# Northwest & Rural Resort Region

Job Vacancy Survey Summer 2003



See Colorado First

Pearl Lake State Park Routt County Photo by Martin G. Kleinsorge Courtesy Colorado State Parks

# Northwest & Rural Resort Region Job Vacancy Survey



Conducted July 7-18, 2003

### State of Colorado

Bill Owens, Governor

### **Colorado Department of Labor & Employment**

Jeffrey M. Wells *Executive Director* 

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# **Contents**

Introduction	1
Executive Summary	2
Regional Information	3
Survey Findings	7
Occupational Details	15
Sector Briefs	25
Appendix	26
How to Use This Report	.26
Caveats	.27
Methodology	.27
NAICS	.29
Glossary	.31

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

### Introduction to the Colorado Job Vacancy Survey

The unemployment rate, along with the level and growth rate of employment, has been used as an indicator of labor market conditions for decades. While this indicator provides information about changes in the supply and demand for labor, it reveals nothing about the skills most sought after by employers. As such, individuals preparing themselves for the job market have done so with limited knowledge of what skills are necessary to successfully compete in the contemporary labor market. Employers have had an equally difficult time determining appropriate compensation levels due to a limited knowledge of what similar firms in their region are currently offering.

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

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

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

### **Executive Summary**

This Northwest & Rural Resort Job Vacancy Survey (JVS) was conducted from July 7th through July 18th, 2003. The survey provides a reliable estimate of the total number of job vacancies in the region while also reporting useful information about the available positions. A representative sample of the region's employers is contacted over the survey period to gain timely and relevant information about current hiring activity.

A total of 1,219 employers, representing 36% of the region's total employment responded to the survey. Of these, 157 are Government agencies, 63 are large employers and 999 are small to mid-size entities. The survey had a 71.7% response rate, while the cooperation rate was 99.6%. The margin of error for the overall vacancy estimate is plus or minus 2.4%, or about 32 vacancies. The major findings of the survey follow:

An estimated 1,329 jobs were available for hire during the survey period, coinciding with a 1.3% vacancy rate. At this time last year, 1,580 vacancies were estimated
<ul> <li>Leisure &amp; Hospitality, one of six JVS Industry sectors, offers 540 estimated vacancies. Education &amp; Health Services; Trade, Transportation, Utilities &amp; Other Services; and Government each have about 195 estimated vacancies.</li> </ul>
• Fifteen percent of the employers surveyed report at least one job vacancy
♦ The average reported wage for vacancies in this survey is \$13.30 per hour
• Seventy percent of the reported openings are permanent, full-time positions
<ul> <li>Forty-four percent of the reported job vacancies require educational attainment beyond the high school/GED level.</li> </ul>
• Either related or occupation specific experience is required for 69% of the job vacancies
More than 60% of vacancies have been open for less than 30 days and 47% of all vacancies have been described as not difficult to fill
<ul> <li>Food Preparation &amp; Serving Related occupations are the most frequently reported of 22 major occupational groups covered in the survey.</li> </ul>

# Northwest & Rural Resort Region

he Northwest & Rural Resort (NW&RR) Region encompasses a vast geographic area rich in environmental wealth and serving as the primary tourist destination for the state. Much of the region's labor force works in tourism related business with the Leisure & Hospitality industries employing more people than any other.

Twelve counties make up the NW&RR Region. More than 40% of the region's employment and population is concentrated in Eagle and Garfield counties. Although Eagle was the fastest growing in terms of population over the 1990-2000 decade, Garfield county has grown at a higher rate, 2.8%, from 2001 to 2002.1 Summit and Routt counties each account for about 11% of the total region-wide employment. While Summit represents 12% of the population, Routt is home to only 10% indicating that businesses like the Steamboat Springs ski area may provide many jobs for people living outside of the county. Pitkin, Gilpin, and Clear Creek with their tourist attractions all support a larger proportion of the region's employment than population. Grand, Jackson, and Rio Blanco have about equal proportions of employment and population, whereas Lake and Moffat counties host a larger percent of the population than employment.

Although the number of estimated vacancies is up from the winter survey, it is just 85% of the number estimated in July 2001. This is reflective of a weak economy at both the regional and national level. Nationally, corporate financial woes and the shakeout in the technology industry directly impact the areas in which they are located-usually larger urban centers or corporate towns. The downstream consequences impact the NW&RR region. Losses in personal income lead to declines in tourism and construction as discretionary spending declines. Decreases in business spending and investment result in less activity for the region's business service companies who support ailing firms and industries in other regions or states of primary impact.

<sup>1</sup>Colorado Department of Local Affairs, Colorado Demography Section, Draft 2002 County Estimates



Source: CDLE, Local Area Unemployment Statistics Released July 2003

Figure 3: Historical Vacancies– Northwest & Rural Resort Region



	Summer 2001	Winter 2002	Summer 2002	Winter 2003	Summer 2003
Vacancies	2,700	940	1,580	676	1,329
Employment	107,307	110,280	108,315	111,868	111,806
Unemployed	2,620	5,119	3,414	5,126	4,440
Unemployment Rate	2.4%	4.4%	3.5%	4.4%	3.8%

Source: CDLE, Local Area Unemployment Statistics, July 2003

3



Figure 4: Employment and Labor Force Trends for the Northwest & Rural Resort Region (Not Seasonally Adjusted)

Source: CDLE, Local Area Unemployment Statistics, July 2003

*Figure 4* illustrates the historical progression of both the region's labor force and employment levels. The upward trend illustrates the growth in both the labor force and employment over the years. The region's labor force and employment have both grown at a compound annual growth rate of more than 2% per year from July of 1998 to July of 2003. The net growth in the labor force over the five-year period is about 12%.

The Job Vacancy Survey is conducted semi-annually in winter and summer in order to measure the demand for labor at peak periods. Outdoor recreation based tourism and construction, major components in the area's economy, heavily influence the seasonal fluctuations evident in the graph. Notice the high peaks that start in December each year and continue through March, coinciding with the winter snow-ski season. Then after a lull, the labor force and employment experience their smaller summer peak in July and August reflecting summer tourism and activity in the construction industry.

*Figure 4* also provides a visual representation of unemployment, represented by the gap between the labor force and the employment lines; the greater the distance between the two lines, the higher the number of unemployed.

The unemployment rate tends to peak in May each year, then falls through late summer as the labor force thins and employers hire construction and tourism-related workers for the summer. As the labor force grows steeply again in the late fall in anticipation of hiring for the ski season, there is a short-term rise in unemployment until employers actually take up the slack and hire these workers in November and December.





Source: CDLE, Local Area Unemployment Statistics, July 2003



It is estimated that 111,806 people are employed out of a labor force of 116,246 in July of 2003. The region's unemployment rate of 3.8% is lower than both that of the state and the U.S. rate of  $6.3\%^2$ for July of 2003.

<sup>2</sup>U.S. Department of Labor. Not Seasonally Adjusted, July preliminary U.S. unemployment rate.



Regional Information | Northwest & Rural Resort Region

Employment and Wages (ES-202)

Area establishments in the Northwest & Rural Resort Region are grouped into six JVS sectors derived from the North American Industrial Classification System (NAICS). These classifications provide a framework for understanding the region's economic activity in both labor and financial terms.

*Figure 7* presents employer and employee data for the six JVS sectors used in the rural areas in Colorado (*Page 28*). Data are gathered under the Covered Employment and Wages Program which includes employers who pay unemployment insurance tax. Although 98%<sup>3</sup> of the nation's jobs are covered under the Unemployment Insurance program, positions typically excluded are agriculture, railroad, some state and local government, certain non-profits, domestic workers, unpaid family workers, or the self employed.

Third quarter 2002 data reveals that 30% of the region's employment is in Leisure & Hospitality. Businesses in this JVS sector account for 12% of all employers. The region's focus on tourism supports high employment in Leisure & Hospitality throughout the year. If annual average employment is represented as 100%, then employment stands at 94% of average in the 3rd quarter and 124% for the first quarter, reflecting the increase in activity around the ski season.

Trade, Transportation, Utilities, & Other Services follows a seasonal pattern with employment peaking in the 1st quarter, but otherwise remaining fairly constant through the rest of the year. Retail trade is the dominant component of this sector, and is influenced by the fluctuations in tourism that drive the Leisure & Hospitality JVS sector. Employment in Goods-Producing businesses peak in the 3rd quarter. Agriculture, Forestry, Fishing and Hunting; Mining; Manufacturing; and Construction are all components of this JVS sector. Construction accounts for a full 80% of Goods-Producing employment in the region. Employment and activity peak in the summer when the weather favors construction.

Information, Financial Activities & Professional & Business Services employment also peaks in the 3rd quarter of the year. This is the period when businesses involved in employment services and services to buildings and dwellings take on temporary staff.

Employment in Government and Education & Health Services is fairly constant throughout the year. Government entities are defined based on ownership which may be federal, state or local. These organizations perform functions in construction, mining, transportation, information, education and health services and other areas in addition to public administration. As of 3rd quarter 2002, 51% of the region's Government employment is in Public Administration while 32% is in Educational Services.

Finally, the Education & Health Services industry accounts for 5% of employment in the region, about 6,500 people. Since many organizations categorized as Educational Services, including public schools, fall under Government ownership, health care organizations dominate this JVS sector. Ambulatory Health Care Services account for more employers and employment than any other subcategory, and are dispersed throughout the region to meet the needs of population centers.

<sup>3</sup>U.S. Department of Labor, Bureau of Labor Statistics. http://www.bls.gov/cew/home.htm

7

# **Estimated Vacancies** JVS Sectors and Employer Size

The survey captures information from private firms with five or more employees and all Government institutions, defined as the sample frame. All survey data refer to this subset of regional employment.

During the survey period, an estimated 1,329 vacancies were open for immediate hire with an average wage of \$13.30 per hour in the Northwest & Rural Resort Region. The overall vacancy rate is 1.3%; this statistic represents the relative demand for labor in terms of current employment and open positions. NW&RR vacancy rates for the summer surveys have been about twice as large as those found in the winter surveys. Thus, summer sees more hiring activity, in the form of both employment growth and job turnover.

A demand for labor that is driven by schools and ski resorts heavily influences the summer survey. The winter survey highlights a period in the labor market when employment is still in the seasonal peak with weaker hiring activity reflecting on-going year-round demand for labor that is not as closely tied to seasonal tourism.

The Job Vacancy Survey is designed to reflect hiring activity by industry groups. In this survey, most job openings are in the Leisure & Hospitality JVS sector. This group of industries has more than twice the number of vacancies of any other sector. Sixty-four percent of Leisure & Hospitality vacancies are with Accommodation businesses. Even more concentrated are openings in Education & Health Services with 71% of those reported job vacancies found in Hospitals. Just under half, 48%, of the vacancies in Goods-Producing firms are with Specialty Trade Contractors. Executive, Legislative, and Other



General Government Support institutions offer the bulk of open positions in Government.

Job vacancies are more dispersed among business types in the remaining JVS sectors: Trade, Transportation, Utilities & Other Services and Information, Financial Activities & Professional & Business Services. Some of the top reporting industry subsectors are as follows:

#### Trade, Transportation, Utilities & Other Services

- Food and Beverage Stores
- Nonstore Retailers
- Personal and Laundry Services
- Sporting Goods, Hobby, Book, and Music Stores
   Miscellaneous Store Retailers

Information, Financial Activities & Professional & Business Services

- Real Estate
- Professional, Scientific, and Technical Services
- Administrative and Support Services

The Leisure & Hospitality JVS sector has the greatest number of vacancies, but offers the lowest wages. Government positions have the highest associated wages, followed by Goods-Producing businesses. While strong or weak demand for labor in an industry puts pressure on wages, specific occupations within an industry category along with their pay play a major role in determining the average wage offered in a JVS Sector. Wages offered to an executive secretary will be similar whether the position is with a government agency, healthcare system or retail chain. Occupations having the most influence on JVS Sector wages in this survey are as follows:

#### Leisure & Hospitality

Waiters and Waitresses followed by Cooks
 Education & Health Services
 Registered Nurses

#### Trade, Transportation, Utilities & Other Services

 Retail Salespersons followed by Construction Equipment Operators

#### Government

- Elementary and Middle School Teachers

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Goods-Producing
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- Construction Laborers

Information, Financial Activities & Professional & Business Services

– Building Cleaning Workers



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



In this survey, 43% of large employers, 28% of Government and 11% of small to mid-size employers had at least one job vacancy to report. Overall, 15 out of every 100 employers in the region have at least one open position.

Of all reported job vacancies, 65% are with the small to mid-size businesses. They represent 95% of sample frame employers and 68% of employment. The types of businesses offering open positions in this employer size category are:

- Leisure & Hospitality (35%)
- Education & Health Services (24%)
- Goods-Producing (17%)
- Trade, Transportation, Utilities, & Other Services (15%)
- Information, Financial Activities, & Professional & Business Services (9%)

Large employers represent 18% of current employment, but are offering about 21% of the job openings. A majority (55%) of the vacancies for this employer size group are with Leisure & Hospitality businesses. There are also Education & Health Services and Goods-Producing businesses with job openings. Almost 4% of sample frame employers in the Northwest & Rural Resort Region are Government owned entities. Fourteen percent of current employment and 14% of reported job vacancies are found in such entities. Local, state, and federal agencies reported vacancies during the survey period; about 87% of the estimated 192 Government vacancies are with local governments.



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

Government job opportunities are offering the highest average wage and represent the widest wage range. As noted, the bulk of these positions are for Elementary and Middle School Teachers. Job vacancies with Leisure & Hospitality businesses make up the lower end of the wage ranges for both small to mid-size and large private firms. The higher end reflects wages reported by Education & Health Services operations. Few of the large Education & Health Services firms reported wages offered for their vacancies, thus the wage range and average wage for this employer size group appear to be low.

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



### **Vacancie**s

### Employment Status, Education, and Experience Requirements

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; however, it can be used to understand characteristics of those job vacancies and occupations reported. Small to mid-size employers represent about 95% of area firms within the sample frame, but constitute 82% of firms surveyed. Large employers account for only about 1% of area firms and 5% of firms surveyed. Government makes up almost 4% of the region's employer mix and represents 13% of the entities surveyed.



The majority of open positions are full-time/permanent. However, the proportion of part-time vacancies is higher in this survey than any other for the region to date. Fifty-three percent of all part-time jobs are offered by Leisure & Hospitality businesses, while Government institutions have posted 39% of these positions.

The average wage ranges are narrow for all employment status categories, even though there are diverse occupations within these categories. More frequently reported occupations within the full-time permanent category are Office & Administrative Support, Construction & Extraction, and Food Preparation & Serving Related occupations. Average wages reported for these vacancies range from \$7 to \$18. There are 16 other major occupations represented by this status category offering a broad spectrum of wages.

There are few full-time/temporary positions in this survey. The average wage for this group is between \$10 and \$11.

Part-time/permanent openings are predominantly in Food Preparation & Serving Related occupations. Many Personal Care & Service and Protective Service occupations support a higher average wage for this group.

The low average range for part-time/temporary positions reflects the lower wages offered for Office & Administrative and Food Preparation & Serving Related job openings.



Full-time/

Permanent

Full-time/

Temporary

Part-time/

Permanent

Part-time/

Part-time/

S

\$7

\$9

\$11

\$13

\$15

Survey Findings Vacancies: Employment Status Education, and Experience Requirements

Assessing labor demand in terms of education and experience requirements provides valuable labor market information. About 87% of reported job vacancies have information on the education and experience requirements of surveyed employers.

Fifty-six percent of the vacancies reported in this survey require a high school diploma or less. These education requirements are primarily reflective of the employment demands of the Leisure & Hospitality sector.

Following are the occupations most in demand in this survey grouped by education required:

*Advanced Degree* Job vacancies fall into six different major occupation groups, but Healthcare Practitioner & Technical occupations are most frequently sited.

**Bachelor's Degree** Most vacancies requiring a bachelor's degree are in Management occupations followed closely by Healthcare Practitioner & Technical and Education, Training, & Library roles.

*Two-Year Degree* The leading occupational group for vacancies requiring a two-year degree is Business & Financial Operations.

*Vocational Training/Certification* Forty-two percent of the vacancies fall into the Healthcare Practitioner & Technical category, while the second most represented occupation group is Protective Service occupations, accounting for 10% of the vacancies in this educational category.

*High School/GED* There are almost three times as many vacancies in Office & Administrative Support roles as the next most representative occupation group, Food Preparation & Serving Related.

*No Diploma* There are employment opportunities in 17 of the 22 major occupational groups for candidates with no diploma. Most abundant are Food Preparation & Serving Related jobs with Construction & Extraction positions a distant second, and Office & Administrative Support roles third.

Wages offered tend to be correlated with educational attainment—higher levels of education command higher wages. Although the highest wage offered for vacancies in

#### <sup>4</sup>U.S. Census Bureau, Census 2000





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



this survey does require an advanced degree, other open positions in the \$15-\$18 per hour range brought the category average down.

On average, roles requiring bachelor's degrees are paying the highest wages. Installation, Maintenance, & Repair occupations are at the high end of the spectrum for job vacancies requiring two-year degrees, while Education, Training, & Library Occupations are at the low end. The JVS also collects experience requirements for job vacancies. The experience levels demanded by employer's can be used to guide employment-training programs and to help job candidates plan for career advancement.

*Figure* 16 shows the percentage distribution of vacancies by experience requirement. To date, job vacancy surveys have found that a majority of job vacancies require either related or direct experience in the occupation for hire. Sixty-nine percent of reported vacancies require at the least, experience in a related field.



The associated average wage ranges follow a logical pattern of higher wages offered for candidates with more applicable job experience. Job vacancies for which prior experience is required in the occupation pay the highest wages. The minimum and maximum wages for each experience category represent a variety of occupations along with the requisite skills and training for each. For example, the "experience in this occupation" category may include a vacancy in a hospital seeking a registered nurse with prior experience and a job opening at a cafe looking for an experienced barista. Knowing the occupations reported in the JVS enhances the relevance of these experience categories:

*Experience in this Occupation* The most frequently reported occupations are in the Healthcare Practitioner & Technical category. Architecture & Engineering jobs pay on the high end of the wage range, while Food Preparation and Serving Related positions are on the low end.

*Experience in a Related Field* Office & Administrative Support are the most abundant job vacancies for job candidates with related experience. Production occupations represent the lower paying vacancies in this category and Architecture & Engineering the highest.

*General Work Experience* Office & Administrative Support are once again among the most frequently reported occupations. This means that though more vacancies are open to candidates with experience related to Office & Administrative Support, there are still other job openings for people with general non-related experience. Candidates with general work experience may find jobs in Food Preparation & Serving Related roles that pay in

Figure 17: Reported Average Wage Ranges by Experience



the \$7 range, and Transportation & Material Moving jobs offering around \$17 per hour.

*No Experience Required* Candidates new to the labor force have many opportunities to obtain work experience in Food Preparation & Serving Related jobs. Wages paid for these jobs are low to begin, and do not increase significantly as evidenced by the low-end of the scale for vacancies where candidates are required to have experience in that occupation. However, people in this field expect a substantial portion of their income in the form of customer gratuities that are received in addition to wages paid by employers. There are also job vacancies for Healthcare Practitioner & Technical occupations that do not require experience, but offer relatively high wages; these employment opportunities do require higher levels of education.

# Vacancies Difficulty to Fill and Time Open for Hire

mployers' ability to find and hire qualified candidates is an important indicator of the supply side of the labor force. Employers continue to find it easier to fill their vacant positions. There has been a major shift from the "somewhat difficult" to the "not difficult" category. The surveys conducted in winter show a higher proportion of vacancies considered not difficult to fill.

The length of time that a vacancy is open is a good indicator of the degree of difficulty an employer is having in filling a position. Factors 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.

The majority of job vacancies have been open for less than 30 days. However, last summer's survey had a significant number of vacancies for ski instructors which are often posted and recruited well before the start-date; these account for the large proportion of vacancies open for 60 days or more in the Summer 2002 JVS. In the Summer 2003 survey, Healthcare Practitioner & Technical jobs as well as Transportation & Material Moving occupations are most frequent among vacancies that have been open for 60 or more days. Often positions that are open longer have a limited pool of qualified candidates. Food Preparation & Serving Related occupations account for 40% of the job vacancies for which employers are always hiring.



Figure 19: Vacancies by Time Open for Hire



Survey Findings | Vacancies: Difficulty to Fill and Time Open for Hire

13

#### by Time Open for Hire Always Hiring Less Than 30 Davs 30 to 59 Days 60 or More Days \$5 \$7 \$9 \$11 \$13 \$15 \$17 \$21 \$19

Figure 20: Reported Average Wage Ranges

In this survey, the group of vacancies open from 30 to 59 days has the highest average wage range. Construction & Extraction, Management, and Protective Service occupations are among the higher paying vacancies in this category. On average, lower wages are offered for the Healthcare Practitioner & Technical vacancies that have been open 60 days or longer as compared to those open from 30 to 59 days - inadequate pay may be the reason these vacancies are unfilled.

# Vacancies Additional Compensation

#### **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 child-care. An important benefit offered to employees is a group medical insurance plan-the employer may pay all or part of the monthly insurance premium for employees.

Thirty-one percent of all available job openings do not include a medical benefit. Vacancies in the Leisure & Hospitality JVS sector are least likely to offer a medical benefit; 54% of these vacancies do not. For the Leisure & Hospitality vacancies that do offer a medical benefit, the employer will pay partial or total cost of the premium 93% of the time.

Given the job vacancies reported in this survey, the most likely institutions for which one could work and receive full payment for his or her medical premium would be found in the Government and Education & Health Services JVS sectors.

#### Sign-On Bonus

Two out of 623 reported job vacancies offer a sign-on bonus. In a labor market where unemployment rates have been rising and job vacancies declining, few employers

Figure 21: Employers' Contribution to Medical Insurance Occupations

tus of a job. The survey found that employers' offer a medical benefit with 70% of full-time positions. Only 37% of part-time vacancies offer a medical benefit.

Benefits are often associated with the employment sta-

are offering sign-on bonuses. When the area labor market tightens, it will be interesting to see if sign-on bonuses do become a popular recruitment tool.



# **Occupations**

In order to help make comparisons between 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 utilizes 820 detailed SOC occupational titles combined into 22 major groups.

At the major occupation level shown in *Figure* 22, job vacancies associated with tourism top the list. Just as

Leisure & Hospitality businesses represented the greatest number of estimated vacancies, Food Preparation & Serving Related occupations account for the greatest number of reported vacancies.

The wages associated with these occupations reflect the degree of skill and experience required to do the job, as well as supply and demand in the labor market.



50																							1000
15%																							
10%																							100/
5%			-	-																		vacancies reported.	, jo
%0		1								lce						dia					-	No	100
\$40	Food Preparation & Serving Related	Healthcare Practitioners & Technical	Office & Administrative Support	Education, Training, & Library	Construction & Extraction	Personal Care & Service	Protective Service	Management	Sales & Related	Building & Grounds Cleaning & Maintenan	Transportation & Material Moving	Installation, Maintenance, & Repair	Healthcare Support	Business & Financial Operations	Community & Social Services	Arts, Design, Entertainment, Sports, & Me	Architecture & Engineering	Production	Farming, Fishing, & Forestry	Life, Physical, & Social Science	Legal	Computer & Mathematical	•
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nol Group 1 Maior Oc ---ά ( 11/2 1040 00 200 Figure 22: Vacancies

Occupational Details | Vacancies and Reported Average Wage Occupational Groups

17

#### **Occupational Estimates**

Table 1 contains a list of all of the detailed SOC job titles assigned to vacancies reported in this survey. As a census of large employers and Government agencies is conducted, the list contains titles for nearly all of the vacancies available at the time of the survey for those employers. Almost 20% of small to mid-size employers were contacted for the random sample, and likewise the occupations associated with those vacancies are listed. Though the sample of small to mid-size employers is representative and significant, 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 found are displayed 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 reported, vacancies are estimated for occupations reported by small to mid-size, private firms. The additional estimated occupational vacancies are calculated per the current mix of occupations found in the region, but restricted to the occupations reported in the survey.

#### Vacancies Found

The number of vacancies by occupation found in the survey.

#### Average JVS Wage

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

#### **Occupational Employment Statistics (OES) Wage Data**

Occupational Employment Statistics (OES) wage data are provided for each reported 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 Northwest & Rural Resort Region when available and statewide otherwise. Data were collected over three years, from 1999 through 2001 and are aged to September 2002. 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 was being paid for filled positions. Together, these data provide employers and job seekers with a good indication of the compensation offered in the current job market. Occupational Details | Table 1: Occupations with Five or More Estimated Vacancies

Table 1: Occupations with Five or More Estimated Vacancies --

					Occu	pationa	ll Emplo	yment	Statistic	cs Wage	e Data (2	2002)
					Ave	rage Wa	ges		Percent	ile Distr	ibution	
SOC Code	SOC Occupational Title	Vacancies Estimated	Vacancies Found	Average JVS Wage	Entry- Level	Overall	Experi- enced	10th	25th	50th	75th	90th
35-3031	Waiters and Waitresses	84	36	\$5.30	\$6.12	\$8.52	\$9.73	\$5.72	\$6.18	\$6.96	\$9.69	\$14.34
41-2031	Retail Salespersons	78	14	\$11.00	\$7.95	\$11.28	\$12.94	\$7.39	\$8.88	\$10.38	\$12.47	\$16.35
37-2012	Maids and Housekeeping Cleaners	47	14	\$9.10	\$8.73	\$10.50	\$11.37	\$7.98	\$9.29	\$10.31	\$11.41	\$13.54
29-1111	Registered Nurses	46	38	\$22.90	\$17.02	\$22.86	\$25.78	\$15.55	\$18.46	\$21.87	\$26.23	\$32.44
43-4171	Receptionists and Information Clerks	36	7	\$8.10	\$8.85	\$11.76	\$13.21	\$8.05	\$9.87	\$11.82	\$13.66	\$15.69
35-2014	Cooks, Restaurant	34	20	\$9.80	\$9.21	\$11.08	\$12.01	\$8.84	\$9.59	\$10.66	\$12.52	\$14.66
47-2061	Construction Laborers	32	10	\$11.80	\$9.92	\$13.02	\$14.58	\$9.42	\$10.76	\$12.57	\$14.92	\$17.24
43-4081	Hotel, Motel, and Resort Desk Clerks	28	14	\$10.20	\$9.27	\$10.68	\$11.39	\$8.98	\$9.67	\$10.62	\$11.80	\$13.45
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	25	11	\$8.30	\$6.95	\$8.66	\$9.51	\$6.44	\$7.36	\$8.43	\$9.86	\$10.99
43-6013	Medical Secretaries	24	10	\$10.20	\$10.94	\$13.59	\$14.92	\$10.04	\$11.85	\$14.06	\$15.73	\$16.78
25-2011	Preschool Teachers, Except Special Education	24	4	\$10.00	\$8.66	\$11.36	\$12.70	\$8.08	\$9.15	\$10.38	\$12.62	\$16.73
49-9042	Maintenance and Repair Workers, General	24	12	\$14.80	\$11.27	\$15.71	\$17.94	\$10.51	\$12.27	\$14.73	\$18.67	\$22.62
47-2073	Operating Engineers and Other Construction Equipment Operators	23	7	\$20.00	\$14.86	\$19.18	\$21.34	\$14.38	\$16.00	\$18.89	\$22.55	\$26.08
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	22	2	+	\$8.60	\$11.72	\$13.28	\$7.76	\$9.47	\$11.00	\$13.76	\$17.11
43-6014	Secretaries, Except Legal, Medical, and Executive	22	12	\$13.20	\$9.26	\$12.72	\$14.46	\$8.68	\$10.40	\$12.63	\$15.34	\$17.25
53-1021	First-Line Supervisors/Mgrs. of Helpers, Laborers, and Material Movers, Hand	21	-	+	\$12.23	\$21.71	\$26.45	\$11.31	\$14.78	\$17.97	\$28.34	\$34.91
47-2044	Tile and Marble Setters	17	4	\$19.00	\$15.69	\$19.54	\$21.46	\$14.82	\$15.97	\$17.91	\$21.05	\$24.88
47-2152	Plumbers, Pipefitters, and Steamfitters	17	4	\$11.00	\$14.50	\$21.37	\$24.80	\$13.49	\$16.21	\$20.62	\$26.64	\$32.11
49-3023	Automotive Service Technicians and Mechanics	16	4	\$19.80	\$10.92	\$18.27	\$21.94	\$9.19	\$13.08	\$18.26	\$22.02	\$27.83
13-2011	Accountants and Auditors	15	9	\$18.30	\$16.21	\$26.24	\$31.25	\$15.04	\$17.81	\$21.99	\$31.15	\$44.87
25-3099	Teachers and Instructors, All Other	14	4	+	\$7.89	\$14.84	\$18.31	\$7.53	\$8.32	\$14.19	\$19.88	\$24.93
25-2021	Elementary School Teachers, Except Special Education	14	14	\$16.40	\$29,138	\$39,216	\$44,256	\$26,984	\$31,338	\$37,614	\$45,194	\$54,604
41-2011	Cashiers	13	ო	\$9.50	\$7.99	\$10.67	\$12.01	\$7.50	\$8.78	\$10.23	\$12.37	\$15.35
47-2031	Carpenters	12	ო	\$15.00	\$15.31	\$21.09	\$23.98	\$14.17	\$17.36	\$20.36	\$23.58	\$28.21
29-2034	Radiologic Technologists and Technicians	12	6	\$13.00	\$15.90	\$19.72	\$21.61	\$15.13	\$16.88	\$19.37	\$22.14	\$25.86
31-9092	Medical Assistants	12	9	+	\$9.24	\$12.42	\$14.01	\$8.73	\$9.64	\$11.36	\$15.15	\$17.22

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

					Occu	pationa	il Emplo	yment	Statistic	cs Wage	e Data (;	2002)
					Ave	rage Wa	ges		Percent	ile Distr	'ibution	
SOC Code	SOC Occupational Title	Vacancies Estimated	Vacancies Found	Average JVS Wage	Entry- Level	Overall	Experi- enced	10th	25th	50th	75th	90th
33-3051	Police and Sheriff's Patrol Officers	12	12	\$19.20	\$14.79	\$18.51	\$20.37	\$13.90	\$15.52	\$17.90	\$21.31	\$24.56
29-2041	Emergency Medical Technicians and Paramedics	12	12	\$18.20	\$10.76	\$15.28	\$17.55	\$10.15	\$12.50	\$14.85	\$17.11	\$21.82
39-9031	Fitness Trainers and Aerobics Instructors	12	12	\$15.50	\$9.61	\$18.92	\$23.57	\$6.89	\$11.87	\$18.30	\$26.22	\$29.16
25-9041	Teacher Assistants	12	12	\$10.80	\$15,375	\$19,492	\$21,550	\$14,137	\$16,579	\$19,093	\$22,474	\$25,862
43-3071	Tellers	12	2	+	\$11.25	\$12.37	\$12.94	\$10.14	\$11.70	\$12.62	\$13.53	\$14.15
39-9011	Child Care Workers	11	e	\$9.50	\$8.01	\$9.66	\$10.48	\$7.66	\$8.26	\$9.20	\$10.90	\$12.91
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	11	4	\$10.60	\$7.47	\$10.77	\$12.42	\$6.59	\$8.55	\$10.62	\$12.89	\$15.26
39-5012	Hairdressers, Hairstylists, and Cosmetologists	10	2	\$8.30	\$7.37	\$10.86	\$12.60	\$6.47	\$8.75	\$10.98	\$13.46	\$15.39
* 35-2019	Cooks, All Other	10	9	\$7.80	+	+	+	+	+	+	+	+
11-9111	Medical and Health Services Managers	10	9	+	\$20.80	\$29.56	\$33.93	\$19.44	\$22.49	\$26.05	\$34.06	\$45.04
11-9021	Construction Managers	10	2	\$18.00	\$23.09	\$33.86	\$39.26	\$20.65	\$26.11	\$32.54	\$40.15	\$50.89
* 11-9039	Education Administrators, All Other	10	2	\$9.90	+	+	+	+	+	+	+	+
39-6011	Baggage Porters and Bellhops	6	5	\$5.90	\$6.94	\$9.77	\$11.19	\$6.42	\$7.46	\$9.16	\$11.12	\$14.77
35-2021	Food Preparation Workers	6	з	+	\$7.53	\$9.80	\$10.93	\$7.21	\$8.06	\$9.38	\$10.93	\$13.68
35-9021	Dishwashers	6	5	\$8.50	\$6.20	\$7.87	\$8.71	\$5.93	\$6.69	\$7.80	\$8.86	\$10.32
43-6011	Executive Secretaries and Administrative Assistants	6	4	\$13.30	\$13.16	\$17.72	\$20.00	\$12.37	\$14.16	\$17.07	\$20.65	\$24.41
43-3031	Bookkeeping, Accounting, and Auditing Clerks	6	4	\$12.50	\$9.96	\$15.07	\$17.63	\$9.04	\$11.72	\$14.75	\$18.09	\$21.52
37-1011	First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	6	7	\$11.90	\$10.85	\$15.30	\$17.53	\$9.95	\$11.79	\$14.64	\$17.88	\$22.06
47-2181	Roofers	8	2	+	\$11.98	\$15.78	\$17.70	\$11.41	\$12.89	\$15.39	\$18.18	\$21.48
47-1011	First-Line Supervisors/Managers of Construction Trades and Extraction Workers	8	5	+	\$19.52	\$26.45	\$29.92	\$18.10	\$21.75	\$25.79	\$30.35	\$36.49
53-7051	Industrial Truck and Tractor Operators	8	8	\$16.90	\$9.01	\$12.94	\$14.91	\$8.08	\$10.45	\$13.05	\$15.72	\$17.67
33-9092	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	8	ø	\$11.10	+	+	+	+	+	+	+	+
33-9032	Security Guards	8	8	\$10.50	\$8.04	\$10.58	\$11.85	\$7.16	\$9.01	\$10.60	\$12.30	\$13.75
41-2021	Counter and Rental Clerks	8	з	\$9.50	\$7.52	\$10.54	\$12.05	\$7.19	\$8.26	\$10.11	\$12.29	\$14.24
11-1021	General and Operations Managers	8	4	\$29.40	\$18.58	\$35.56	\$44.06	\$16.27	\$21.62	\$32.53	\$46.85	\$66.49
29-2061	Licensed Practical and Licensed Vocational Nurses	7	4	\$10.50	\$11.78	\$14.40	\$15.71	\$11.03	\$12.30	\$14.00	\$16.29	\$18.61
35-3011	Bartenders	7	ო	\$5.20	\$6.11	\$8.35	\$9.46	\$5.75	\$6.25	\$7.15	\$9.42	\$13.27
11-3011	Administrative Services Managers	7	ი	\$20.00	\$16.74	\$28.55	\$34.46	\$14.52	\$19.28	\$24.81	\$33.90	\$45.89

19

Occupational Details | Table 1: Occupations with Five or More Estimated Vacancies Occupational Details | Table 1: Occupations with Five or More Estimated Vacancies

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

					Occu	pationa	il Emplo	yment	Statisti	cs Wag	e Data (	2002)
					Ave	rage Wa	Iges		Percent	tile Distı	ribution	
SOC Code	SOC Occupational Title	Vacancies Estimated	Vacancies Found	Average JVS Wage	Entry- Level	Overall	Experi- enced	10th	25th	50th	75th	90th
11-9141	Property, Real Estate, and Community Assn. Mgrs.	7	e	\$14.90	\$11.94	\$22.33	\$27.54	\$10.49	\$13.86	\$21.38	\$26.71	\$32.12
47-2111	Electricians	9	e	÷	\$13.97	\$20.18	\$23.28	\$12.83	\$15.42	\$20.54	\$24.64	\$27.34
25-2022	Middle School Teachers, Except Special and Vocational Education	9	9	\$16.40	\$29,735	\$38,822	\$43,365	\$27,852	\$31,394	\$37,129	\$45,581	\$54,151
35-1011	Chefs and Head Cooks	9	9	\$11.00	\$11.36	\$20.84	\$25.58	\$10.63	\$13.31	\$16.94	\$21.97	\$28.74
41-9022	Real Estate Sales Agents	9	-	\$14.40	\$12.20	\$17.62	\$20.33	\$11.63	\$12.66	\$17.14	\$20.95	\$23.01
* 41-9031	Sales Engineers	9	-	\$13.00	\$20.87	\$33.14	\$39.28	\$18.55	\$24.14	\$31.30	\$39.66	\$53.47
51-6052	Tailors, Dressmakers, and Custom Sewers	9	-	÷	\$7.49	\$12.39	\$14.83	\$6.90	\$8.44	\$11.92	\$14.16	\$20.72
51-3011	Bakers	9	-	\$8.00	\$9.33	\$12.55	\$14.17	\$8.91	\$10.08	\$12.38	\$15.00	\$17.06
* 51-3023	Slaughterers and Meat Packers	9	-	\$7.20	+	+	÷	+	+	+	+	+
51-6011	Laundry and Dry-Cleaning Workers	9	-	\$6.00	\$7.33	\$9.18	\$10.10	\$6.81	\$7.69	\$8.72	\$10.42	\$12.28
43-3021	Billing and Posting Clerks and Machine Operators	9	-	÷	\$9.83	\$13.76	\$15.71	\$8.91	\$11.04	\$13.41	\$16.32	\$19.16
43-5071	Shipping, Receiving, and Traffic Clerks	9	-	\$10.30	\$9.71	\$13.53	\$15.44	\$9.17	\$10.70	\$13.25	\$16.34	\$18.29
11-9199	Managers, All Other	9	2	\$31.60	\$16.46	\$26.60	\$31.68	\$15.14	\$18.15	\$24.65	\$32.59	\$43.50
13-1051	Cost Estimators	5	-	\$27.60	\$16.94	\$23.45	\$26.71	\$15.57	\$18.32	\$23.35	\$27.02	\$32.91
29-1123	Physical Therapists	5	с	÷	\$18.54	\$26.24	\$30.09	\$18.01	\$19.82	\$23.39	\$27.73	\$45.82
39-9021	Personal and Home Care Aides	5	-	\$8.90	\$6.28	\$8.01	\$8.87	\$6.03	\$6.67	\$7.62	\$8.73	\$11.76
29-1126	Respiratory Therapists	5	4	÷	\$16.06	\$18.69	\$20.00	\$15.17	\$17.00	\$18.77	\$20.72	\$22.03
* 21-1019	Counselors, All Other	5	4	+	+	+	÷	+	+	+	+	+
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	5	-	\$15.30	\$15.74	\$20.75	\$23.26	\$14.95	\$17.52	\$20.93	\$24.83	\$27.48
25-2031	Secondary School Teachers, Except Special and Vocational Education	5	5	÷	\$30,140	\$40,622	\$45,862	\$28,329	\$32,004	\$38,023	\$46,861	\$57,616
39-1021	First-Line Supervisors/Mgrs. of Personal Service Workers	5	5	\$15.10	\$11.11	\$16.48	\$19.17	\$11.49	\$12.92	\$15.32	\$19.62	\$25.89
* 19-3031	Clinical, Counseling, and School Psychologists	5	2	\$16.30	\$15.47	\$23.36	\$27.31	\$14.51	\$17.21	\$23.27	\$28.92	\$33.76
11-9031	Education Administrators, Preschool and Child Care Center/Program	5	-	\$14.40	\$10.14	\$16.19	\$19.23	\$8.26	\$12.47	\$15.61	\$17.90	\$25.45

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

Table 2: Occupations with Fewer Than Five Estimated Vacancies -

		•	Occupati	onal Emp	oloyment	Statistic	s Wage D	)ata (200;	5)
		Av	erage Wa	ges		Percei	ntile Distr	ribution	
SOC Code	SOC Occupational Title	Entry- Level	Overall	Experi- enced	10th	25th	50th	75th	90th
39-3091	Amusement and Recreation Attendants	\$7.17	\$8.93	\$9.82	\$6.47	\$7.61	\$8.43	\$9.29	\$12.27
13-2021	Appraisers and Assessors of Real Estate	\$12.53	\$17.40	\$19.84	\$11.93	\$13.59	\$16.82	\$20.63	\$23.84
29-9091	Athletic Trainers	\$26,349	\$38,154	\$44,056	\$24,850	\$26,799	\$30,854	\$49,861	\$59,249
* 29-1121	Audiologists	\$17.62	\$21.39	\$23.29	\$16.97	\$18.94	\$21.19	\$24.29	\$27.13
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	\$14.30	\$18.62	\$20.79	\$13.46	\$15.87	\$18.50	\$21.58	\$25.30
53-3022	Bus Drivers, School	\$9.65	\$12.51	\$13.93	\$9.45	\$10.41	\$11.92	\$14.16	\$17.51
53-3021	Bus Drivers, Transit and Intercity	\$10.78	\$14.07	\$15.71	\$9.73	\$12.10	\$14.09	\$16.39	\$17.84
47-2051	Cement Masons and Concrete Finishers	\$9.83	\$13.91	\$15.96	\$9.63	\$10.52	\$11.99	\$17.55	\$21.41
* 25-1052	Chemistry Teachers, Postsecondary	\$38,338	\$58,785	\$69,008	\$35,619	\$43,356	\$54,499	\$70,991	\$90,671
11-1011	Chief Executives	\$27.28	\$48.16	\$58.60	\$21.38	\$34.34	\$50.89	\$65.28	+
17-2051	Civil Engineers	\$18.24	\$26.21	\$30.21	\$16.69	\$21.17	\$25.51	\$29.64	\$35.88
* 21-2011	Clergy	\$7.89	\$17.74	\$22.66	\$6.32	\$9.85	\$15.61	\$21.26	\$30.51
27-2022	Coaches and Scouts	\$19,010	\$29,820	\$35,223	\$17,429	\$21,280	\$26,188	\$33,288	\$48,719
43-9011	Computer Operators	\$12.38	\$17.30	\$19.76	\$11.72	\$13.63	\$18.07	\$20.45	\$21.89
39-6012	Concierges	\$9.53	\$12.42	\$13.86	\$9.06	\$10.26	\$11.97	\$13.98	\$17.06
47-4011	Construction and Building Inspectors	\$16.65	\$18.48	\$19.40	\$15.46	\$16.25	\$17.59	\$18.86	\$24.26
35-2012	Cooks, Institution and Cafeteria	\$8.06	\$11.03	\$12.51	\$7.74	\$8.52	\$10.20	\$13.55	\$16.37
35-2015	Cooks, Short Order	\$6.56	\$8.09	\$8.86	\$6.13	\$7.01	\$7.91	\$9.02	\$10.73
33-3012	Correctional Officers and Jailers	\$11.66	\$16.86	\$19.46	\$9.79	\$14.09	\$16.79	\$20.49	\$24.15
43-4051	Customer Service Representatives	\$9.46	\$14.05	\$16.35	\$8.89	\$10.69	\$13.09	\$16.92	\$21.90
29-2032	Diagnostic Medical Sonographers	\$20.70	\$25.00	\$27.14	\$17.67	\$22.95	\$25.30	\$27.48	\$29.80
29-1031	Dietitians and Nutritionists	\$15.59	\$20.11	\$22.37	\$14.34	\$17.30	\$20.53	\$23.40	\$26.06
35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	\$6.12	\$7.86	\$8.72	\$5.85	\$6.45	\$7.71	\$9.23	\$10.43
53-3031	Driver/Sales Workers	\$7.92	\$11.71	\$13.60	\$6.52	\$9.28	\$10.71	\$14.20	\$17.91
* 25-9099	Education, Training, and Library Workers, All Other	+	+	+	+	+	+	+	+
17-3023	Electrical and Electronic Engineering Technicians	\$20.54	\$24.52	\$26.51	\$19.33	\$21.90	\$24.20	\$26.88	\$29.76
17_071	Electrical Engineers	\$24.67	\$31.87	\$35.48	\$22.71	\$27.12	\$31.96	\$37.64	\$42.92

<u>21</u>

Occupational Details Table 2: Occupations with Fewer

Occupational Details | Table 2: Occupations with Fewer

\$26.62 \$129,767 \$27.19 \$16.26 \$25.79 \$41.72 \$12.21 \$54.34 \$25.58 \$30.60 \$34.68 \$21.43 \$35.99 \$32.17 \$33.07 \$28.07 \$16.33 \$14.46 \$24.08 \$26.41 \$34.27 \$31.37 90th Occupational Employment Statistics Wage Data (2002) \$85,519 \$22.49 \$33.13 \$14.09 \$23.98 \$20.39 \$36.69 \$17.00 \$32.03 \$20.78 \$13.28 \$43.81 \$19.57 \$25.50 \$23.52 \$28.84 \$26.54 \$21.74 \$26.87 \$12.97 **Percentile Distribution** \$9.97 \$7.15 75th \$54,887 \$16.05 \$25.14 \$12.14 \$19.84 \$14.32 \$32.29 \$32.71 \$14.85 \$19.23 \$13.42 \$25.44 \$17.56 \$21.23 \$16.71 \$11.72 \$11.22 \$30.54 \$22.54 \$17.27 \$8.22 \$6.52 50th \$25,611 \$11.29 \$12.09 \$13.48 \$26.72 \$24.68 \$12.92 \$27.90 \$10.99 \$14.89 \$21.70 \$13.43 \$18.56 \$10.41 \$13.47 \$20.04 \$7.25 \$17.75 \$15.01 \$9.85 \$9.08 \$5.97 25th \$17,576 \$10.49 \$12.16 \$10.54 \$11.46 \$16.59 \$11.83 \$11.44 \$15.15 \$18.24 \$12.17 \$23.35 \$18.21 \$19.53 \$13.68 \$9.70 \$6.20 \$8.14 \$5.63 \$9.52 \$7.57 \$7.27 10th \$80,987 Experi-enced \$18.66 \$20.26 \$18.73 \$24.08 \$31.58 \$28.23 \$25.55 \$26.18 \$21.10 \$13.61 \$22.33 \$35.33 \$17.62 \$21.94 \$13.30 \$12.42 \$10.74 \$40.94 \$29.91 \$23.61 \$9.64 Average Wages \$61,340 \$17.76 \$16.25 \$34.36 \$16.23 \$20.04 \$14.78 \$25.96 \$20.18 \$18.65 \$12.40 \$18.52 Overall \$31.00 \$28.38 \$25.64 \$22.22 \$23.04 \$18.62 \$11.82 \$10.98 \$8.70 \$9.20 \$10.89 \$22,044 \$11.41 \$12.75 \$22.36 \$21.18 \$11.24 \$12.00 \$21.98 \$13.33 \$20.47 \$12.09 \$16.76 \$13.66 \$18.07 \$15.55 \$6.81 \$8.11 \$6.11 \$9.96 Entry-\$9.11 \$8.87 Level Gaming Surveillance Officers and Gaming Investigators First-Line Supervisors/Managers of Transportation and Employment, Recruitment, and Placement Specialists First-Line Supervisors/Managers of Farming, Fishing, First-Line Supervisors/Managers of Fire Fighting and First-Line Supervisors/Managers of Food Preparation First-Line Supervisors/Managers, Protective Service First-Line Supervisors/Managers of Production and First-Line Supervisors/Managers of Retail Sales First-Line Supervisors/Managers of Mechanics, Installers, and Repairers First-Line Supervisors/Managers of Office and Administrative Support Workers First-Line Supervisors/Managers of Police and Eligibility Interviewers, Government Programs Gaming Change Persons and Booth Cashiers Health Specialties Teachers, Postsecondary SOC Occupational Title Farmworkers, Farm and Ranch Animals Material-Moving Machine and Vehicle and Forestry Workers and Serving Workers Engineers, All Other **Prevention Workers** Financial Managers **Operating Workers** Norkers, All Other Health Educators Floral Designers Gaming Dealers Fire Fighters Detectives Workers 33-2011 39-3011 21-1091 \* 25-1071 41-2012 43-4061 17-2199 45-2093 \* 45-1011 33-1021 35-1012 49-1011 33-1012 51-1011 41-1011 53-1031 33-1099 27-1023 33-9031 13-1071 43-1011 11-3031 Code soc

Table 2: Occupations with Fewer Than Five Estimated Vacancies – Page 2

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

		•	Occupati	onal Emp	loyment	Statistic	s Wage D	)ata (200	(j
		Av	erage Wa	ges		Percer	ntile Distr	ribution	
SOC Code	SOC Occupational Title	Entry- Level	Overall	Experi- enced	10th	25th	50th	75th	90th
47-4051	Highway Maintenance Workers	\$11.76	\$15.15	\$16.85	\$11.27	\$12.70	\$14.97	\$17.48	\$20.28
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	\$7.14	\$9.33	\$10.42	\$6.69	\$7.58	\$8.87	\$10.78	\$13.09
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	\$12.31	\$15.87	\$17.64	\$11.80	\$13.32	\$15.81	\$18.61	\$20.97
11-3040	Human Resources Managers	\$19.33	\$29.80	\$35.04	\$18.43	\$20.91	\$28.40	\$37.73	\$45.23
49-9041	Industrial Machinery Mechanics	\$19.34	\$24.20	\$26.64	\$18.51	\$21.03	\$25.32	\$27.81	\$29.27
27-3091	Interpreters and Translators	\$10.00	\$14.88	\$17.32	\$8.34	\$11.41	\$13.22	\$16.86	\$25.13
37-3011	Landscaping and Groundskeeping Workers	\$9.07	\$12.02	\$13.49	\$8.37	\$10.16	\$12.08	\$13.69	\$15.74
23-1011	Lawyers	\$23.86	\$40.66	\$49.07	\$20.39	\$27.77	\$35.76	\$58.45	\$69.87
43-6012	Legal Secretaries	\$9.76	\$11.31	\$12.08	\$8.98	\$9.40	\$10.10	\$10.80	\$18.79
25-4031	Library Technicians	\$8.28	\$11.20	\$12.66	\$7.67	\$8.87	\$10.89	\$13.09	\$15.65
11-9081	Lodging Managers	\$16.77	\$22.94	\$26.01	\$15.47	\$18.00	\$20.81	\$25.42	\$34.44
49-9043	Maintenance Workers, Machinery	\$16.19	\$21.93	\$24.81	\$13.67	\$18.72	\$23.67	\$26.37	\$28.00
39-5092	Manicurists and Pedicurists	\$6.99	\$13.96	\$17.44	\$6.38	\$7.79	\$9.46	\$10.90	\$33.30
11-2021	Marketing Managers	\$16.69	\$28.82	\$34.89	\$15.93	\$17.70	\$24.57	\$34.01	\$56.13
* 21-1013	Marriage and Family Therapists	\$13.64	\$16.05	\$17.25	\$12.60	\$14.41	\$15.88	\$17.45	\$20.47
29-2012	Medical and Clinical Laboratory Technicians	\$9.51	\$18.58	\$23.12	\$8.21	\$11.04	\$18.03	\$21.50	\$33.84
29-2011	Medical and Clinical Laboratory Technologists	\$13.59	\$20.92	\$24.60	\$12.07	\$15.55	\$21.76	\$25.15	\$27.89
31-9093	Medical Equipment Preparers	\$9.61	\$12.61	\$14.11	\$9.15	\$10.27	\$11.86	\$13.62	\$19.13
13-1121	Meeting and Convention Planners	\$12.56	\$16.51	\$18.49	\$11.97	\$13.02	\$15.78	\$19.50	\$22.38
47-5042	Mine Cutting and Channeling Machine Operators	\$20.86	\$21.15	\$21.30	\$19.17	\$19.94	\$21.20	\$22.50	\$23.29
11-9121	Natural Sciences Managers	\$17.70	\$25.17	\$28.91	\$16.17	\$19.64	\$24.80	\$30.50	\$35.57
39-2021	Nonfarm Animal Caretakers	\$7.89	\$10.19	\$11.34	\$7.51	\$8.65	\$10.03	\$11.75	\$13.83
31-1012	Nursing Aides, Orderlies, and Attendants	\$9.88	\$12.07	\$13.16	\$9.43	\$10.32	\$11.61	\$14.07	\$16.07
29-1122	Occupational Therapists	\$17.57	\$22.46	\$24.90	\$16.60	\$19.19	\$22.71	\$26.07	\$28.72
53-6021	Parking Lot Attendants	\$7.14	\$8.98	\$9.91	\$6.72	\$7.48	\$8.53	\$10.38	\$12.24
43-3051	Payroll and Timekeeping Clerks	\$11.53	\$15.58	\$17.61	\$11.30	\$12.84	\$15.15	\$18.90	\$21.40
39-9099	Personal Care and Service Workers, All Other	\$7.61	\$9.79	\$10.88	\$7.18	\$7.92	\$8.82	\$10.79	\$14.29

Occupational Details Table 2: Occupations with Fewer

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<u>23</u>

Occupational Details | Table 2: Occupations with Fewer

\$55,471 \$58,936 \$53,545 \$17.19 \$13.50 \$21.59 \$19.07 \$15.38 \$23.70 \$39.82 \$28.58 \$57,291 \$29.43 \$19.30 \$20.00 \$16.56 \$22.67 \$29.32 \$25.15 \$43.94 \$38,831 90th + Occupational Employment Statistics Wage Data (2002) \$43,635 \$49,296 \$27,069 \$48,289 \$12.39 \$22.48 \$43,498 \$25.45 \$14.29 **Percentile Distribution** \$56.10 \$27.33 \$16.17 \$40.96 \$12.44 \$19.13 \$16.37 \$17.43 \$20.39 \$27.93 \$21.03 \$8.26 \$15.70 75th \$22,204 \$40,775 \$36,241 \$14.50 \$36.48 \$10.88 \$48.18 \$15.75 \$13.34 \$10.14 \$20.52 \$35,407 \$38,382 \$20.76 \$10.44 \$18.77 \$11.12 \$16.98 \$25.64 \$7.48 \$13.64 \$17.09 50th \$10.43 \$17.72 \$33,816 \$29,678 \$19,648 \$11.42 \$15.96 \$32,483 \$31,360 \$17.56 \$10.93 \$12.50 \$13.07 \$27.01 \$14.58 \$21.97 \$31.24 \$9.19 \$7.87 \$6.58 \$8.86 \$9.68 25th \$16,648 \$25,970 \$29,025 \$27,312 \$14.95 \$11.33 \$28,509 \$24.01 \$13.65 \$10.13 \$24.38 \$6.63 \$8.75 \$12.45 \$15.03 \$7.95 \$8.38 \$7.52 \$12.11 \$5.79 \$9.69 \$7.78 10th \$46,549 \$43,194 \$12.19 \$43,101 \$27,590 \$15.29 \$46,282 \$56.40 Experi-\$38.68 \$17.99 \$15.61 \$22.07 \$27.08 \$11.60 \$24.00 \$14.34 \$16.09 \$12.73 \$19.48 \$26.98 \$20.05 \$11.77 enced Average Wages \$14.18 \$45.98 \$10.49 \$21.35 \$17.44 \$38,103 \$24,492 \$41,119 \$10.72 \$13.34 \$19.62 \$23.03 \$38,496 \$12.58 \$14.17 \$11.28 Overall \$34.84 \$15.27 \$9.76 \$41,311 \$24.04 \$17.17 \$29,099 \$28,106 \$18,296 \$11.92 \$30,792 \$11.42 \$27.13 \$25.14 \$30,834 \$10.32 \$13.35 \$18.15 \$8.79 \$7.11 \$14.71 \$14.91 \$6.09 \$16.07 \$9.05 \$8.35 Entry-\$8.62 \$9.83 Level Special Education Teachers, Preschool, Kindergarten, Nater and Liquid Waste Treatment Plant and System Vocational Education Teachers, Secondary School Special Education Teachers, Secondary School Vocational Education Teachers, Postsecondary Umpires, Referees, and Other Sports Officials Special Education Teachers, Middle School Veterinary Technologists and Technicians SOC Occupational Title Police, Fire, and Ambulance Dispatchers Truck Drivers, Heavy and Tractor-Trailer Physicians and Surgeons, All Other Rotary Drill Operators, Oil and Gas Speech-Language Pathologists Plasterers and Stucco Masons Stock Clerks and Order Fillers Taxi Drivers and Chauffeurs Social Workers, All Other Physical Therapist Aides and Elementary School Surgical Technologists Skin Care Specialists **Recreation Workers** Sales Managers Pharmacists Operators 39-9032 \* 47-5012 29-1051 31-2022 21-1029 25-2042 25-2043 29-1127 53-3041 53-3032 27-2023 29-2056 25-2032 29-1069 11-2022 39-5094 29-2055 25-1194 47-2161 43-5031 25-2041 43-5081 51-8031 Code soc

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

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

#### Trade, Transportation, Utilities & Other Services

A s noted earlier, Trade, Transportation, Utilities & Other Services is the second largest JVS sector in the Northwest & Rural Resort Region in terms of employment. More than 22,000 people were employed in this industry in the fourth quarter of 2002.<sup>5</sup>

With the new NAICS classification system, data at the industry level only go back to 1st quarter 2001 and are available through fourth quarter 2002 at the writing of this report. For both of these years, there is a consistent first quarter peak in employment, coinciding with the high point for employment in the Leisure & Hospitality JVS sector and with the height of the ski season.

Trade, Transportation, Utilities & Other Services is comprised of five NAICS sectors:

- Utilities
- Wholesale Trade
- Retail Trade
- Transportation & Warehousing
- Other Services.

More than 63% of this JVS sector employment is with some 1,760 Retail Trade businesses. Almost 60% of the region's retail employment is classified into four subsectors:

- Food & Beverage Stores
- Clothing & Clothing Accessories Stores
- -Sporting Goods, Hobby, Book, & Music Stores
- Building Material & Garden Equipment & Supplies Dealers.

Other Services is the second largest sector in terms of employment within Trade, Transportation, Utilities & Other Services. There are approximately 3,600 people working in 870 establishments. About 37% of these work with Religious, Grantmaking, Civic, Professional, & Similar Organizations, another 27% in Repair & Maintenance businesses, 26% in Personal & Laundry Services, and the remaining 10% in Private Households.

Transportation & Warehousing and Wholesale Trade each employ about 1,850 people although the number of Wholesale Trade firms outweighs those in Transportation & Warehousing. There are 1.6 firms in Wholesale Trade for every one firm in Transportation & Warehousing. The more significant subsectors in terms of employment in Transportation & Warehousing are Truck Transportation, Transit & Group Passenger Transportation, Support Activities for Transportation, and Couriers & Messengers. Rail and Water Transportation businesses are not represented in the NW&RR region. Forty-eight percent of the region's Wholesale Trade sector employment is associated with Durable Goods, 45% with Nondurable Goods, and 7% with Wholesale Electronic Markets and Agents and Brokers.

Within Utilities, 91% of employment is associated with Electric Power Generation, Transmission & Distribution. The remaining employment is associated with Natural Gas Distribution and Water, Sewage & Other Systems.

25

Appendix How to Use

which 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?

#### **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

- ♦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.

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.

While Labor Market Information (LMI)

provides data on the local labor force sup-

ply, the Job Vacancy Survey complements

this by providing information about the

demand for labor and offers a more com-

plete picture of local labor markets.

#### **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

#### **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 bottleindustries. 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.

necks may occur should current vacancies persist. Economic developers can also generate a comprehensive picture of the region by determining where labor demand stands today, as identified by the survey, and where the local market is trending using Labor Market Information's employment projections. 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 nonresponse, and estimating errors. The majority of non-sampling errors are corrected in the Job Vacancy Survey's extensive review and validation process that takes place before estimates are published.

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

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

The occupational detail provided is supplemental data believed to be of interest to the reader. The survey design does not allow for application of this detail to the region as a whole, but it can be used to understand characteristics of those job vacancies reported. These vacancy characteristics are not estimated and therefore do contain significant bias. Approximately two-thirds of the non-estimated information comes from large employers and government agencies, but they represent approximately 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 inherit bias.

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

# Methodology

The Job Vacancy Survey (JVS) conducted by the Colorado Department of Labor and Employment involves the collection, processing, and dissemination of regional job vacancies and their characteristics. The survey design allows for estimation of a job vacancy rate and the total job vacancies within a region by

industry and size of firm. Additional data related to these vacancies is informative of the occupations for which they are reported, but is not indicative of overall vacancy characteristics in the regional *universe*.

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

#### Survey Design

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 region's employment is found with large and government employers that make up only 1.6% 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.

27

#### **Survey Sample**

The Northwest & Rural Resort survey was conducted from July 7 through July 18. For the purpose of this report, all large and government employers 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 81% 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 150 employees are considered large employers. Attempts are made to contact all government agencies and large firms in the sample frame. The remaining small to mid-size firms are split into JVS industry sectors.

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

Government makes up almost 14% of the employment in the sample frame, while private industry employers make up the remaining 86%. Large firms account for 21% of private industry employment in the sample frame. Firms employing from five to 149 individuals are considered small to midsize employers, and account for the remaining 79% of private industry employment.

The margin of sampling error for the overall vacancy estimate is plus or minus 2.4%, meaning that in 95 out of 100 surveys the number of vacancies in the region would be between 1297 and 1361. 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 71.7%. This measures the quality of the survey database, or the success experienced in contacting eligible employers. The cooperation rate is 99.6% 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 NW&RR, 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.

NW&RR JVS Sectors = inclu	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

#### **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

#### **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. 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,

#### **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. 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.

#### Wage Conversion

**S** tandard 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 Canada<sup>3</sup> were tasked with the development of a system that accounted for rapid changes in the U.S and world economies.

#### Industrial Classification vs. Occupational Classification

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

#### Benefits

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

**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

<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

29

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 informationbased economy.

- Formerly, under SIC, corporate headquarters were not distinguished from the industry category of the product or service they produced. Now corporate headquarters are recognized in the new Management sector.
- Manufacturing is restructured to account for high-tech industries.
- An increase in the amount of detail overall accompanies the shift to NAICS

including a further breakdown of SIC's Services sector into nine new sectors.

- Eating and drinking places move out of Retail Trade into a new category called Accommodation & Food Services.
- The difference between Retail and Wholesale is now based on how each store conducts business. For example, many computer stores are reclassified from Wholesale to Retail.

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

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

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

#### Average Maximum Wage

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

#### Average Minimum Wage

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

#### Computer Assisted Telephone Interviewing (CATI)

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

#### **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.

31

#### **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 ES-202 while private companies come from the ALMIS (America's Labor Market Information System) database.

#### Seasonally Adjusted

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

#### Service Producing Industries (NAICS)

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

#### 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.



Photo Courtesy Colorado State Parks



Golden Gate Canyon State Park Harvey Gap State Park Pearl Lake State Park Rifle Falls State Park Rifle Gap State Park Stagecoach State Park State Forest State Park Steamboat Lake State Park Sylvan Lake State Park Yampa River State Park

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



### WORKFORCE CENTERS IN THE NW&RR JVS REGION

#### Craig Workforce Center

480 Barclay Craig, CO 81625 Phone: 970-824-3246 Fax: 970-824-7108 craig@cwfc.net

#### Edwards Workforce Center

Edwards Access Road #23 Edwards, CO 81632 Phone: 970-926-4440 Fax: 970-926-7287 edwards@cwfc.net

#### Frisco Workforce Center

602 Galena Street Frisco, CO 80443 Phone: 970-668-5360 Fax: 970-668-3216 frisco@cwfc.net

#### Glenwood Springs

forkforce Center 51027 Highway 6 & 24, Ste 173 Glenwood Springs, CO 81601 Phone: 970-945-8638 Fax: 970-928-0885 glenwoodsprings@cwfc.net

#### Granby Workforce Center

469 East Topaz Avenue Granby, CO 80446 Phone: 970-887-1857 Fax: 970-887-1858 granby@cwfc.net

#### Leadville Workforce Center

#### Satellite Office

505 Harrison Avenue Leadville, CO 80461 Phone: 719-486-2428 Fax: 719-486-2971 leadville@cwfc.net



#### **Meeker Workforce Center**

Satellite Office 345 Market Street Meeker, CO 81641 Phone: 970-878-4211 Fax: 970-878-3355 meeker@cwfc.net

#### **Rangely Workforce Center**

Social Services Building 209 E. Main Street Rangely, CO 81648 Phone: 970-675-5072 Fax: 970-675-8250 rangely@cwfc.net

#### Rifle Workforce Center

Satellite Office 310 West Third Street Rifle, CO 81650 Phone: 970-625-5627 Fax: 970-625-1120 rifle@cwfc.net

#### Steamboat Springs

1250 South Lincoln Avenue Steamboat Springs, CO 80488 Phone: 970-879-3075 Fax: 970-879-3547 steamboatsprings@cwfc.net

#### Tri-County Workforce

Center / Gilpin County 2960 Dory Hill Road, Ste. 100 Blackhawk, CO 80403 Phone: 303-582-6003 Fax: 303-582-5798 nbelk@cc.trico1stop.org

#### Tri-County Workforce

1531 Colorado Blvd. Idaho Springs, CO 80452 Phone: 303-567-3135 Fax: 303-567-3132 nbelk@cc.trico1stop.org



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

Workforce Research & Analysis Labor Market Information Colorado Department of Labor and Employment COLORADO DEPARTMENT OF LABOR & EMPLOYMENT (303) 318-8890 Imi@state.co.us www.coworkforce.com/Imi.wra/home.htm