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## Northwest \& Rural Resort Region Job Vacancy Survey

## Contents

Introduction ..... 1
Executive Summary ..... 2
Regional Information .....  3
Survey Findings .....  8
Occupational Details ..... 17
Sector Briefs ..... 28
Appendix ..... 29
How to Use This Report ..... 29
Caveats ..... 30
Methodology ..... 30
NAICS ..... 32
Glossary ..... 34
NW\&RR Region Workforce Centers ..... 36

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> The Colorado Job Vacancy Survey

## Introduction

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

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

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

Figure 1: Colorado Job Vacancy Survey Regions

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

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

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

## Executive Summary

This Summer 2004 Northwest \& Rural Resort Job Vacancy Survey (JVS) was conducted from June 30th through July 7th, 2004. 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 1,234 employers, representing $35 \%$ of the region's total employment, responded to the survey. Of these, 172 are Government agencies, 57 are large employers ( 75 employees or more), and 1,005 are small to mid-size entities (5 to 74 employees). The survey has a response rate of $80.5 \%$ and a cooperation rate of $99.1 \%$. The margin of error for the overall vacancy estimate is plus or minus $2.6 \%$, or about 44 vacancies.

## Major Findings of Survey:

- There are 1,663 job vacancies, compared to 1,329 a year ago. ....................................Page 8
- Leisure \& Hospitality has 540 vacancies. ..........................................................................Page 8
- The average wage is $\$ 13.55$ per hour. ......................................................................Page 8
- Fifteen percent of employers have at least one vacancy. ..........................................Page 10
- Of the openings, $62 \%$ are permanent, full-time positions. .......................................Page 11
- Post-secondary education is required for $47 \%$ of the vacancies.. ...............................Page 12
- Related or specific experience is required for $75 \%$ of all openings. ............................Page 13

Employers are having less difficulty filling vacancies than a year ago. Most positions are open for less than 30 days.

Page 15

- Most vacancies are in Education, Training \& Library. Page 17


## The 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. Most of the region's labor force works in tourism related business in the Leisure \& Hospitality industry .

Twelve counties make up the NW\&RR Region. More than one quarter of the region's employment is concentrated in Eagle County. Summit and Routt
counties each account for more than $12 \%$ of the total region-wide employment. While Summit represents $12 \%$ of the population, Routt is home to only $10 \%$ indicating businesses like the Steamboat Springs ski resort may provide many jobs for people living in other counties. Pitkin, Gilpin, and Clear Creek, with their numerous tourist attractions, 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 host a larger percent of population than employment.

Figure 2: Employment by County for July 2004
Clear Creek


## Regional Information -continued

Figure 3: Historical Vacancies-Northwest \& Rural Resort Region


## Regional Information -coninued

Figure 4 illustrates the historical progression of the Northwest \& Rural Resort's labor force and employment levels. The positive trend illustrates growth in both the labor force and employment over time. The region's labor force has grown $1.4 \%$, while employment has experienced a compound annual growth rate of $1.1 \%$ per year from July of 2000 to July of 2004. The net growth in the labor force over the five-year period is about $7 \%$.

The Job Vacancy Survey is conducted semiannually in winter and summer in order to measure the demand for labor at peak employment periods. Outdoor recreation based tourism and construction, which are 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, labor force and employment levels experience a smaller summer peak in July and August, reflecting summer tourism and activity in the construction industry.

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

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


Source: CDLE, Local Area Unemployment Statistics Released August 2004

## Regional Information -continued

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. The labor force grows again in the late fall in anticipation of the ski season. A short-term rise in unemployment occurs until employers take up the slack and hire these workers in November and December.

Figure 5: Northwest \& Rural Resort Region Unemployment Rate Trend (Not Seasonally Adjusted)


Source: CDLE, Local Area Unemployment Statistics Released August 2004

## Regional Information <br> -continued

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 (page 31). Data is gathered under the Quarterly Census of Employment \& Wages Program, which includes all employers who pay unemployment insurance tax. Although $98 \%{ }^{2}$ of the nation's jobs are covered under the Unemployment Insurance program, typically excluded positions include agriculture, railroad, some state and local government, certain non-profits, domestic workers, unpaid family workers, and the self employed.

Third quarter 2003 data reveals that $30 \%$ of the region's employment is in Leisure \& Hospitality. This JVS sector constitutes a smaller proportion of the region's employment in the summer, while last winter it accounted for $36 \%$ of total employment. Concurrently, the Goods-Producing sector moved from $12 \%$ of employment in the winter to $15 \%$ in the

Figure 7: Northwest \& Rural Resort Region Employers and Employees,


Source: CDLE, Quarterly Census of Employment and Wages (QCEW), 3rd Quarter, 2003 summer. This is mostly due to a rise in summer employment by construction firms, which are part of the Goods-Producing sector. Businesses employ the same percentage of the workforce through the seasons, they merely hire and release workers to accommodate seasonal demand.

- Tourism provides many employment opportunities in Leisure \& Hospitality throughout the year.
- Retail trade is the dominant component of the Trade, Transportation, Utilities, \& Other Services sector and is influenced by the same fluctuations in tourism that drive the Leisure \& Hospitality JVS sector.
$\bullet$ Agriculture, Forestry, Fishing \& Hunting; Mining; Manufacturing; and Construction are all components of the Goods-Producing sector. Employment and activity peak in the summer when the weather permits construction.
- Information, Financial Activities \& Professional \& Business

Services include employment services and services to buildings and dwellings.

- Government is defined based on federal, state, or local ownership and perform functions in construction, mining, transportation, information, public administration, education \& health services, and other areas.
- Finally, the Education \& Health Services JVS sector accounts for a relatively small portion of employment in the region. 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.


The Summer Survey highlights a period in the labor market when employment is in a minor seasonal peak, but hiring activity reflects the demand for teachers to start work in early fall and ski resort workers who begin work in late fall.

The Job Vacancy Survey is designed to reflect demand for labor and hiring activity by industry groups. For the Northwest \& Rural Resort, the highest number of job vacancies has consistently been in the Leisure \& Hospitality JVS sector. Employers in this industry group offer 32\% of the estimated vacancies. With a vacancy rate of $1.5 \%$, there are 15 Leisure \& Hospitality job openings for every 1,000 positions. Sixty-eight percent of the reported Leisure \& Hospitality vacancies are with Accommodation businesses. All other reported vacancies in this sector are classified as Amusement, Gambling, \& Recreation Industries (22\%); Food Services \& Drinking Places (9\%); or Performing Arts, Spectator Sports, \& Related Industries (less than 1\%).

The Government sector has 285 estimated vacancies, with a $2.0 \%$ vacancy rate. This reflects a strong hiring rate by Government Educational Services organizations. Government vacancies occur in 17 different occupational groups. The average wage range graph reflects wages offered for Food Preparation \& Serving Related jobs through Management occupations.

Trade, Transportation, Utilities, \& Other Services has 245 estimated vacancies, with a vacancy rate that translates to 14 vacancies for every 1,000 positions. Vacancies are reported by firms representing the myriad of detailed industries within this JVS sector. General Merchandise Stores represent the largest proportion, totaling $32 \%$ of all vacancies in the sector.

Information, Financial Activities \& Professional \& Business Services offer 229 estimated vacancies; the majority of which are offered by Real Estate businesses.

The 193 vacancies associated with the Education \& Health Services JVS sector are most representative of the staffing needs of community hospitals. The low end of the wage scale reflects wages paid to Healthcare Support workers, while the high end reflects salaries for Healthcare Practitioner \& Technical jobs.

Specialty Trade Contractors offer $62 \%$ of the vacancies associated with the Goods-Producing sector. However, the wide range for wages represent
pay offered for a variety of occupations - from Food Preparation and Serving Related to Management.

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 a retail chain.

Figure 9: Reported Average Wage Ranges by JVS Sectors


In this survey, almost $60 \%$ of large employers, $23 \%$ of Government, and $10 \%$ of small to mid-size employers surveyed 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, $54 \%$ are with small to mid-size businesses. They represent $81 \%$ of the sample frame employers and $67 \%$ of employment. The types of businesses offering open positions in this employer size category are:

- Education \& Health Services (23\%)
- Leisure \& Hospitality (23\%)
- Information, Financial Activities, \& Professional \& Business Services (20\%)
- Goods-Producing (18\%)
- Trade, Transportation, Utilities, \& Other Services (16\%)

Large employers represent $19 \%$ of the current employment, but are offering about $29 \%$ of the job openings. A majority (59\%) of the large employer vacancies are with Leisure \& Hospitality businesses. Vacancies are also reported for each of the other non-Government JVS Sectors.

Fourteen percent of current employment and $17 \%$ of estimated job vacancies are in Government entities. Almost $98 \%$ of Government vacancies are with local governments, leaving about $2 \%$ with state institutions, and less than $1 \%$ with federal agencies. Government job opportunities offer the highest average wage and represent the widest wage range. Almost $50 \%$ of these positions are for Education, Training \& Library occupations.

Figure 10: Estimated Vacancies and Average Wages by Employer Size


Figure 11: Reported Average Wage Ranges by Employer Size


## Survey Findings

## The remainder of this report provides descriptive

 statistics of the vacancies reported in and unique to this survey. The survey design does not allow for application of this detail to the region as a whole. However, it can be used to understand characteristics of those job vacancies and occupations reported.Figure 12: Vacancies by Employment Status


The majority of open positions are full-time/permanent. Indeed, each of the 6 JVS sectors offer more full-time/permanent vacancies than part-time or temporary. The Leisure \& Hospitality sector offers more choices among work status than the other sectors. While $40 \%$ of the vacancies offered by the Leisure \& Hospitality JVS sector are full-time/permanent, $32 \%$ are fulltime/temporary, and $14 \%$ are part-time/permanent, the reminder were not specified.

The largest portion of Trade, Transportation, Utilities, \& Other Services vacancies are full-time/permanent (49\%), but $36 \%$ are part-time/permanent, and $15 \%$ are full-time/temporary.

Figure 13: Reported Average Wage Ranges
by Employment Status


The wide wage range for full-time/permanent job vacancies is reflective of the diversity of occupations represented by those vacancies.

Full-time/temporary positions are available in 10 different occupational groups. Sixty-three of these positions pay average wages in the $\$ 8-\$ 9$ range. These are Food Preparation \& Serving Related, Office \& Administrative, and Personal Care \& Service occupations.

The lowest wages offered are reported for part-time/temporary jobs. These opportunities exist in Food Preparation \& Serving Related, Building \& Grounds Cleaning \& Maintenance, and Office \& Administrative Support.

## Survey Findings

Assessing labor demand in terms of education and experience requirements provides valuable labor market information. About $72 \%$ of reported job vacancies have information on the education and experience requirements of surveyed employers.

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

Figure 15 illustrates that wages offered tend to be correlated with educational attainment-higher levels of education command higher wages. Following are details of the occupations demanded and the wages offered for vacancies grouped by education required:
Advanced Degree: Job vacancies in four major occupational groups require advanced degrees: Healthcare Practitioner \& Technical; Management; Community \& Social Services; and Education, Training, \& Library.
Bachelor's Degree: Vacancies requiring bachelor's degrees are classified under 14 different major occupational groups. Thirty-six percent of these current opportunities are in Education, Training, \& Library positions. Management occupations and Business \& Financial Operations count for another 36\% combined. Office \& Administrative Support vacancies are paying the lowest wages while Protective Service openings offer the highest wages.
Two-Year Degree: Thirteen different occupational groups have job vacancies requiring two-year degrees. Of these vacancies, $66 \%$ are in Healthcare Practitioner \& Technical roles. Healthcare Practitioner \& Technical, along with Computer \& Mathematical vacancies offer high wages for candidates meeting this educational requirement, while Education, Training, \& Library positions are among the lowest wages reported.

Figure 14: Vacancies by Education


Figure 15: Reported Average Wage Ranges by Education


Vocational Training/Certification: Seventeen of the 22 major occupational groups represent vacancies for which employers require vocational training or certification. Forty-one percent of these are classified as Education, Training \& Library occupations. Management positions, though limited in number, offer the highest earning power while Personal Care \& Service job vacancies pay the lowest wages.
High-School/GED: Fourteen occupational groups represent vacancies requiring a high school diploma or GED. Food Preparation \& Serving Related positions provide the highest number of job opportunities during the survey period. While more limited in number, Construction \&

Extraction; Installation, Maintenance, \& Repair; Protective Service; Production; and Management vacancies all offer average wages above $\$ 15$ per hour.
No Diploma: Twenty-two percent of the vacancies reported by employers do not require a diploma. These opportunities span eleven different occupational groups, but the greatest proportion of open positions are in Food Preparation \& Serving Related occupations. Construction \& Extraction positions are at the top of the wage range, while Food Preparation \& Serving Related jobs, though plentiful, pay at the low end of the wage scale.

Figure 16: Vacancies by Experience


The JVS also collects experience requirements for job vacancies. The experience levels demanded by employers can be used to guide employ-ment-training programs and to help job candidates plan for career advancement.

Figure 16 shows the percentage distribution of vacancies by experience requirement. To date, NW\&RR surveys have found that a majority of job vacancies require either related or direct experience in the occupation for hire. Seventy-five percent of reported vacancies require at least experience in a related field.

## Survey Findings

Positions demanding higher levels of experience generally pay higher wages. The minimum and maximum wages for each experience category represent a variety of occupations along with the required 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:

Forty-five percent of all reported job vacancies require that candidates have experience in the occupation. Construction \& Extraction jobs make up $15 \%$ of the vacancies and offer above average wages in this experience category. Thirteen percent of the vacancies are for Food Preparation \& Serving Related jobs that pay below average wages.

Figure 17: Reported Average Wage Ranges by Experience


## Experience in a Related Field:

Employers are looking to fill a wide variety of occupations with people who have experience related to the job open for hire. Education, Training, \& Library positions are found most frequently. Higher paying positions are in Management occupations while many Food Preparation \& Serving Related vacancies offer wages below the average minimum wage range charted.

## General Work Experience:

Food Preparation \& Serving Related occupations are among the most frequently reported occupational groups. Though more vacancies are open to candidates with direct work experience in Food Preparation \& Serving Related jobs, there are still many openings in this field for people with general non-related experience. Other opportunities for candidates who do not have direct or related work experience abound in Transportation \& Material Moving and Personal Care \& Service jobs.

## No Experience Required:

Candidates new to the labor force have many opportunities to obtain work experience in Sales \& Related occupations. While some Sales \& Related positions reported in this survey require related work experience, wages offered indicate no pay advantage for the experienced worker in this field. Figure 17 shows higher average wages for vacancies where no experience is required than for vacancies requiring general work experience.

Vacancies: Difficulty to Fill and Time Open for Hire

## Survey Findings

## Employer ability to find and hire qualified candi-

 dates provides important information on the labor market. Overall, the number of vacancies considered not difficult to fill is higher than at this time last year. However, an increase in the proportion of positions considered very difficult to fill indicates that certain jobs present a recruiting challenge for employers. Fifty percent of the 14 different occupations that are considered very difficult to fill are for Construction \& Extraction jobs.The length of time a vacancy is open is a good indicator of the difficulty an employer is having 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, but the proportion of vacancies open more than 30 days has grown. This data corroborates employer reports of difficulty in filling certain positions.
Construction \& Extraction job openings represent $51 \%$ of the vacancies open for 60 or more days. These jobs support the average wage range, with Computer \& Mathematical positions paying at the high end of the range and Transportation \& Material Moving vacancies offering wages on the low end.

Figure 18: Vacancies by Difficulty to Fill


Figure 19: Vacancies by Time Open for Hire


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


## Additional Compensation

## Survey Findings

## Medical Insurance

## Employers frequently offer compensation related

benefits to recruit qualified candidates. Some of these perks are paid time off, transportation or parking vouchers, and subsidized child-care. An important benefit offered to employees is a group medical insurance plan, which may have all or part of the monthly insurance premium paid for by the employer.

Thirty percent of the vacancies include no information on whether or not medical insurance is offered as a benefit with the position. However, of those reporting, more than $80 \%$ offer some form of medical coverage. Job vacancies offered by Government institutions are most likely to have a medical benefit.

Benefits are often associated with the employment status of a job, in that a full-time or permanent job is more likely to offer benefits than a part-time or temporary one. However, the proportion of full-time vacancies that offer medical coverage is lower than in past surveys. Sixty percent of all full-time and part-time positions include some type of medical benefit.

Figure 21: Employers' Contribution to Medical Insurance


## Sign-On Bonus

No employers in this survey offer sign-on bonuses.

## Occupational Details

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.

The largest proportion of vacancies for this survey is found in the Education, Training, \&

Library occupation group. This reflects demand for teachers and assistants with the approach of the academic year.

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. The highest wages are offered for Computer \& Mathematical positions, the lowest for Food Preparation \& Serving vacancies.
Figure 22: Vacancies and Reported Average Wage Ranges by Major Occupational Groups


[^0]
## Vacancies Found

The number of vacancies by occupation found in the survey.

## Average JVS Wage Offered

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 reporting vacancies in this survey, and does not reflect information from other sources or wages paid for currently filled positions.

## Average OES Wage Paid

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

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

Table 1: Occupations with Five or More Estimated Vacancies

|  |  |  |  |  | Occupational Employment Statistics Wage Data (2003) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Average Wage Paid |  |  | Percentile Distribution |  |  |  |  |
| SOC Code | SOC Occupational Title | Vacancies <br> Estimated | Vacancies Found | Average Wage Offered | EntryLevel | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 41-2031 | Retail Salespersons | 73 | 21 | \$9.20 | \$8.45 | \$12.46 | \$14.47 | \$7.56 | \$9.42 | \$11.29 | \$14.39 | \$17.68 |
| 35-2014 | Cooks, Restaurant | 65 | 39 | \$10.30 | \$9.53 | \$11.27 | \$12.14 | \$9.06 | \$9.72 | \$10.76 | \$12.67 | \$14.99 |
| 37-2012 | Maids and Housekeeping Cleaners | 59 | 30 | \$9.10 | \$8.95 | \$10.67 | \$11.53 | \$8.31 | \$9.41 | \$10.42 | \$11.65 | \$13.60 |
| 35-3031 | Waiters and Waitresses | 55 | 33 | \$5.50 | \$6.08 | \$8.61 | \$9.87 | \$5.70 | \$6.16 | \$6.96 | \$9.98 | \$14.40 |
| 25-2031 | Secondary School Teachers, Except Special and Vocational Education | 50 | 50 | \$19.80 | \$30,710 | \$40,764 | \$45,790 | \$29,230 | \$32,436 | \$38,529 | \$47,537 | \$57,180 |
| 43-4081 | Hotel, Motel, and Resort Desk Clerks | 48 | 21 | \$9.70 | \$9.73 | \$11.17 | \$11.89 | \$9.39 | \$10.01 | \$11.04 | \$12.50 | \$13.88 |
| 29-1111 | Registered Nurses | 44 | 34 | \$25.70 | \$16.74 | \$23.37 | \$26.69 | \$15.06 | \$18.65 | \$22.87 | \$27.03 | \$32.54 |
| 47-2073 | Operating Engineers and Other Construction Equipment Operators | 41 | 18 | \$16.40 | \$15.35 | \$19.44 | \$21.49 | \$14.80 | \$16.34 | \$18.97 | \$22.53 | \$26.41 |
| 43-6013 | Medical Secretaries | 36 | 9 | \$11.80 | \$10.72 | \$13.41 | \$14.76 | \$9.95 | \$11.51 | \$13.52 | \$15.55 | \$17.00 |
| 25-2022 | Middle School Teachers, Except Special and Vocational Education | 34 | 24 | \$20.40 | \$30,362 | \$39,105 | \$43,476 | \$28,865 | \$32,029 | \$37,455 | \$45,546 | \$53,996 |
| 25-2021 | Elementary School Teachers, Except Special Education | 34 | 27 | \$20.30 | \$29,558 | \$37,921 | \$42,102 | \$27,593 | \$31,344 | \$36,722 | \$44,276 | \$52,084 |
| 53-3032 | Truck Drivers, Heavy and Tractor-Trailer | 33 | 7 | \$15.60 | \$13.18 | \$18.20 | \$20.72 | \$11.95 | \$15.22 | \$18.31 | \$21.02 | \$23.91 |
| 13-2011 | Accountants and Auditors | 29 | 10 | \$17.50 | \$15.36 | \$29.38 | \$36.39 | \$13.70 | \$17.43 | \$23.09 | \$28.09 | \$51.69 |
| 37-2011 | Janitors and Cleaners, Except Maids and Housekeeping Cleaners | 28 | 14 | \$9.30 | \$7.95 | \$11.26 | \$12.91 | \$7.02 | \$8.92 | \$10.69 | \$13.20 | \$16.56 |
| 41-1011 | First-Line Supervisors/Managers of Retail Sales Workers | 27 | 4 | \$16.00 | \$12.53 | \$19.30 | \$22.68 | \$11.90 | \$13.73 | \$17.50 | \$21.78 | \$28.53 |
| 49-9042 | Maintenance and Repair Workers, General | 23 | 12 | \$15.10 | \$10.47 | \$15.33 | \$17.77 | \$9.30 | \$12.10 | \$14.38 | \$18.44 | \$22.82 |
| 41-2011 | Cashiers | 23 | 17 | \$9.70 | \$8.16 | \$10.91 | \$12.29 | \$7.42 | \$9.02 | \$10.38 | \$12.82 | \$15.96 |
| 35-9011 | Dining Room and Cafeteria Attendants and Bartender Helpers | 23 | 10 | \$5.40 | \$6.16 | \$7.69 | \$8.46 | \$5.79 | \$6.31 | \$7.20 | \$8.71 | \$10.45 |
| 37-3011 | Landscaping and Groundskeeping Workers | 21 | 10 | \$9.90 | \$9.35 | \$12.25 | \$13.70 | \$8.35 | \$10.65 | \$12.44 | \$13.84 | \$15.81 |
| 43-6014 | Secretaries, Except Legal, Medical, and Executive | 20 | 7 | \$12.10 | \$8.79 | \$12.61 | \$14.51 | \$7.88 | \$10.24 | \$12.73 | \$15.18 | \$17.15 |
| 51-4121 | Welders, Cutters, Solderers, and Brazers | 20 | 1 | $\dagger$ | \$12.90 | \$17.25 | \$19.42 | \$11.74 | \$14.40 | \$16.77 | \$20.41 | \$24.58 |
| 25-9041 | Teacher Assistants | 19 | 16 | \$9.40 | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |

* OES wages reported for Colorado statewide
$\dagger$ insufficient wage data available

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

|  |  |  |  |  | Occ | ation | Emp | men | tatis | Wa | Data | 003) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Aver | ge Wa | Paid |  | Percen | ile Dis | bution |  |
| SOC Code | SOC Occupational Title | Vacancies Estimated | Vacancies Found | Average Wage Offered | EntryLevel | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 47-2111 | Electricians | 19 | 4 | \$17.90 | \$13.76 | \$19.62 | \$22.55 | \$12.84 | \$14.50 | \$18.77 | \$23.95 | \$27.47 |
| 35-9031 | Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop | 17 | 11 | \$10.70 | \$6.52 | \$8.65 | \$9.71 | \$6.09 | \$7.03 | \$8.26 | \$9.96 | \$11.38 |
| 25-2011 | Preschool Teachers, Except Special Education | 17 | 4 | \$10.10 | \$8.16 | \$10.40 | \$11.51 | \$7.44 | \$8.89 | \$9.99 | \$11.34 | \$13.79 |
| 43-4171 | Receptionists and Information Clerks | 17 | 8 | \$9.00 | \$8.76 | \$11.73 | \$13.21 | \$7.87 | \$9.81 | \$11.70 | \$13.47 | \$15.80 |
| 35-9021 | Dishwashers | 17 | 7 | \$8.90 | \$6.22 | \$8.27 | \$9.30 | \$5.91 | \$6.71 | \$8.19 | \$9.95 | \$10.93 |
| 43-3071 | Tellers | 16 | 3 | $\dagger$ | \$11.55 | \$12.68 | \$13.25 | \$10.39 | \$11.99 | \$12.93 | \$13.86 | \$14.48 |
| 47-2131 | Insulation Workers, Floor, Ceiling, and Wall | 14 | 3 | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |
| 53-7032 | Excavating and Loading Machine and Dragline Operators | 14 | 5 | \$19.90 | \$14.26 | \$19.06 | \$21.45 | \$14.03 | \$15.82 | \$18.77 | \$22.89 | \$26.69 |
| 35-3011 | Bartenders | 13 | 7 | \$7.40 | \$6.09 | \$7.98 | \$8.93 | \$5.69 | \$6.10 | \$6.80 | \$8.57 | \$13.62 |
| 35-3022 | Counter Attendants, Cafeteria, Food Concession, and Coffee Shop | 13 | 7 | \$6.30 | \$6.14 | \$8.04 | \$8.99 | \$5.87 | \$6.53 | \$7.76 | \$9.25 | \$10.84 |
| 53-6021 | Parking Lot Attendants | 13 | 13 | \$7.40 | \$6.61 | \$8.61 | \$9.62 | \$6.22 | \$7.11 | \$8.30 | \$10.03 | \$11.44 |
| 39-5012 | Hairdressers, Hairstylists, and Cosmetologists | 13 | 4 | $\dagger$ | \$5.96 | \$10.05 | \$12.10 | \$5.67 | \$6.19 | \$8.71 | \$13.78 | \$16.48 |
| 49-3023 | Automotive Service Technicians and Mechanics | 13 | 5 | \$12.80 | \$11.20 | \$18.44 | \$22.06 | \$10.15 | \$12.74 | \$18.05 | \$22.31 | \$28.08 |
| 35-2012 | Cooks, Institution and Cafeteria | 12 | 9 | \$9.10 | \$8.16 | \$11.26 | \$12.81 | \$7.67 | \$8.78 | \$10.48 | \$13.92 | \$16.56 |
| * 49-2092 | Electric Motor, Power Tool, and Related Repairers | 12 | 4 | \$14.00 | \$10.11 | \$14.80 | \$17.15 | \$9.63 | \$10.60 | \$14.10 | \$18.05 | \$22.56 |
| 43-9061 | Office Clerks, General | 11 | 7 | \$13.10 | \$7.30 | \$12.18 | \$14.62 | \$6.20 | \$8.75 | \$12.04 | \$15.20 | \$18.32 |
| 33-9032 | Security Guards | 11 | 11 | \$12.10 | \$8.91 | \$10.93 | \$11.94 | \$8.54 | \$9.46 | \$10.78 | \$12.60 | \$13.77 |
| 33-3051 | Police and Sheriff's Patrol Officers | 11 | 11 | \$19.70 | \$15.14 | \$19.05 | \$21.00 | \$14.39 | \$15.80 | \$18.17 | \$21.90 | \$26.09 |
| 11-2022 | Sales Managers | 11 | 3 | \$19.20 | \$22.25 | \$36.23 | \$43.23 | \$20.39 | \$24.94 | \$34.42 | \$44.51 | \$57.70 |
| 47-1011 | First-Line Supervisors/Managers of Construction Trades and Extraction Workers | 11 | 7 | \$18.90 | \$18.79 | \$26.48 | \$30.33 | \$17.35 | \$20.96 | \$25.40 | \$30.25 | \$36.71 |
| 39-9011 | Child Care Workers | 10 | 6 | \$9.10 | \$7.29 | \$9.29 | \$10.29 | \$6.49 | \$8.23 | \$9.47 | \$10.43 | \$11.57 |
| 43-6011 | Executive Secretaries and Administrative Assistants | 10 | 6 | \$13.50 | \$13.78 | \$18.11 | \$20.27 | \$12.82 | \$14.61 | \$16.95 | \$20.74 | \$24.98 |
| 39-6011 | Baggage Porters and Bellhops | 10 | 8 | \$7.70 | \$6.27 | \$9.32 | \$10.85 | \$5.84 | \$6.76 | \$8.78 | \$11.08 | \$14.11 |
| 47-2021 | Brickmasons and Blockmasons | 10 | 10 | \$19.00 | \$11.08 | \$17.89 | \$21.29 | \$10.47 | \$12.51 | \$18.75 | \$22.60 | \$26.44 |

* OES wages reported for Colorado statewide
$\dagger$ insufficient wage data available


## Occupational Details

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

|  |  |  |  |  | Occupational Employment Statistics Wage Data (2003) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Average Wage Paid |  |  | Percentile Distribution |  |  |  |  |
| SOC Code | SOC Occupational Title | Vacancies Estimated | Vacancies Found | Average Wage Offered | EntryLevel | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 47-2022 | Stonemasons | 10 | 10 | \$22.50 | \$14.72 | \$20.31 | \$23.10 | \$13.87 | \$16.12 | \$19.99 | \$24.75 | \$27.98 |
| 11-3011 | Administrative Services Managers | 10 | 2 | $\dagger$ | \$18.18 | \$32.64 | \$39.88 | \$16.81 | \$20.40 | \$27.32 | \$36.38 | \$57.42 |
| 11-2021 | Marketing Managers | 10 | 2 | $\dagger$ | \$20.23 | \$34.09 | \$41.01 | \$16.77 | \$23.34 | \$27.85 | \$40.07 | \$57.57 |
| 47-3012 | Helpers--Carpenters | 10 | 2 | $\dagger$ | \$7.51 | \$12.52 | \$15.02 | \$7.23 | \$7.95 | \$13.38 | \$16.37 | \$17.89 |
| 47-2151 | Pipelayers | 10 | 2 | $\dagger$ | \$11.55 | \$14.91 | \$16.60 | \$10.77 | \$12.15 | \$14.13 | \$17.84 | \$21.03 |
| 47-2152 | Plumbers, Pipefitters, and Steamfitters | 10 | 2 | $\dagger$ | \$16.10 | \$22.01 | \$24.97 | \$14.98 | \$17.81 | \$21.73 | \$26.11 | \$31.28 |
| 29-2034 | Radiologic Technologists and Technicians | 9 | 4 | \$14.00 | \$16.59 | \$20.70 | \$22.76 | \$15.40 | \$17.91 | \$20.50 | \$23.52 | \$27.14 |
| 39-3011 | Gaming Dealers | 9 | 9 | \$6.20 | \$6.01 | \$10.02 | \$12.03 | \$5.58 | \$5.92 | \$6.49 | \$7.61 | \$26.01 |
| 11-9021 | Construction Managers | 9 | 1 | $\dagger$ | \$23.63 | \$36.33 | \$42.68 | \$21.44 | \$26.84 | \$34.64 | \$44.12 | \$55.07 |
| 11-1011 | Chief Executives | 9 | 1 | $\dagger$ | \$32.48 | \$61.72 | \$76.34 | \$27.45 | \$39.50 | \$54.15 | $\dagger$ | $\dagger$ |
| 41-2021 | Counter and Rental Clerks | 9 | 3 | $\dagger$ | \$7.41 | \$10.15 | \$11.52 | \$6.88 | \$8.25 | \$9.78 | \$11.61 | \$14.13 |
| 53-7062 | Laborers and Freight, Stock, and Material Movers, Hand | 8 | 4 | \$11.00 | \$8.92 | \$11.93 | \$13.43 | \$8.25 | \$9.63 | \$11.17 | \$13.86 | \$17.32 |
| 35-3021 | Combined Food Preparation and Serving Workers, Including Fast Food | 8 | 2 | $\dagger$ | \$6.84 | \$8.58 | \$9.46 | \$6.31 | \$7.30 | \$8.35 | \$9.90 | \$11.13 |
| 11-9111 | Medical and Health Services Managers | 8 | 8 | \$22.20 | \$21.36 | \$29.67 | \$33.82 | \$19.77 | \$23.29 | \$27.17 | \$35.78 | \$44.83 |
| * 19-2041 | Environmental Scientists and Specialists, Including Health | 8 | 1 | † | \$15.76 | \$27.60 | \$33.52 | \$14.39 | \$18.32 | \$26.66 | \$35.53 | \$43.31 |
| 31-1012 | Nursing Aides, Orderlies, and Attendants | 8 | 5 | $\dagger$ | \$8.79 | \$11.22 | \$12.44 | \$8.00 | \$9.39 | \$10.75 | \$13.17 | \$15.64 |
| 43-3031 | Bookkeeping, Accounting, and Auditing Clerks | 7 | 3 | $\dagger$ | \$10.73 | \$15.65 | \$18.11 | \$9.77 | \$12.30 | \$15.39 | \$18.53 | \$21.88 |
| 53-3033 | Truck Drivers, Light or Delivery Services | 7 | 3 | $\dagger$ | \$8.82 | \$15.41 | \$18.70 | \$7.04 | \$10.65 | \$15.27 | \$18.33 | \$25.64 |
| 39-3031 | Ushers, Lobby Attendants, and Ticket Takers | 7 | 7 | \$9.60 | \$6.19 | \$7.74 | \$8.52 | \$5.77 | \$6.22 | \$6.96 | \$9.36 | \$11.09 |
| 43-5081 | Stock Clerks and Order Fillers | 7 | 7 | \$10.00 | \$9.01 | \$11.96 | \$13.44 | \$8.35 | \$9.60 | \$10.94 | \$13.42 | \$17.83 |
| 37-1011 | First-Line Supervisors/Managers of Housekeeping and Janitorial Workers | 7 | 7 | \$11.00 | \$11.65 | \$16.47 | \$18.88 | \$10.95 | \$12.47 | \$15.49 | \$19.91 | \$24.27 |
| 41-2022 | Parts Salespersons | 7 | 1 | $\dagger$ | \$9.64 | \$14.40 | \$16.78 | \$9.31 | \$10.62 | \$13.52 | \$17.35 | \$21.98 |
| 41-3011 | Advertising Sales Agents | 7 | 1 | $\dagger$ | \$14.14 | \$22.03 | \$25.98 | \$12.96 | \$16.06 | \$19.74 | \$24.78 | \$33.53 |
| * 39-5092 | Manicurists and Pedicurists | 6 | 2 | $\dagger$ | \$6.95 | \$10.29 | \$11.97 | \$6.49 | \$7.35 | \$8.63 | \$10.51 | \$17.76 |
| 27-1024 | Graphic Designers | 6 | 1 | $\dagger$ | \$9.58 | \$16.28 | \$19.64 | \$6.76 | \$12.00 | \$15.69 | \$19.19 | \$22.49 |

## Occupational Details

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

|  |  |  |  |  | Occupational Employment Statistics Wage Data (2003) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Average Wage Paid |  |  | Percentile Distribution |  |  |  |  |
| SOC Code | SOC Occupational Title | Vacancies Estimated | Vacancies Found | Average Wage Offered | EntryLevel | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 29-2071 | Medical Records and Health Information Technicians | 6 | 1 | $\dagger$ | \$9.85 | \$12.97 | \$14.53 | \$9.34 | \$10.66 | \$12.69 | \$15.04 | \$17.38 |
| 35-1012 | First-Line Supervisors/Managers of Food Preparation and Serving Workers | 6 | 6 | \$14.00 | \$10.05 | \$15.11 | \$17.64 | \$8.75 | \$11.66 | \$13.94 | \$17.23 | \$21.53 |
| 39-9031 | Fitness Trainers and Aerobics Instructors | 6 | 6 | \$14.40 | \$8.77 | \$17.17 | \$21.37 | \$7.24 | \$10.44 | \$17.25 | \$21.48 | \$28.53 |
| 33-9092 | Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers | 6 | 6 | \$10.30 | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |
| 43-4141 | New Accounts Clerks | 5 | 1 | $\dagger$ | \$10.42 | \$12.51 | \$13.56 | \$9.91 | \$10.84 | \$12.38 | \$14.04 | \$15.73 |
| 43-4041 | Credit Authorizers, Checkers, and Clerks | 5 | 1 | $\dagger$ | \$11.09 | \$13.38 | \$14.52 | \$10.31 | \$11.63 | \$13.11 | \$14.50 | \$16.86 |
| * 39-3093 | Locker Room, Coatroom, and Dressing Room Attendants | 5 | 3 | $\dagger$ | \$6.30 | \$9.32 | \$10.83 | \$5.96 | \$6.84 | \$8.99 | \$10.73 | \$13.06 |
| 39-6012 | Concierges | 5 | 3 | $\dagger$ | \$9.36 | \$12.63 | \$14.26 | \$9.01 | \$10.21 | \$12.33 | \$14.35 | \$17.35 |
| 31-1011 | Home Health Aides | 5 | 3 | $\dagger$ | \$7.23 | \$9.50 | \$10.64 | \$6.76 | \$7.65 | \$8.99 | \$11.64 | \$13.35 |
| 43-4161 | Human Resources Assistants, Except Payroll and Timekeeping | 5 | 5 | \$12.60 | \$10.02 | \$15.37 | \$18.05 | \$7.10 | \$12.36 | \$15.58 | \$18.90 | \$21.54 |
| 51-8031 | Water and Liquid Waste Treatment Plant and System Operators | 5 | 5 | \$16.00 | \$10.21 | \$17.43 | \$21.05 | \$8.20 | \$12.52 | \$17.64 | \$22.16 | \$26.63 |
| 25-2042 | Special Education Teachers, Middle School | 5 | 5 | \$14.40 | \$27,863 | \$39,104 | \$44,725 | \$25,802 | \$29,573 | \$37,327 | \$47,194 | \$56,487 |
| 25-2041 | Special Education Teachers, Preschool, Kindergarten, and Elementary School | 5 | 5 | $\dagger$ | \$30,984 | \$42,606 | \$48,417 | \$29,510 | \$33,203 | \$40,768 | \$51,617 | \$60,246 |
| 25-2043 | Special Education Teachers, Secondary School | 5 | 5 | $\dagger$ | \$31,094 | \$40,724 | \$45,539 | \$29,454 | \$32,646 | \$37,992 | \$46,532 | \$58,731 |
| 47-2051 | Cement Masons and Concrete Finishers | 5 | 1 | $\dagger$ | \$11.17 | \$16.04 | \$18.47 | \$10.25 | \$13.17 | \$16.49 | \$19.63 | \$21.50 |
| * 47-2121 | Glaziers | 5 | 1 | $\dagger$ | \$12.84 | \$19.86 | \$23.38 | \$11.17 | \$15.31 | \$20.86 | \$25.32 | \$27.57 |
| 49-3093 | Tire Repairers and Changers | 5 | 1 | $\dagger$ | \$8.92 | \$11.68 | \$13.06 | \$8.14 | \$9.46 | \$11.22 | \$13.04 | \$18.05 |
| 49-9099 | Installation, Maintenance, and Repair Workers, All Other | 5 | 1 | $\dagger$ | \$11.06 | \$16.14 | \$18.68 | \$10.27 | \$12.17 | \$16.49 | \$19.45 | \$21.28 |
| 49-9051 | Electrical Power-Line Installers and Repairers | 5 | 1 | $\dagger$ | \$20.46 | \$24.07 | \$25.88 | \$18.61 | \$22.72 | \$25.08 | \$27.18 | \$28.43 |
| 17-3011 | Architectural and Civil Drafters | 5 | 2 | $\dagger$ | \$17.49 | \$19.97 | \$21.21 | \$16.57 | \$18.09 | \$19.70 | \$21.31 | \$25.78 |

[^1][^2]
## Occupational Details

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

|  |  | Occupational Employment Statistics Wage Data (2003) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Average Wage Paid |  |  | Percentile Distribution |  |  |  |  |
| $\begin{aligned} & \text { SOC } \\ & \text { Code } \end{aligned}$ | SOC Occupational Title | EntryLevel | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 11-9031 | Education Administrators, Preschool and Child Care Center/Program | \$8.97 | \$15.17 | \$18.27 | \$8.33 | \$9.39 | \$14.14 | \$17.34 | \$23.67 |
| 21-1012 | Educational, Vocational, and School Counselors | \$16.15 | \$21.41 | \$24.05 | \$14.82 | \$17.64 | \$21.21 | \$25.41 | \$28.45 |
| * 49-2093 | Electrical and Electronics Installers and Repairers, Transportation Equipment | \$13.99 | \$17.86 | \$19.80 | \$12.75 | \$15.58 | \$18.74 | \$20.60 | \$21.72 |
| 29-2041 | Emergency Medical Technicians and Paramedics | \$10.85 | \$14.98 | \$17.05 | \$10.76 | \$12.10 | \$14.20 | \$16.89 | \$21.67 |
| * 17-2081 | Environmental Engineers | \$21.21 | \$31.73 | \$37.00 | \$19.19 | \$23.90 | \$31.28 | \$38.67 | \$43.57 |
| * 19-4091 | Environmental Science and Protection Technicians, Including Health | \$13.31 | \$19.70 | \$22.90 | \$12.12 | \$14.57 | \$18.29 | \$24.70 | \$30.20 |
| * 47-5031 | Explosives Workers, Ordnance Handling Experts, and Blasters | \$12.33 | \$19.17 | \$22.59 | \$10.93 | \$14.32 | \$19.62 | \$22.19 | \$27.05 |
| 13-2051 | Financial Analysts | \$20.73 | \$31.96 | \$37.58 | \$19.57 | \$22.36 | \$31.51 | \$35.54 | \$42.91 |
| 11-3031 | Financial Managers | \$23.35 | \$39.29 | \$47.26 | \$21.51 | \$26.92 | \$36.43 | \$47.66 | \$60.00 |
| 33-2011 | Fire Fighters | \$10.20 | \$16.67 | \$19.91 | \$7.21 | \$12.83 | \$16.24 | \$20.74 | \$25.96 |
| 49-1011 | First-Line Supervisors/Managers of Mechanics, Installers, and Repairers | \$17.64 | \$25.10 | \$28.83 | \$16.18 | \$19.25 | \$23.47 | \$30.78 | \$36.51 |
| 43-1011 | First-Line Supervisors/Managers of Office and Administrative Support Workers | \$13.63 | \$20.76 | \$24.32 | \$12.25 | \$15.22 | \$18.71 | \$24.97 | \$32.72 |
| 39-1021 | First-Line Supervisors/Managers of Personal Service Workers | \$11.38 | \$16.97 | \$19.77 | \$10.90 | \$13.25 | \$16.60 | \$20.66 | \$25.04 |
| 33-1012 | First-Line Supervisors/Managers of Police and Detectives | \$21.45 | \$27.18 | \$30.04 | \$20.08 | \$22.67 | \$26.59 | \$31.62 | \$36.65 |
| 51-1011 | First-Line Supervisors/Managers of Production and Operating Workers | \$16.81 | \$24.35 | \$28.12 | \$15.12 | \$18.82 | \$22.56 | \$29.98 | \$37.16 |
| 35-9099 | Food Preparation and Serving Related Workers, All Other | \$8.56 | \$11.17 | \$12.47 | \$7.76 | \$9.32 | \$10.96 | \$12.80 | \$14.38 |
| 35-3041 | Food Servers, Nonrestaurant | \$6.47 | \$9.38 | \$10.84 | \$6.12 | \$6.99 | \$8.93 | \$10.95 | \$14.69 |
| 11-9051 | Food Service Managers | \$15.36 | \$22.11 | \$25.49 | \$14.39 | \$16.62 | \$20.70 | \$26.37 | \$33.64 |
| 11-9071 | Gaming Managers | \$19.07 | \$23.85 | \$26.24 | \$17.87 | \$19.13 | \$21.11 | \$26.95 | \$32.60 |
| 39-1011 | Gaming Supervisors | \$15.32 | \$18.35 | \$19.87 | \$14.50 | \$15.61 | \$17.76 | \$21.11 | \$23.40 |
| 33-9031 | Gaming Surveillance Officers and Gaming Investigators | \$10.92 | \$13.54 | \$14.85 | \$10.03 | \$11.63 | \$13.48 | \$15.40 | \$17.20 |
| 11-1021 | General and Operations Managers | \$21.09 | \$40.60 | \$50.35 | \$18.02 | \$25.03 | \$34.67 | \$49.41 |  |
| 19-2042 | Geoscientists, Except Hydrologists and Geographers | \$23.76 | \$35.30 | \$41.07 | \$19.69 | \$28.25 | \$33.80 | \$42.71 | \$50.76 |
| * 21-1091 | Health Educators | \$10.14 | \$18.21 | \$22.25 | \$9.42 | \$10.95 | \$16.13 | \$24.54 | \$30.53 |

* OES wages reported for Colorado statewide
$\dagger$ insufficient wage data available

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

|  |  | Occupational Employment Statistics Wage Data (2003) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Average Wage Paid |  |  | Percentile Distribution |  |  |  |  |
| $\begin{aligned} & \text { SOC } \\ & \text { Code } \end{aligned}$ | SOC Occupational Title | Entry- <br> Level | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| 25-1071 | Health Specialties Teachers, Postsecondary | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |
| 31-9099 | Healthcare Support Workers, All Other | \$8.46 | \$11.17 | \$12.53 | \$7.98 | \$8.92 | \$10.70 | \$13.15 | \$15.30 |
| 49-9021 | Heating, Air Conditioning, and Refrigeration Mechanics and Installers | \$17.43 | \$20.46 | \$21.98 | \$15.71 | \$18.94 | \$20.87 | \$22.74 | \$25.62 |
| 49-9098 | Helpers--Installation, Maintenance, and Repair Workers | \$8.89 | \$14.49 | \$17.29 | \$8.01 | \$10.25 | \$15.51 | \$18.92 | \$20.58 |
| 47-4051 | Highway Maintenance Workers | \$12.10 | \$16.14 | \$18.16 | \$11.50 | \$13.35 | \$16.42 | \$19.19 | \$21.10 |
| 11-3040 | Human Resources Managers | \$20.89 | \$32.43 | \$38.20 | \$19.47 | \$22.96 | \$31.78 | \$40.94 | \$47.65 |
| 27-3091 | Interpreters and Translators | \$10.74 | \$15.86 | \$18.42 | \$8.84 | \$12.01 | \$13.98 | \$18.49 | \$25.16 |
| 43-4111 | Interviewers, Except Eligibility and Loan | \$10.46 | \$13.08 | \$14.39 | \$9.29 | \$11.81 | \$13.14 | \$14.77 | \$16.89 |
| 25-2012 | Kindergarten Teachers, Except Special Education | \$30,205 | \$39,587 | \$44,278 | \$28,740 | \$32,208 | \$38,884 | \$47,263 | \$53,453 |
| 51-6011 | Laundry and Dry-Cleaning Workers | \$7.34 | \$10.31 | \$11.80 | \$6.57 | \$8.21 | \$9.90 | \$12.00 | \$14.53 |
| * 43-6012 | Legal Secretaries | \$13.40 | \$17.17 | \$19.05 | \$11.27 | \$14.86 | \$16.75 | \$19.88 | \$23.77 |
| 25-4031 | Library Technicians | \$8.97 | \$11.80 | \$13.21 | \$8.34 | \$9.35 | \$11.04 | \$13.62 | \$16.79 |
| 29-2061 | Licensed Practical and Licensed Vocational Nurses | \$11.88 | \$14.24 | \$15.42 | \$11.30 | \$12.44 | \$14.17 | \$16.27 | \$17.66 |
| 11-9081 | Lodging Managers | \$15.70 | \$22.34 | \$25.66 | \$15.12 | \$17.18 | \$20.66 | \$23.71 | \$32.70 |
| 31-9011 | Massage Therapists | \$10.50 | \$18.46 | \$22.44 | \$9.29 | \$11.68 | \$13.43 | \$24.73 | \$36.52 |
| * 17-2141 | Mechanical Engineers | \$21.93 | \$31.85 | \$36.81 | \$20.43 | \$24.48 | \$30.61 | \$38.17 | \$45.37 |
| 29-2011 | Medical and Clinical Laboratory Technologists | \$13.64 | \$21.07 | \$24.79 | \$12.34 | \$15.48 | \$21.85 | \$26.01 | \$30.48 |
| 31-9092 | Medical Assistants | \$9.70 | \$13.75 | \$15.77 | \$9.32 | \$10.43 | \$14.70 | \$16.45 | \$17.52 |
| 19-1042 | Medical Scientists, Except Epidemiologists | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |
| 31-9094 | Medical Transcriptionists | \$12.93 | \$17.00 | \$19.04 | \$12.21 | \$14.18 | \$17.38 | \$20.14 | \$21.84 |
| 49-3042 | Mobile Heavy Equipment Mechanics, Except Engines | \$14.98 | \$19.69 | \$22.04 | \$14.03 | \$16.76 | \$19.80 | \$22.99 | \$26.58 |
| 11-9121 | Natural Sciences Managers | \$17.00 | \$25.02 | \$29.04 | \$15.54 | \$19.14 | \$24.84 | \$30.49 | \$34.00 |
| 39-2021 | Nonfarm Animal Caretakers | \$9.13 | \$12.22 | \$13.77 | \$8.55 | \$10.05 | \$12.15 | \$14.89 | \$16.31 |
| 29-1122 | Occupational Therapists | \$16.50 | \$20.88 | \$23.07 | \$14.62 | \$18.16 | \$20.80 | \$24.26 | \$27.04 |
| 29-2081 | Opticians, Dispensing | \$11.24 | \$13.70 | \$14.93 | \$10.33 | \$11.80 | \$13.58 | \$15.89 | \$17.41 |
| 43-3051 | Payroll and Timekeeping Clerks | \$10.97 | \$15.62 | \$17.95 | \$10.25 | \$12.60 | \$15.57 | \$19.45 | \$21.49 |
| * 37-2021 | Pest Control Workers | \$7.43 | \$12.63 | \$15.23 | \$7.06 | \$7.92 | \$11.17 | \$16.11 | \$21.85 |

[^3]
## Occupational Details

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

|  |  | Occupational Employment Statistics Wage Data (2003) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Average Wage Paid |  |  | Percentile Distribution |  |  |  |  |
| SOC Code | SOC Occupational Title | Entry- <br> Level | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
| * 37-3012 | Pesticide Handlers, Sprayers, and Applicators, Vegetation | \$9.14 | \$13.36 | \$15.47 | \$8.62 | \$9.87 | \$12.43 | \$16.80 | \$20.04 |
| 29-2052 | Pharmacy Technicians | \$11.63 | \$13.08 | \$13.81 | \$11.05 | \$11.78 | \$12.91 | \$14.23 | \$16.34 |
| 31-2021 | Physical Therapist Assistants | \$12.28 | \$15.13 | \$16.56 | \$11.72 | \$13.13 | \$15.35 | \$17.27 | \$18.64 |
| 29-1123 | Physical Therapists | \$18.64 | \$22.70 | \$24.74 | \$17.96 | \$19.45 | \$21.88 | \$26.21 | \$29.75 |
| 43-5031 | Police, Fire, and Ambulance Dispatchers | \$8.75 | \$13.44 | \$15.79 | \$7.27 | \$10.50 | \$13.49 | \$16.55 | \$19.52 |
| * 49-9069 | Precision Instrument and Equipment Repairers, All Other | \$15.29 | \$21.52 | \$24.64 | \$14.36 | \$16.88 | \$20.51 | \$23.20 | \$31.53 |
| 11-2031 | Public Relations Managers | \$17.89 | \$28.20 | \$33.35 | \$16.49 | \$18.78 | \$25.67 | \$30.60 | \$42.63 |
| 13-1023 | Purchasing Agents, Except Wholesale, Retail, and Farm Products | \$15.56 | \$23.50 | \$27.47 | \$15.10 | \$17.38 | \$21.07 | \$26.08 | \$33.00 |
| 11-3061 | Purchasing Managers | \$17.33 | \$24.31 | \$27.80 | \$15.47 | \$19.52 | \$22.38 | \$28.03 | \$38.92 |
| 39-9032 | Recreation Workers | \$6.96 | \$10.81 | \$12.73 | \$6.43 | \$7.66 | \$10.44 | \$13.16 | \$16.34 |
| * 29-1125 | Recreational Therapists | \$8.50 | \$13.32 | \$15.74 | \$7.83 | \$9.19 | \$12.37 | \$16.82 | \$20.73 |
| 43-4181 | Reservation and Transportation Ticket Agents and Travel Clerks | \$8.89 | \$12.18 | \$13.82 | \$7.93 | \$10.07 | \$11.99 | \$13.57 | \$16.71 |
| 29-1126 | Respiratory Therapists | \$16.42 | \$19.30 | \$20.75 | \$15.01 | \$17.81 | \$19.59 | \$21.39 | \$23.36 |
| * 39-5094 | Skin Care Specialists | \$5.95 | \$10.67 | \$13.02 | \$5.65 | \$6.20 | \$7.44 | \$11.44 | \$24.70 |
| 39-1012 | Slot Key Persons | \$10.93 | \$13.35 | \$14.56 | \$10.30 | \$11.56 | \$12.78 | \$14.55 | \$17.65 |
| 11-9151 | Social and Community Service Managers | \$16.89 | \$24.96 | \$28.99 | \$15.44 | \$19.29 | \$24.74 | \$31.29 | \$35.34 |
| 29-1127 | Speech-Language Pathologists | \$16.67 | \$21.94 | \$24.57 | \$15.43 | \$17.91 | \$21.72 | \$25.90 | \$29.77 |
| 29-2055 | Surgical Technologists | \$10.35 | \$14.93 | \$17.23 | \$9.70 | \$10.94 | \$14.09 | \$18.64 | \$21.45 |
| 17-3031 | Surveying and Mapping Technicians | \$13.96 | \$18.60 | \$20.92 | \$12.82 | \$15.61 | \$18.88 | \$21.54 | \$25.07 |
| 17-1022 | Surveyors | \$16.27 | \$22.73 | \$25.97 | \$15.18 | \$18.05 | \$23.18 | \$26.53 | \$31.35 |
| 41-9041 | Telemarketers | \$8.88 | \$10.68 | \$11.59 | \$8.14 | \$9.28 | \$10.46 | \$12.04 | \$13.62 |
| 41-3041 | Travel Agents | \$8.88 | \$12.97 | \$15.01 | \$8.40 | \$9.64 | \$11.07 | \$15.62 | \$20.26 |
| 27-2023 | Umpires, Referees, and Other Sports Officials | \$21,003 | \$35,060 | \$42,088 | \$12,487 | \$30,186 | \$40,517 | \$43,987 | \$46,221 |
| 19-3051 | Urban and Regional Planners | \$18.24 | \$24.10 | \$27.03 | \$17.22 | \$19.58 | \$23.52 | \$28.05 | \$33.61 |
| 25-2032 | Vocational Education Teachers, Secondary School | \$30,390 | \$40,346 | \$45,325 | \$27,275 | \$33,962 | \$41,223 | \$47,441 | \$53,562 |

[^4]Government
The Government JVS sector accounts for 14\% of the employment and represents $3 \%$ of the employers in the Northwest \& Rural Resort Region as of 3rd Quarter 2003. It is the second smallest sector in terms of employment, but represents important job opportunities. With a vacancy rate of $2.0 \%$ in this survey, there are 2 jobs available for every 100 positions. These vacancies may represent job-turnover and/or job growth.

Looking at the industries within the Government JVS sector allows us to take a more detailed look at the activities carried out by federal, state, and local Government institutions.

Government hiring during the survey period is focused on the needs of Educational Services organizations, which account for $62 \%$ of vacancies. Thirty-two percent of sector employment is in Educational Services.

## Executive, Legislative, \& Other General Government Support

accounts for $37 \%$ of employment in and $33 \%$ of the vacancies in the sector
during the survey period. These entities are the offices of government executives, legislative bodies, public finance, and general government support.

Organizations providing Administration of Human Resource
Programs offer 4\% of Government vacancies and represent just 2\% of current employment within the sector.

Justice, Public Order, \& Safety Activities have 1\% of the sector vacancies and represent $9 \%$ of employment. Courts, police and fire protection, correctional institutions, and legal counsel are included in this industry group.

Administration of Environmental Quality Programs offer less than $1 \%$ of the vacancies in the Government sector for this survey. Meanwhile, 7\% of employment and $15 \%$ of the Government institutions are classified here.

Five percent of the region's Government employment is with Hospitals, however, no vacancies are offered by these organizations in this survey. Another primarily Government-run operation is the Postal Service, accounting for 3\% of the Northwest \& Rural Resort's employment. Arts, Entertainment, \& Recreation; Construction; Utilities; Information; and many other services are administered by federal, state, and local Government.

## Appendix

> How to Use
> This Report

With the analysis of labor market conditions, many questions regarding labor demand and supply, as well as labor skills requirements, often arise...
-How many job openings are there?
What industries are hiring?

- What skills are employers seeking?
- Are employers having difficulty filling positions?

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

## Employers

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

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

Compensation and Benefits Planning-The Job Vacancy Survey provides wages offered for surveyed job openings. Tables in this report also detail current wages by occupation from Occupational Employment Statistics data. Together these pieces of information can be used to develop wage guidelines for compensation practices.
New Site Selection-Employers considering relocating or expanding to the area can study the survey and determine how easily the company's employment needs will be met by reviewing current vacancies. Companies need a sufficient, qualified labor pool to operate. High labor demand within a particular JVS sector segment along with indications of difficulty filling these positions should caution a firm requiring a similar labor profile.

## Job Seekers

The Job Vacancy Survey provides job seekers with a broad view of which industries are hiring, which occupations are in demand along with currently offered
salaries and benefits, and what education and experience levels are required. This report is a roadmap that can be used to determine where the best paying jobs are given an individual's skills and level of education.

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

## Workforce Centers

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

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

## Economic Developers

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

## Appendix

## Caveats

## The Job Vacancy Survey uses sampling methods to

 estimate over-all job vacancies for regions. As such, readers should be mindful of sampling issues.Sampling error results from the Job Vacancy Survey producing estimates from one particular sample, rather than examining the entire population. Different samples will likely result in different estimates for the population, thus we report the overall estimate with a confidence interval; i.e., the range of values within which the actual sample derived vacancy estimate is likely to fall $95 \%$ of the time.

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

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

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

The occupational detail provided is supplemental data. 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 contain significant bias. Approximately $80 \%$ of the nonestimated information comes from large employers and government agencies, but they represent approximately $33 \%$ of the employment in the region. The vacancy characteristics are therefore 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 the 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 $33 \%$ of the region's employment is with large and government employers that make up only $5 \%$ of the total number of firms. Conducting a census of these entities allows us to cover a large portion of the region's employment while contacting relatively few entities.

## Appendix: Methodology -continued

## Survey Sample

The Northwest \& Rural Resort survey was conducted from June 30th through July 7th. For the purpose of this report, all large employers, government, and small to mid-size private employers with five or more employees are referred to as the sample frame. Firms with fewer than five employees make up a very large portion of all employers in the region, but a small proportion of the total employment. Employment in the sample frame accounts for $80 \%$ of the region's total employment.

The Job Vacancy Survey separates employers into either government or private industry. Private firms are then split into large and small to mid-size categories. Firms with at least 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 ensures that all 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 $23 \%$ of private industry employment in the sample frame. Firms employing from five to 149 individuals are considered small to mid-size employers, and account for the remaining $77 \%$ of private industry employment.

The margin of error for the overall vacancy estimate is plus or minus $2.6 \%$ or 44 vacancies at a .95 certainty level. In other words, in 95 out of 100 samples taken, the actual number of vacancies in the region would be between 1,619 and 1,707. Labor Market Information is confident that the estimates in this survey are accurate and that the survey is conducted according to recognized survey research standards.

The survey response rate is $80.5 \%$. This measures the quality of the survey database, or the success experienced in contacting eligible employers. The cooperation rate is $99.1 \%$ and measures the success in obtaining data once an employer is contacted.

## JVS Sectors

The new North American Industry Classification System increases the number of major groups to 20 from the Standard Industrial Classification System. The new coding system better reflects today's service based economy and allows comparison of industries in the United States, Mexico and Canada.

In the Northwest \& Rural Resort Region, the 20 NAICS sectors have been combined into 6 JVS sectors. These groupings are based on the NAICS sectors, but are unique to this Job Vacancy Survey. The new groupings allow the Job Vacancy Survey to study local Colorado labor markets in a more relevant and meaningful way.

For more information on the North American Industry Classification System see page 32.

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

## Appendix: Methodology -continued

## Data Collection

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

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

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

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

## Data Editing

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

## Wage Conversion

Standard conversions are used to translate salaries into hourly wages: 2,080 hours for annual, 173.3 hours for monthly.
All wages reported below the federal minimum are adjusted to that amount. Currently, the federal minimum wage is $\$ 5.15$ per hour. Where only a single wage figure is reported, that wage is used as both the minimum and maximum wage for that job vacancy.

## North American Industry <br> Classification

## North American Industry Classification System (NAICS)

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

## History of Process

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

[^5]broad industry sectors, up from SIC's 10. Some new industry categories include an Information sector and a Health Care \& Social Assistance sector formerly lumped into Services under SIC.

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

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

## Things to Consider

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

## New Industries Reflected in NAICS

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

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

- Manufacturing is restructured to account for high-tech industries.
- An increase in the amount of detail overall accompanies the shift to NAICS including a further breakdown of SIC's Services sector into seven new sectors.
- Eating and drinking places move out of Retail Trade into a new category called Accommodation \& Food Services.
- The difference between Retail and Wholesale is now based on how each store conducts business. For example, many computer stores are reclassified from Wholesale to Retail.

[^6]
## Appendix

## Glossary

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

## Average Maximum Wage

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

## Average Minimum Wage

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

## Computer Assisted Telephone Interviewing (CATI)

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

## Cooperation Rate

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

## Educational Attainment

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

## Effective Response Rate

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

## Employed Persons (Employment)

Persons 16 years and over in the civilian non-institutional population who, during the reference period
a)did any work at all (at least one hour) as paid employees, worked in their own business, profession, or on their own farm, or worked 15 hours or more as unpaid workers in an enterprise operated by a member of the family, and
b)all those who were not working but who had jobs or businesses from which they were temporarily absent because of vacation, illness, bad weather, childcare problems, maternity or paternity leave, labor-management dispute, job training, or
other family or personal reasons, whether or not they were paid for the time off or were seeking other jobs.

## Employer

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

## Full-time Employee

Employees who usually work 35 hours per week or more.

## Goods Producing Industries (NAICS)

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

## Industry

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

## Job Seeker

A person actively looking for employment or researching career options.

## Job Vacancy

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

## Job Vacancy Rate

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

## Labor Force

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

## Medical Insurance

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

## Medical Insurance Premium

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

## North American Industry Classification System (NAICS)

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

## Appendix: Glossary -continued

## Not Seasonally Adjusted

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

## Occupation

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

## Part-time Employee

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

## Percentile Wage Estimate

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

## Permanent Employment

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

## Sample

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

## Sample Frame

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

## Seasonally Adjusted

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

## Service Producing Industries (NAICS)

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

## Sign-on Bonus

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

## Standard Occupational Classification (SOC) System

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

## Temporary Employment

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

## Unemployed Persons

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

## Unemployment Rate

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

## Wages

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

Labor \& Employment

## Workforce Centers in the Northwest \& Rural Resort Job Vacancy Survey 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

Workforce 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: 719-486-297
leadville@cwfc.net

## Meeker Workforce Center

## Satellite Office

345 Market Street
Meeker, CO 81641 Phone: 970-878-421 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
Workforce Center
1250 South Lincoln Avenue
Steamboat Springs, CO 80488
Phone: 970-879-3075
Fax: 970-879-3547
steamboatsprings@cwfc.ne

## Tri-County Workforce

 Center / Gilpin County2960 Dory Hill Road, Ste. 100
Blackhawk, CO 80403 Phone: 303-582-6003 Fax: 303-582-5798
nbelk@cc.trico1stop.org
Tri-County Workforce /
Mountain Center
1531 Colorado Blvd.
Idaho Springs, CO 80452
Phone: 303-567-3135
Fax: 303-567-3132
nbelk@cc.trico1stop.org


[^0]:    ## Occupational Details

    ## Occupational Estimates

    Table 1 contains a list of all of the detailed SOC job titles assigned to vacancies reported in this survey. Because nearly all large employers and Government agencies are contacted, the list contains titles for nearly all of the vacancies available at the time of the survey for those employers. About 19\% 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.

    ## Estimated Vacancies

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

[^1]:    * OES wages reported for Colorado statewide
    $\dagger$ insufficient wage data available

[^2]:    

    ## Table 2: Occupations with Fewer than Five Estimated Vacancies

    |  |  | Occupational Employment Statistics Wage Data (2003) |  |  |  |  |  |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    |  |  | Average Wage Paid |  |  | Percentile Distribution |  |  |  |  |
    | SOC Code | SOC Occupational Title | EntryLevel | Overall | Experienced | 10th | 25th | 50th | 75th | 90th |
    | 39-3091 | Amusement and Recreation Attendants | \$7.20 | \$9.60 | \$10.80 | \$6.55 | \$7.63 | \$8.65 | \$10.68 | \$13.88 |
    | 13-2021 | Appraisers and Assessors of Real Estate | \$14.01 | \$18.55 | \$20.81 | \$12.93 | \$15.05 | \$18.31 | \$21.56 | \$25.21 |
    | * 29-1121 | Audiologists | \$17.68 | \$22.28 | \$24.58 | \$16.33 | \$19.13 | \$22.65 | \$25.98 | \$28.00 |
    | 51-3011 | Bakers | \$9.21 | \$12.06 | \$13.49 | \$8.72 | \$9.83 | \$11.61 | \$14.37 | \$16.56 |
    | 13-2031 | Budget Analysts | \$20.08 | \$26.25 | \$29.33 | \$19.11 | \$20.15 | \$21.90 | \$23.76 | \$47.87 |
    | 49-3031 | Bus and Truck Mechanics and Diesel Engine Specialists | \$14.86 | \$18.67 | \$20.58 | \$14.30 | \$16.32 | \$18.89 | \$21.11 | \$23.33 |
    | 53-3022 | Bus Drivers, School | \$9.79 | \$12.85 | \$14.39 | \$9.25 | \$10.90 | \$12.41 | \$14.29 | \$18.24 |
    | 53-3021 | Bus Drivers, Transit and Intercity | \$11.37 | \$13.95 | \$15.23 | \$10.59 | \$12.26 | \$14.23 | \$16.15 | \$17.36 |
    | 35-1011 | Chefs and Head Cooks | \$12.26 | \$23.15 | \$28.59 | \$11.35 | \$14.24 | \$18.82 | \$26.85 | \$32.76 |
    | * 25-1052 | Chemistry Teachers, Postsecondary | \$38,430 | \$60,500 | \$71,540 | \$36,620 | \$43,230 | \$54,510 | \$71,520 | \$93,620 |
    | 21-1021 | Child, Family, and School Social Workers | \$13.58 | \$17.54 | \$19.53 | \$12.54 | \$14.54 | \$17.48 | \$20.64 | \$22.60 |
    | 17-2051 | Civil Engineers | \$19.83 | \$29.65 | \$34.56 | \$16.94 | \$23.18 | \$28.37 | \$33.69 | \$41.64 |
    | 19-3031 | Clinical, Counseling, and School Psychologists | \$14.56 | \$21.42 | \$24.84 | \$13.81 | \$15.56 | \$19.68 | \$27.16 | \$33.18 |
    | 27-2022 | Coaches and Scouts | \$18,272 | \$26,291 | \$30,301 | \$16,515 | \$19,895 | \$23,169 | \$27,723 | \$37,101 |
    | 11-3041 | Compensation \& Benefits Managers | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |
    | 15-1021 | Computer Programmers | \$19.85 | \$26.11 | \$29.24 | \$18.34 | \$22.31 | \$26.77 | \$31.31 | \$34.00 |
    | 15-1031 | Computer Software Engineers, Applications | \$25.18 | \$32.80 | \$36.61 | \$22.47 | \$28.41 | \$32.08 | \$36.17 | \$46.66 |
    | 15-1041 | Computer Support Specialists | \$10.40 | \$17.43 | \$20.94 | \$9.43 | \$11.72 | \$15.88 | \$21.71 | \$28.08 |
    | 15-1051 | Computer Systems Analysts | \$19.56 | \$33.05 | \$39.80 | \$16.38 | \$23.62 | \$31.61 | \$45.32 | \$51.71 |
    | 47-4011 | Construction and Building Inspectors | \$14.00 | \$19.49 | \$22.23 | \$12.60 | \$15.39 | \$18.81 | \$23.60 | \$27.79 |
    | 33-3012 | Correctional Officers and Jailers | \$12.24 | \$16.54 | \$18.69 | \$10.28 | \$14.17 | \$15.99 | \$19.37 | \$24.13 |
    | * 43-4021 | Correspondence Clerks | \$10.57 | \$14.25 | \$16.09 | \$9.90 | \$11.39 | \$13.66 | \$17.26 | \$20.30 |
    | 39-3092 | Costume Attendants | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |
    | 43-4031 | Court, Municipal, and License Clerks | \$10.71 | \$14.79 | \$16.83 | \$8.44 | \$13.01 | \$15.18 | \$17.14 | \$20.08 |
    | 43-4051 | Customer Service Representatives | \$6.35 | \$11.49 | \$14.06 | \$6.11 | \$6.87 | \$11.20 | \$14.70 | \$18.91 |
    | * 29-2032 | Diagnostic Medical Sonographers | \$17.25 | \$26.80 | \$31.58 | \$13.19 | \$21.63 | \$25.69 | \$32.45 | \$41.12 |
    | 11-9032 | Education Administrators, Elementary and Secondary School | \$53,216 | \$65,125 | \$71,079 | \$51,188 | \$57,058 | \$64,799 | \$73,342 | \$84,533 |

    * OES wages reported for Colorado statewide
    $\dagger$ insufficient wage data available

[^3]:    * OES wages reported for Colorado statewide
    $\dagger$ insufficient wage data available

[^4]:    * OES wages reported for Colorado statewide
    $\dagger$ insufficient wage data available

[^5]:    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
    ${ }^{2}$ 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 ${ }^{3}$ Specifically, Mexico's Instituto Nacional de Estadística, Geografía e Informàtica (INEGI) and Statistics Canada

[^6]:    U.S. Bureau of the Census, U.S. Department of Commerce

