur in the Education & Health Services JVS Sector.

A key difference between the current survey and last year's is the decrease in overall average wages. Average wages decreased from \$14.80 an hour in 2003 to \$8.80 this survey. This information should not be taken to mean that offered wages in San Luis Valley are falling, however. A possible explanation for this discrepancy is the

8

### Survey Findings Estimated Vacancies: JVS Sectors and Employer Size – continued

lack of wage data received from typically high-paying medical occupations this year. Nearly all JVS sectors reported lower wages this year than last, though. The educational requirements for vacancies were also lower this year compared to last.

In this survey, wages are reported for 57% of all vacancies. While wages do reflect the labor force supply and demand, they are also heavily affected by the particular occupations that employers are looking to fill during the survey period<sup>8</sup>. Employers are asked to provide both a minimum and maximum wage for each open position they report. Typically, employers are willing to offer a candidate more or less money depending on a candidate's prior experience and education if it will allow the employee to be more productive.

A wide range between average minimum and maximum wages within a JVS sector, such as that found in Information, Financial Activities & Professional & Business Services, reflects a wide range of skill and experience desired for the vacancies. Sales & Related occupations make up the low end of the wage spectrum for this JVS sector, while Installation, Maintenance, & Repair occupations offer higher wages. Government had the survey's highest average wages and about twice as many vacancies as last year. All other JVS sectors' number of vacancies remained fairly consistent over the past year.



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

### Survey Findings Estimated Vacancies: JVS Sectors and Employer Size – continued

Most vacancies are found in the small to mid-size (5 to 74 employees) category. Large employers and Government agencies combined make up 45% 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 (private firms with 75 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 1.9 vacancies per large private employer, 0.2 vacancies per Government entity and 0.1 vacancies per small to mid-size employer.

When considering the relative demand for new employees across size classifications it is best to turn to vacancy rates. Large employers have an average vacancy rate of 1.5%, small to mid-size employers 0.7% and Government 0.3%. Thus, relative to the number of people employed in each category, large private employers are looking to fill more positions than small to mid-size and Government employers combined.

Compared to a year ago, the number of vacancies in large and small to mid-size employers has dropped while vacancies in Government went up. Wages decreased since last year for all employer sizes, with large businesses reporting the biggest fall, from \$18.40 last year to \$10.30 this year. Once again, much of the difference can be attributed to the lack of wage data for medical occupations, most of which work in large hospitals. While the drop from one survey to another does not signify in itself any trend, it will be interesting to see in the future how employers of different size groups adjust their hiring practices at different points in the economic cycle.

In this survey, Government offered higher wages than small to midsize companies and last year's leader - large employers. Like all the categories discussed in this report, occupations found in a size class play a major role in determining the average wage in that category. The vast majority of healthcare related occupations are found in the large size category, and the insufficient wage data in these higher paying occupations brings wages down. Many vacancies in the small to mid-size category come from the low-paying Food Preparation & Serving Related occupations, decreasing that employer size group's wages to the lowest in the survey.



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





### Vacancies: Employment Status, Education and Experience Requirements

# **Survey Findings**

The remainder of this report provides descriptive statistics of the vacancies reported in and unique to this survey; this is supplemental data of

interest to the reader. The survey design does not allow for application of this detail to the region as a whole, but it can be used to understand characteristics of those job vacancies and occupations reported.



Ninety-eight percent of the vacancies reported are permanent employment opportunities. Of openings, 88% are full-time/permanent positions and 10% are parttime/permanent positions. Just 2% of the positions are temporary, down from 4% a year ago. Figure 13: Reported Average Wage Ranges by Employment Status



In this survey, full-time/permanent positions offer by far the highest average wages. The results are similar to last year in that part-time/permanent positions offer the lowest average wage and full-time/temporary positions offer an average wage in the middle of the two categories.

Full-time/permanent positions offering the highest average wages in the San Luis Valley region include Management, Healthcare Practitioner & Technical and Construction & Extraction occupations. Thirty-one percent of full-time/permanent vacancies are in the low-paying Food Preparation & Serving Related occupations, the largest concentration of any one group. The majority of economic reporting treats all workers as if they are part of the same labor market. For example, if the unemployment rate is high, one might assume there are plenty of qualified candidates and no 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.

Vacancies by education differ greatly from last year's survey. This survey indicates that only 4% of vacancies require a Bachelor's degree or higher, compared to 37% of openings last year. Almost all of last year's vacancies requiring Bachelor's degrees came from the Healthcare Practitioner & Technical group. Forty-five percent of vacancies require a high school diploma or GED, compared to just 8% of openings last survey. Vacancies falling under this educational category include Protective Services, Office & Administrative Support and Installation, Maintenance & Repair occupations.

Generally, the greater the education required for a position, the higher the wage offered. This survey reflects that idea perfectly. It is important for people considering whether or not to continue their education to have an idea of how it will affect their earnings. Positions requiring a two-year degree offered average wages of \$19 an hour in this survey, while a high school diploma or GED commanded on average between \$8 and \$9.50 an hour. While obtaining higher levels of education may be expensive and difficult, the difference in pay offers a powerful incentive.

The occupations most in demand by education category are as follows:

**No Diploma** – Food Preparation & Serving Related **High School/GED** – Office & Administrative Support **Two-Year Degree** – Management

There were not enough vacancies requiring Vocational Training/Certification and Bachelor's & Advanced Degrees to accurately report in-demand occupations.



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



A year ago, 81% of vacancies required at least experience in a related field. For this survey, 52% of openings mandate applicants have experience in a related field or in that particular occupation. Another major change over last year is the prevalence of vacancies that do not require experience; 40% this year compared to 14% last year. This survey's experience requirements seem more in line with 2001 and 2002 surveys, where many vacancies did not require work experience. Last year may have been aberrational because of the unusually high number of Healthcare Practitioner & Technical positions available, most of which require experience in a related field.

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.

The associated average wage ranges follow a logical pattern of higher wages offered to candidates with more applicable job experience, although the average wage for no experience required vacancies is slightly higher than those requiring general work experience. Cashiers in Sales & Related occupations make up 75% of openings in the general work experience category. Of the positions not requiring experience, most fall into the typically minimum wage-paying Food Preparation & Serving Related occupations, but other vacancies in Healthcare Support and Protective Service occupations bring up this experience category's average wages.

The occupations most in demand by experience category are as follows:

**Experience in a Related Field** – Installation, Maintenance & Repair and Office & Administrative Support

General Work Experience - Sales & Related

No Experience Required – Food Preparation & Serving Related

While there are several vacancies requiring experience in this occupation, there is no single occupation that dominates the experience category.



Figure 17: Reported Average Wage Ranges by Experience



Vacancies:

for Hire

Difficulty to Fill and Time Open

# **Survey Findings**

**Employers' ability to find and hire quali**fied candidates is an important indicator of the supply side of the labor force. The diffi-

culty of filling a vacancy depends upon the nature of work and current labor market conditions. For example, finding a high level executive with the right qualifications is usually harder than locating a qualified waiter or waitress. The pool of candidates available to fill vacancies affects the difficulty employers face in hiring new workers. 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. Previous surveys have shown several vacancies for nurses to be somewhat or very difficult to fill, meaning an increase in the supply side of qualified nurses in San Luis Valley will make those vacancies easier to fill, assuming candidates are willing to work for the wages offered.

In addition to asking employers about their perceived difficulty in filling vacant positions, the Job Vacancy Survey also measures the amount of time that employers have been actively recruiting. Factors influencing the length of time a vacancy is open include the availability of qualified candidates, competition among employers for similar candidates, and the willingness of candidates to accept job duties in light of wages and benefits offered. Also, employers may allow more time to fill a vacancy in order to ensure the fit of the candidate with the organization.



Figure 18: Vacancies by Difficulty to Fill

Employers are finding it easier to hire qualified workers in this survey compared to last year. A comparison of these two surveys shows:

- The proportion of vacancies reported as very difficult to fill dropped from 20% to 5%.
- Openings reported as somewhat difficult to fill decreased from 37% to 33%.
- Vacancies reported as not difficult to fill increased from 43% to 62%.

59 days.

### Survey Findings Vacancies: Difficulty to Fill and Time Open for Hire-continued

80% In this survey the proportion of vacancies open for more than 30 days 70% 66% has increased compared to last year. At the same time, a higher percent-60% age of openings are filled in less than 30 days. Of the positions filled the quickest, 16% are in Food Preparation & Serving Related occupations, 50% 14% are in Protective Service, and 8% are in Healthcare Support. The 40% most frequent occupations open for 60 or more days are Sales & Related. Food Preparation & Serving Related occupations top those open for 30 to 30% 20% 13% 8% 10% 5% 3% 0%

60 or More Days

90%



82%

Less Than

30 Days

23%

Always Hiring

0%

Positions open for less than 30 days are the highest paid. While the most prevalent vacancies are low paying, Construction & Extraction and Protective Service occupations bring up the wages for positions filled in less than 30 days, thus explaining this category's larger wage range and higher average.



Eall 2004

30 to 59 Days

Eall 2003



# Additional Survey Findings

### Compensation

### **Medical Insurance**

**Employers frequently offer compensation related** benefits to recruit qualified candidates. Some of these perks include 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 71% of the vacancies, employers offer medical insurance. This is up from 59% a year ago. When medical insurance is offered, employers contribute a partial cost of the premium the majority of the time. Of these employers, 33% are Healthcare Practitioner & Technical occupations. Vacancies where employers pay the total cost of the premium receive the highest average wages, followed by employers paying a partial cost of the premium.



### Sign-On Bonus

**Employers did not offer sign-on bonuses for any of the vacancies in** the survey. Over the last four years the frequency of sign-on bonuses in the labor market has dropped significantly. As hiring activity increases, it is likely that the number of sign-on bonuses offered will rise.



# **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 looking for a job, the more detailed the information the better. Reporting

vacancies at the individual occupation level is the most detailed information the survey can provide without breaking confidentiality with those employers who participated in the survey.

To facilitate comparisons between the results of this survey and other sources of employment statistics, all jobs reported are assigned a Standard Occupational Classification (SOC) code from the 2000 Standard Occupational Classification Manual. The JVS uses 801 detailed SOC titles combined under 22 major groups.

The Healthcare Practitioner & Technical major occupational group accounts for the largest proportion of vacancies, just as it did in 2002 and 2003. This group of occupations constitutes 21% of openings and offers the survey's second highest average wages, behind Management. On average, positions in the Healthcare Practitioner & Technical group offer between \$12 and \$20 an hour. Overall, seven of the 12 major occupational groups for which we have wage data offer an average wage above the survey average of \$8.80. These seven major occupational groups account for 56% of reported vacancies.

Food Preparation & Serving Related occupations as well as Sales & Related occupations are also in demand. Both of these occupations, however, offer wages on the lower end of what was found in the survey.

# **Occupational Details** –continued

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

| \$5 | \$                                       | 10      | \$15                        | \$2                             | 0   | 0%     | 5%         | <i>ы</i> ́ 1( | 0%    | 15% | 20% | 25% |
|-----|--|---------|-----------------------------|---------------------------------|---|--------|------------|---------------|-------|-----|-----|-----|
|     |  |         |                             |                                 | Healthcare Practitioner & Technical         |        |            |               |       |     |     |     |
|     |  |         |                             |                                 | Food Preparation & Serving Related          |        |            |               |       |     |     |     |
|     |  |         |                             |                                 | Sales & Related                             |        |            |               |       |     |     |     |
|     |  |         |                             |                                 | Office & Administrative Support             |        |            |               |       |     |     |     |
|     |  |         |                             |                                 | Protective Service                          |        |            |               |       |     |     |     |
|     |  |         |                             |                                 | Healthcare Support                          |        |            |               |       |     |     |     |
|     |  |         |                             |                                 | Building & Grounds Cleaning & Maintenance   | )      |            |               |       |     |     |     |
|     |  |         |                             |                                 | Transportation & Material Moving            |        |            |               |       |     |     |     |
|     |  |         |                             |                                 | Management                                  |        |            |               |       |     |     |     |
|     |  |         |                             |                                 | Installation, Maintenance & Repair          |        |            |               |       |     |     |     |
|     |  |         |                             |                                 | Construction & Extraction                   |        |            |               |       |     |     |     |
|     |  |         |                             |                                 | Education, Training & Library               |        |            |               |       |     |     |     |
|     | Insufficient wage data Community & Socia |         | Community & Social Services |                                 |   |        |            |               |       |     |     |     |
|     |  | Insuffi | cient wage c                | lata                            | Business & Financial Operations             |        |            |               |       |     |     |     |
|     |  | Insuffi | cient wage c                | data                            | Arts, Design, Entertainment, Sports & Media |        |            |               |       |     |     |     |
|     |  | Insuffi | cient wage c                | data                            | Production                                  |        |            |               |       |     |     |     |
|     |  | No vao  | cancies repo                | orted                           | Architecture & Engineering                  |        | No vac     | ancies rep    | orted |     |     |     |
|     |  | No va   | cancies repo                | orted                           | Personal Care & Service                     |        | No vac     | ancies rep    | orted |     |     |     |
|     | No vacancies reported                    |         | orted                       | Life, Physical & Social Science |   | No vac | ancies rep | orted         |       |     |     |     |
|     | No vacancies reported                    |         | orted                       | Legal                           |   | No vac | ancies rep | orted         |       |     |     |     |
|     |  | No va   | cancies repo                | orted                           | Farming, Fishing & Forestry                 |        | No vac     | ancies rep    | orted |     |     |     |
|     |  | No vao  | cancies repo                | orted                           | Computer & Mathematical                     |        | No vac     | ancies rep    | orted |     |     |     |
| 5   | \$                                       | 10      | \$15                        | \$2                             | 0   | 0%     | 5%         | б 1(          | 0%    | 15% | 20% | 25% |

\_

Wage Range Offered – Average Minimum to Average Maximum

Percent of Total Vacancies Reported

### **Occupational Details** -continued

### **Occupational Estimates**

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

#### **Estimated Vacancies**

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

#### **Vacancies Found**

The number of vacancies by occupation found in the survey.

#### Average JVS Wage Offered

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

#### 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 San Luis Valley region when available and statewide otherwise. Data were collected in 2000 and 2001 and aged to 2002 using the Employment Cost Index (ECI). A complete description of the OES survey is available on the Internet at: http://www.bls.gov/.

While the Job Vacancy Survey average wages reflect what is being offered to fill vacancies at the time of the survey, OES wage data reflect what is being paid to 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 Four or More Estimated Vacancies -

|             |  |                        |                    |                        | Occupational Employment Statistics Wage Data (2003) |         |                  |         |         |            |          |         |
|-------------|--|------------------------|--------------------|------------------------|---|---------|------------------|---------|---------|------------|----------|---------|
|             |  |                        |                    |                        | Ave   | rage Wa | iges             |         | Percent | tile Distr | ribution |         |
| SOC<br>Code | SOC Occupational Title   | Vacancies<br>Estimated | Vacancies<br>Found | Average<br>JVS<br>Wage | Entry-<br>Level                                     | Overall | Experi-<br>enced | 10th    | 25th    | 50th       | 75th     | 90th    |
| 29-1111     | Registered Nurses  | 9                      | 9                  | †                      | \$17.08   | \$21.11 | \$23.12          | \$15.65 | \$18.47 | \$20.85    | \$23.02  | \$27.25 |
| 53-7062     | Laborers and Freight, Stock, and<br>Material Movers, Hand        | 8                      | 3                  | \$6.20                 | \$6.20  | \$7.78  | \$8.57           | \$5.82  | \$6.33  | \$7.20     | \$8.68   | \$11.08 |
| 41-2011     | Cashiers   | 7                      | 5                  | \$5.50                 | \$6.21  | \$7.20  | \$7.69           | \$5.74  | \$6.13  | \$6.76     | \$7.80   | \$8.97  |
| 37-2011     | Janitors and Cleaners, Except Maids<br>and Housekeeping Cleaners | 5                      | 4                  | \$7.80                 | \$7.17  | \$9.34  | \$10.43          | \$6.74  | \$7.55  | \$8.60     | \$10.80  | \$12.86 |
| 43-6011     | Executive Secretaries and<br>Administrative Assistants           | 4                      | 1                  | †                      | \$13.39   | \$17.18 | \$19.07          | \$12.33 | \$14.64 | \$16.58    | \$19.44  | \$22.90 |
| 43-4171     | Receptionists and Information Clerks                             | 4                      | 1                  | \$6.30                 | \$7.09  | \$9.87  | \$11.26          | \$6.46  | \$7.69  | \$9.45     | \$12.49  | \$13.87 |
| * 35-2011   | Cooks, Fast Food   | 4                      | 3                  | \$5.20                 | \$6.16  | \$8.14  | \$9.13           | \$5.89  | \$6.61  | \$7.94     | \$9.61   | \$10.77 |

\* OES wages reported for Colorado statewide

† Insufficient Wage Data Available

# Occupational Details \_\_continued

Table 2: Occupations with Fewer than Four Estimated Vacancies

|             |   | Occupational Employment Statistics Wage Data (2003) |          |                  |                         |          |          |          |          |  |  |
|-------------|---|---|----------|------------------|-------------------------|----------|----------|----------|----------|--|--|
|             |   | Av  | erage Wa | ges              | Percentile Distribution |          |          |          |          |  |  |
| SOC<br>Code | SOC Occupational Title  | Entry-<br>Level                                     | Overall  | Experi-<br>enced | 10th                    | 25th     | 50th     | 75th     | 90th     |  |  |
| * 49-2098   | Security and Fire Alarm Systems Installers                            | \$14.14   | \$18.66  | \$20.91          | \$13.78                 | \$15.25  | \$17.81  | \$21.12  | \$27.41  |  |  |
| 41-2021     | Counter and Rental Clerks   | \$6.21  | \$6.22   | \$6.22           | \$5.67                  | \$5.93   | \$6.35   | \$6.78   | \$7.04   |  |  |
| * 33-9032   | Security Guards   | \$8.58  | \$11.64  | \$13.16          | \$7.88                  | \$9.19   | \$10.65  | \$13.11  | \$17.62  |  |  |
| 35-3021     | Combined Food Preparation and Serving Workers,<br>Including Fast Food | \$6.10  | \$7.20   | \$7.76           | \$5.66                  | \$6.04   | \$6.67   | \$7.69   | \$8.88   |  |  |
| 25-2011     | Preschool Teachers, Except Special Education                          | \$6.63  | \$10.05  | \$11.76          | \$6.23                  | \$7.16   | \$9.74   | \$12.73  | \$15.11  |  |  |
| 25-9041     | Teacher Assistants  | \$12,490  | \$15,726 | \$17,345         | \$11,825                | \$12,828 | \$14,597 | \$18,786 | \$21,709 |  |  |
| * 35-3041   | Food Servers, Nonrestaurant   | \$6.64  | \$9.20   | \$10.48          | \$6.15                  | \$7.17   | \$8.86   | \$10.99  | \$13.08  |  |  |
| * 47-2152   | Plumbers, Pipefitters, and Steamfitters                               | \$13.80   | \$21.02  | \$24.63          | \$12.36                 | \$15.94  | \$20.80  | \$25.71  | \$29.07  |  |  |
| 29-1126     | Respiratory Therapists  | \$14.95   | \$18.88  | \$20.85          | \$13.33                 | \$16.69  | \$19.54  | \$21.48  | \$22.96  |  |  |
| * 31-9091   | Dental Assistants   | \$11.14   | \$16.76  | \$19.57          | \$10.01                 | \$12.91  | \$16.68  | \$20.59  | \$24.84  |  |  |
| 31-1011     | Home Health Aides   | †   | t        | †                | +                       | †        | †        | †        | +        |  |  |
| 13-2072     | Loan Officers   | \$16.47   | \$24.14  | \$27.98          | \$14.25                 | \$18.69  | \$22.68  | \$28.89  | \$38.00  |  |  |
| * 51-3021   | Butchers and Meat Cutters   | \$10.31   | \$15.11  | \$17.51          | \$9.02                  | \$12.01  | \$15.73  | \$18.34  | \$20.68  |  |  |
| 35-3031     | Waiters and Waitresses  | \$6.11  | \$6.64   | \$6.90           | \$5.63                  | \$5.96   | \$6.52   | \$7.13   | \$8.28   |  |  |
| 35-2014     | Cooks, Restaurant   | \$6.35  | \$8.10   | \$8.97           | \$6.09                  | \$6.89   | \$8.02   | \$9.31   | \$10.67  |  |  |
| * 29-2012   | Medical and Clinical Laboratory Technicians                           | \$11.23   | \$15.56  | \$17.73          | \$10.35                 | \$12.32  | \$15.14  | \$18.53  | \$21.49  |  |  |
| * 11-3011   | Administrative Services Managers                                      | \$18.69   | \$32.10  | \$38.81          | \$16.87                 | \$21.70  | \$29.44  | \$39.27  | \$50.67  |  |  |
| * 11-9031   | Education Administrators, Preschool and Child Care Center/Program     | \$11.87   | \$17.87  | \$20.88          | \$11.09                 | \$13.33  | \$16.58  | \$20.41  | \$27.61  |  |  |
| * 21-1022   | Medical and Public Health Social Workers                              | \$14.21   | \$19.46  | \$22.08          | \$12.96                 | \$15.94  | \$19.35  | \$22.56  | \$26.91  |  |  |
| * 43-3051   | Payroll and Timekeeping Clerks  | \$11.99   | \$15.96  | \$17.94          | \$11.34                 | \$13.41  | \$15.87  | \$18.40  | \$21.36  |  |  |
| * 43-5031   | Police, Fire, and Ambulance Dispatchers                               | \$11.91   | \$16.51  | \$18.81          | \$10.89                 | \$13.69  | \$16.80  | \$19.68  | \$21.82  |  |  |
| 27-3022     | Reporters and Correspondents  | †   | †        | †                | †                       | †        | †        | †        | +        |  |  |
|             |   |   |          |                  |                         |          |          |          |          |  |  |

\* OES wages reported for Colorado statewide † Insufficient wage data

Table 2: Occupations with Fewer than Four Estimated Vacancies – Page 2 -

|             |   |                 | Occupati | onal Emp         | loyment                 | Statistics | Wage Da | e Data (2003) |         |  |  |  |  |  |
|-------------|---|-----------------|----------|------------------|-------------------------|------------|---------|---------------|---------|--|--|--|--|--|
|             |   | Ave             | erage Wa | ges              | Percentile Distribution |            |         |               |         |  |  |  |  |  |
| SOC<br>Code | SOC Occupational Title                        | Entry-<br>Level | Overall  | Experi-<br>enced | 10th                    | 25th       | 50th    | 75th          | 90th    |  |  |  |  |  |
| * 29-1123   | Physical Therapists                           | \$18.76         | \$24.82  | \$27.85          | \$17.71                 | \$21.32    | \$24.88 | \$27.89       | \$33.17 |  |  |  |  |  |
| * 29-2034   | Radiologic Technologists and Technicians      | \$15.21         | \$19.71  | \$21.96          | \$14.46                 | \$16.65    | \$19.65 | \$22.60       | \$26.19 |  |  |  |  |  |
| * 29-2011   | Medical and Clinical Laboratory Technologists | \$16.18         | \$20.81  | \$23.12          | \$15.02                 | \$17.53    | \$20.77 | \$24.18       | \$27.19 |  |  |  |  |  |
| 33-3051     | Police and Sheriff's Patrol Officers          | \$11.04         | \$18.80  | \$22.68          | \$9.99                  | \$11.93    | \$17.00 | \$26.29       | \$31.20 |  |  |  |  |  |
| 43-2021     | Telephone Operators                           | †               | †        | †                | †                       | †          | †       | †             | †       |  |  |  |  |  |
| 31-9092     | Medical Assistants                            | \$8.56          | \$9.57   | \$10.07          | \$7.97                  | \$8.88     | \$9.62  | \$10.47       | \$10.98 |  |  |  |  |  |
| * 31-9099   | Healthcare Support Workers, All Other         | \$9.46          | \$12.66  | \$14.25          | \$9.00                  | \$10.27    | \$12.20 | \$14.37       | \$17.44 |  |  |  |  |  |
| * 33-3021   | Detectives and Criminal Investigators         | \$21.20         | \$28.59  | \$32.29          | \$19.03                 | \$24.51    | \$29.46 | \$33.24       | \$37.88 |  |  |  |  |  |
| 11-1021     | General and Operations Managers               | \$18.48         | \$37.39  | \$46.85          | \$16.10                 | \$21.44    | \$32.70 | \$42.36       | †       |  |  |  |  |  |
| 49-9042     | Maintenance and Repair Workers, General       | \$9.19          | \$14.26  | \$16.80          | \$7.32                  | \$11.67    | \$15.04 | \$17.17       | \$20.04 |  |  |  |  |  |
| 47-4051     | Highway Maintenance Workers                   | \$9.81          | \$12.70  | \$14.15          | \$9.34                  | \$10.37    | \$12.27 | \$15.40       | \$17.15 |  |  |  |  |  |
| 43-9061     | Office Clerks, General                        | \$6.43          | \$8.97   | \$10.23          | \$6.04                  | \$6.94     | \$8.56  | \$10.56       | \$12.92 |  |  |  |  |  |

\* OES wages reported for Colorado statewide

† Insufficient Wage Data Available



# Education & Health Services

**Sector Briefs** 

**The Education & Health Services JVS sector** accounts for the largest proportion, 33%, of San Luis Valley's estimated vacancies this survey. Yet it ranks fifth out of the six JVS sectors in terms of the region's employment, securing 11% of employees.

The largest employers for this JVS sector are the San Luis Valley Regional Medical Center and the San Luis Valley Comprehensive Community Mental Health Center, both of which are classified as large employers.

The Education & Health Services JVS sector is made up of two NAICS sectors: Educational Services and Health Care & Social Services. This survey found vacancies only in the Health Care & Social Services sector. Of these, 45% are in Healthcare Practitioner & Technical, 17% in Healthcare Support and 10% in Protective Services occupations. Protective Services occupations may not sound like they belong in the Health Care & Social Services sector, but these would include positions such as security guards at hospitals.

As for specific occupations, Registered Nurses account for the highest proportion of this sector's sample vacancies with 31%. According to Occupational Employment Statistics wage data, RNs in the San Luis Valley region receive an average wage of \$21.11 per hour. This survey's lack of wage data for RNs makes it hard to provide a reliable estimate of offered wages, and it also contributes to this JVS sector having the second highest average wages this year instead of the highest as they had last year.

Employers within the Health Care & Social Services sector faced great difficulty during the late 1990s and early 2000s in recruiting and retaining employees. Spiraling demand for healthcare services due to a growing aging population increased the need for qualified healthcare workers. This need was left unmet for the most part of the 1990s for factors such as the hi-tech boom that diverted employment from the Health Care & Social Services sector to more lucrative technology fields. Long working hours, inflexible scheduling, in addition to stressful working conditions further exacerbated recruitment difficulties in the sector.

Thirty-two vacancies are estimated to be open in this JVS sector in the 2004 survey. Vacant positions in the Education & Health Services JVS sector tend to require higher levels of education and experience and are more likely to be termed difficult to fill.



### Appendix

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

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

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

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

#### Employers

How to Use

This Report

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 workexperience 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.

### Caveats Appendix -continued

### Caveats

and

Methodology

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.

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. 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 36% of the employment in the region is found in large and government employers that make up less than 5% of the total number of employers. 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 San Luis Valley survey was conducted from September 27 through October 5, 2004. For the purpose of this report, all large employers, government entities and small to mid-size private 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 a small proportion of the total employment. Employment in the sample frame accounts for 80% of the region's total employment.

The Job Vacancy Survey separates employers into either government or private industry. Private firms are then split into large and small to mid-size categories. Firms with at least 75 employees are considered large employers. Attempts are made to contact all government agencies and large firms in the sample frame. The remaining small to mid-size firms are split into JVS industry sectors.

The number of firms surveyed in each sector varies according to the number of employees and employers in the sector. In most JVS sectors half of all employers are contacted up to 200 employers. In JVS sectors with less than 1,000 employees, efforts are made to capture at least 500 employees in the sample. If less than 500 employees work in a sector then all employers are contacted. This sampling method insures that all the vacancy estimates are based on a sufficiently large sample size.

Government makes up 32% of the employment in the sample frame, while private industry employers make up the remaining 68%. Large firms account for 19% of private industry employment in the sample frame. Firms employing from five to 74 individuals are considered small to mid-size employers, and account for the remaining 81% of private industry employment.

The margin of error for the overall vacancy estimate is plus or minus 8% or 8 vacancies at a .95 certainty level. In other words, in 95 out of 100 samples taken, the actual number of vacancies in the region will be between 89 and 105 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 88%. 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 San Luis Valley, the 20 NAICS sectors have been combined into 6 JVS sectors. These groupings are based on the NAICS sectors, but are somewhat unique to the Job Vacancy Survey. The new groupings allow the Job Vacancy Survey to study local Colorado labor markets in a more relevant and meaningful way.

For more information on the North American Industry Classification System see page 27.

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

### Appendix: Methodology - continued

#### **Data Collection**

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

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

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

#### **Occupational Coding**

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

#### **Data Editing**

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

#### Wage Conversion

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

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

North American Industry Classification System

### North American Industry Classification System (NAICS)

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

#### **History of Process**

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

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

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

in job categories as a result of the shift to NAICS, unless they are looking at occupations by industry.

#### Benefits

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

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

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

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

### Appendix: NAICS - continued

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

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

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

#### **Things to Consider**

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

#### New Industries Reflected in NAICS

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

• Formerly, under SIC, corporate headquarters were not distinguished from the

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

### Comparison of NAICS and SIC Major Industry Groups

industry category of the product or service they produced. Now corporate headquarters are recognized in the new Management sector.

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

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

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

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

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

### 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*.

#### 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, straighttime 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.



### SAN LUIS VALLEY REGION WORKFORCE CENTERS

#### Alamosa Workforce Center

1016 W. Ave. #6 Alamosa, CO 81101 Phone: 719-589-5118 Fax: 719-589-6762

#### Antonita Workforce Satellite

307 Main Street Antonita, CO 81120 Phone: 719-376-2355

#### **Blanca/Fort Garland**

Workforce Satellite Community Center 17591 Highway 160 Blanca, CO 81123 Phone: 719-379-3450

#### Center Workforce Satellite

Cezar Chavez Family Med Center 186 North Hurt Street Center, CO 81125 Phone: 719-754-2778

#### Conejos County Satellite

Department of Human Services 12989 County Road G.6 Conejos, CO 81129 Phone: 719-376-5455

#### Monte Vista Workforce Center

2079 Sherman Avenue Monte Vista, CO 81144 Phone: 719-852-5171 Fax: 719-852-3817

#### Saguache Workforce Satellite

Saguache

**Rio Grande** 

Conejos

Alamosa

Costilla

Mountain Valley Schools 403 Pitkin Saguache, CO 81149 Phone: 719-655-0267

Mineral

#### San Luis Satellite

Rocky Mountain SER Head Start 209 Vegas San Luis, CO 81152 Phone: 719-672-3310

