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Mesa County

Job Vacancy Survey

Spring 2004



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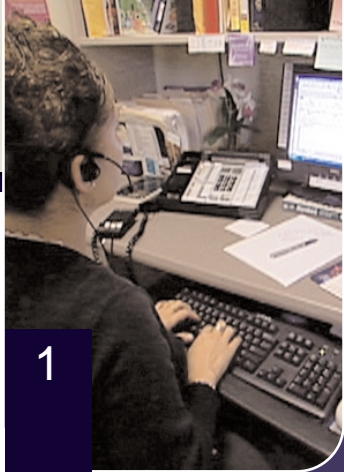
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The Colorado Job Vacancy Survey

Introduction

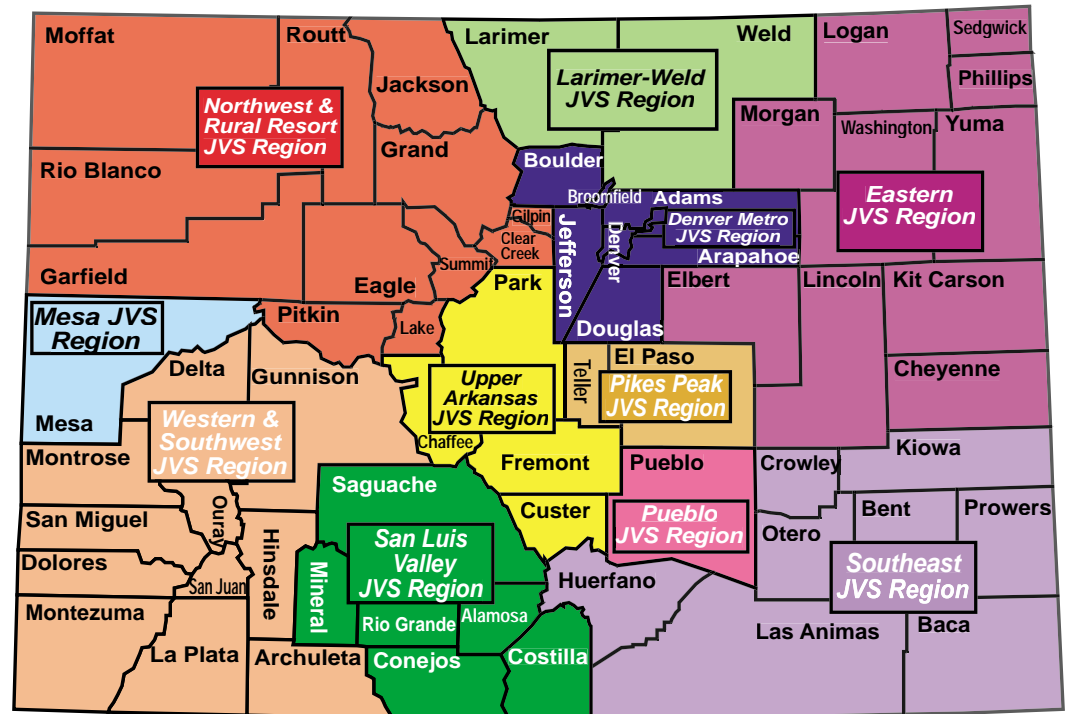
The unemployment rate, along with the level and growth rate of employment, has been used as an indicator of labor market conditions for decades. While this indicator provides information about changes in the supply and demand for labor, it reveals nothing about the skills most sought after by employers. 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 these needs. The JVS is designed to provide a snapshot estimate of job vacancies along with detailed information and analysis on accompanying wages, skill requirements, and work experience.

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

Figure 1: Colorado Job Vacancy Survey Regions



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

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

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

The Spring 2004 Mesa County Job Vacancy Survey (JVS) was conducted from March 22nd through the 31st, 2004. The survey provides a reliable estimate of the total number of job vacancies in the region while also relating demand-specific information about the available positions. The goal of the survey is to provide current information on the demand for workers so that employers, job seekers, economic developers, educators and workforce centers can make informed decisions in Mesa County.

The Job Vacancy Survey is conducted twice a year, in spring and fall, to provide frequent and timely analysis of the demand for labor. The survey is directed at all government entities and private employers with five or more employees. Employers are asked if they are currently hiring, and if so, details about those positions they are seeking to fill.

A total of 952 employers representing 50% of the region's total employment responded to the survey. Of these, 56 are Government agencies, 49 are large employers and 847 are small to mid-size employers. The response rate for this survey is 82.9% while the cooperation rate is 98.7%. The margin of error for the overall vacancy estimate is plus or minus 3.6%, or about 34 vacancies.

Major Findings of the Survey:

- ◆ An estimated 941 jobs were available for hire during this survey period, coinciding with a 1.9% vacancy rate.Page 7
- ◆ Health Care & Social Assistance employers offer 271 vacancies, the highest number in Mesa County.Page 7
- ◆ The average reported wage for vacancies in this survey is \$10.80 per hour. ..Page 7
- ◆ Fifteen percent of surveyed employers report at least one job vacancy.Page 9
- ◆ Only 39% of the reported openings are full-time, permanent positions.Page 10
- ◆ A majority of the reported job vacancies require educational attainment at the high school/GED level, or no diploma at all.Page 11
- ◆ Sixty-two percent of the job vacancies require experience in a related field.Page 12
- ◆ Forty-seven percent of the vacant positions have been open for 60 or more days.Pages 13-14
- ◆ Office & Administrative Support occupations are the most frequently reported of the 21 major occupational groups for which vacancies are reported in this survey.Page 17

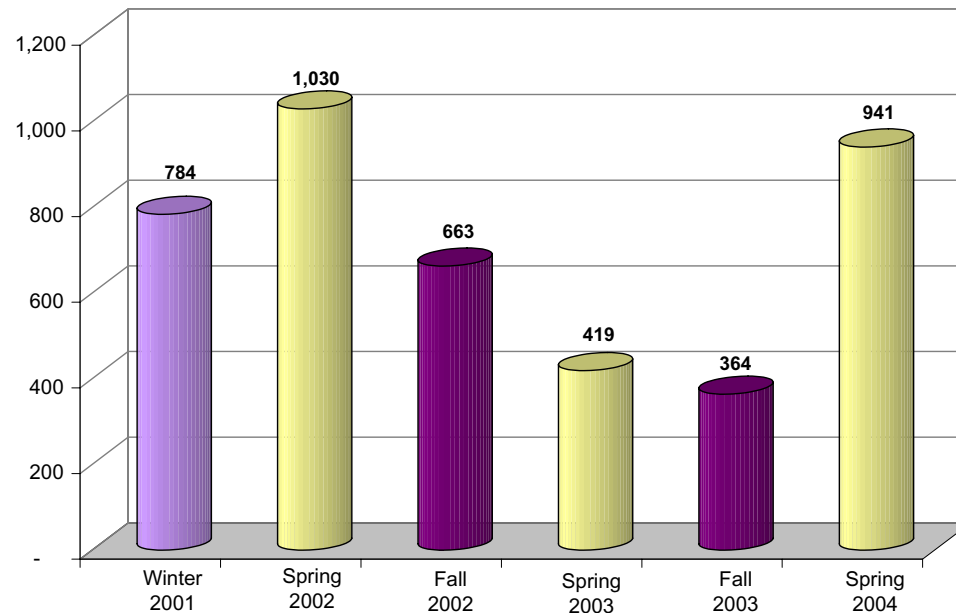


Regional Information

Mesa County is the largest population center in western Colorado. While serving as an employment hub for the county and surrounding areas, the city of Grand Junction is home to 43,170 people. Fruita is the next largest city with 6,686 people. The next three largest towns in the county have populations ranging from 400 to more than 2,600 people. The outlying areas combined are home to more than 68,000¹. The Demography Section of the Colorado Department of Local Affairs estimates Mesa County's population at 122,463 people².

With relatively moderate weather and highly regarded medical facilities, Mesa County is an attractive home for retirees. Fifteen percent of the county's population is age 65 or older; this compares to less than 10% for Colorado as a whole and just over 12% for the United States³. Given these demographics, industries that provide services to the older population are needed and constitute a larger portion of the labor economy than in some other regions.

Figure 2: Historical Vacancies—Mesa County



	Winter 2001	Spring 2002	Fall 2002	Spring 2003	Fall 2003	Spring 2004
Vacancies	784	1,030	663	419	364	941
Employment	55,565	59,543	63,024	61,666	64,752	62,765
Unemployed	2,717	3,016	2,840	3,636	3,501	3,467
Unemployment Rate	4.7%	4.8%	4.3%	5.6%	5.2%	5.2%

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

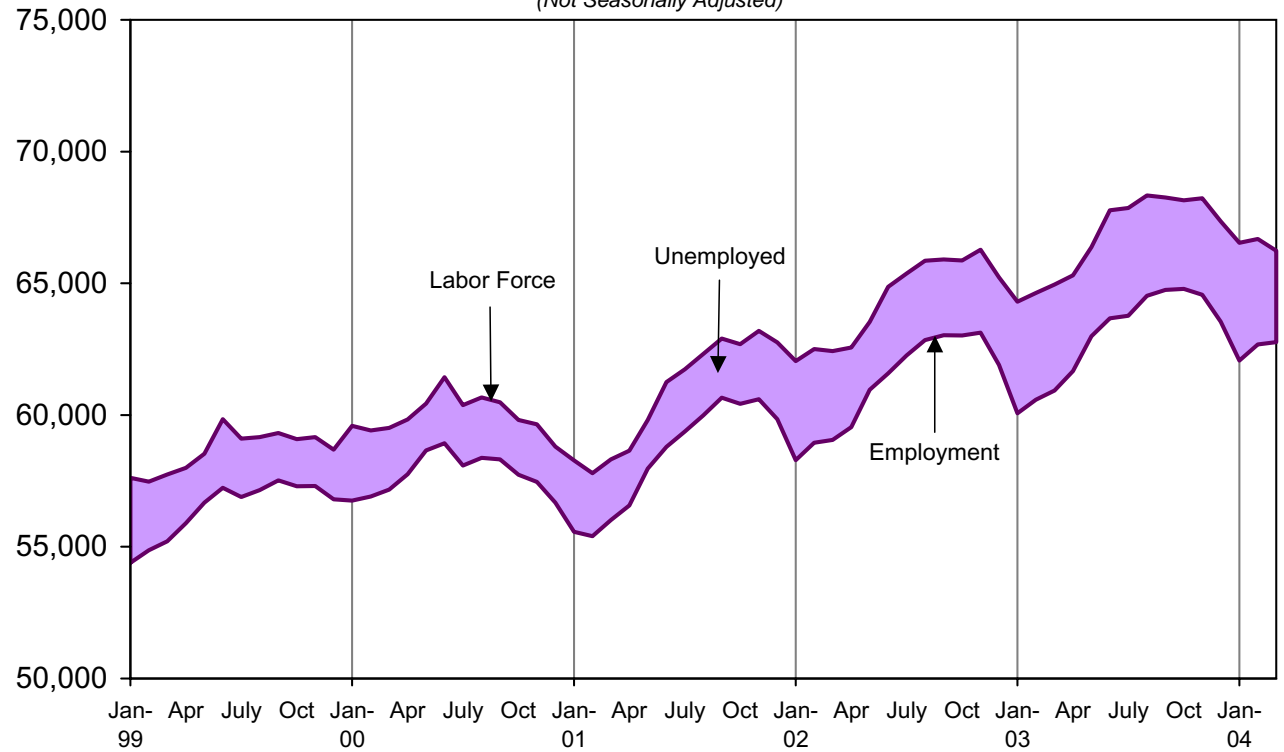
¹U.S. Census Bureau 2002 Population Estimates

²DOLA, Colorado Demography Section. 2002 County Population Yearly Estimates

³U.S. Census Bureau. Profile of Demographic Characteristics, 2000.

Figure 3 illustrates the historical progression of both the region's labor force and employment levels. The shaded area between the labor force and employment lines represents the number of unemployed people. The upward trend illustrates the growth in both the labor force and employment over the years. Though the number of unemployed has increased, both the labor force and employment figures are climbing as well. The region's labor force grew at a compound annual rate of 3.5% while employment grew 3.3% from March of 1999 through March of 2004. The net growth in the labor force over the five-year period is about 14.7%. The graph illustrates a general growth trend over the last five years.

Figure 3: Employment and Labor Force Trends for Mesa County
(Not Seasonally Adjusted)

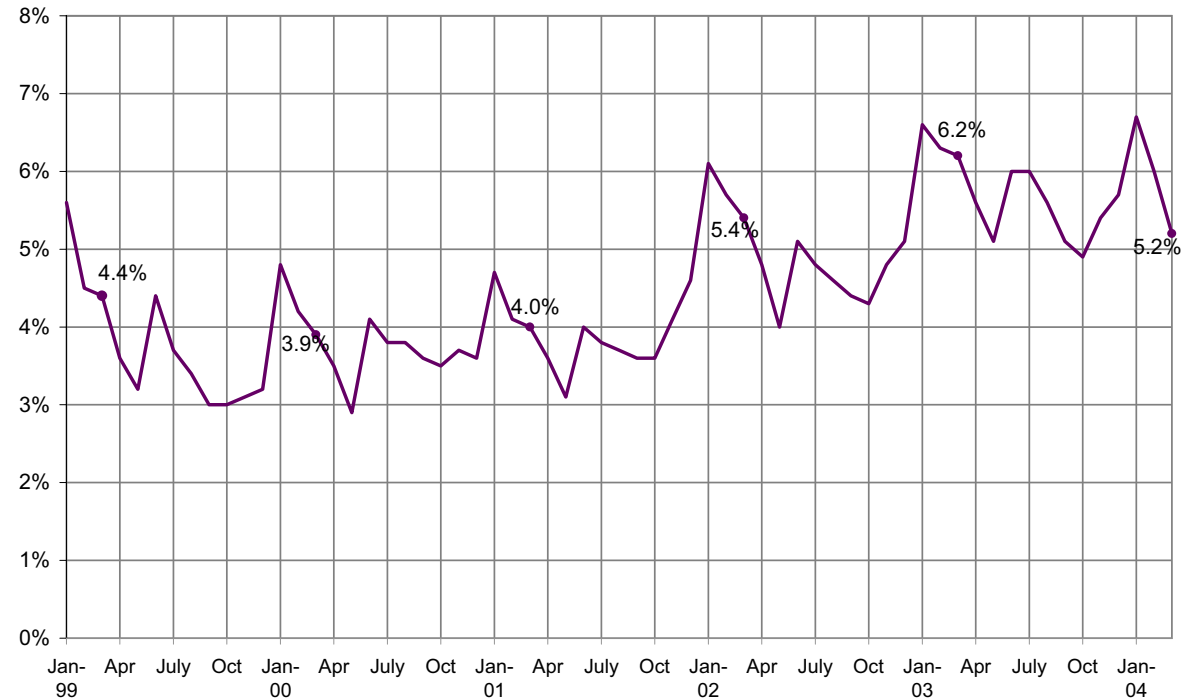


Source: CDLE, Local Area Unemployment Statistics, Released April 2004

Figure 4 highlights unemployment rate changes in Mesa County. The unemployment rate, the ratio of unemployed to the labor force, has peaked each January in recent history. The labor force experiences a seasonal decline early each year that is outweighed by a decline in the number of jobs, thus causing an increase in the unemployment rate. It is in the second quarter of the calendar year that the gap between the labor force and employment is most narrow. For the time period shown, the highest rate of unemployment was recorded in January 2004, when it reached 6.7%. The unemployment rate in the county has followed a slight upward trend with seasonal fluctuations since 2001.

Mesa's unemployment rate of 5.2% is equal to that of the state in March. The U.S. not-seasonally-adjusted rate is 6.0%.

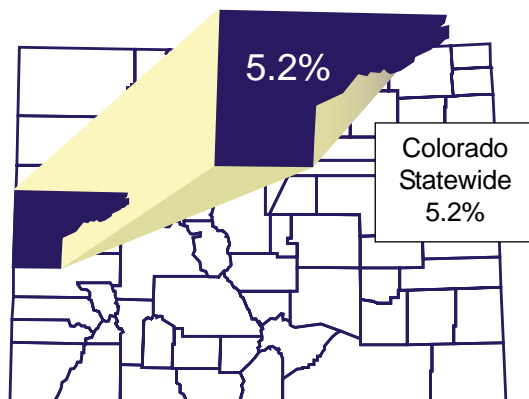
Figure 4: Mesa County Unemployment Rate Trend
(Not Seasonally Adjusted)



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

Figure 5: Unemployment Rates for March 2004

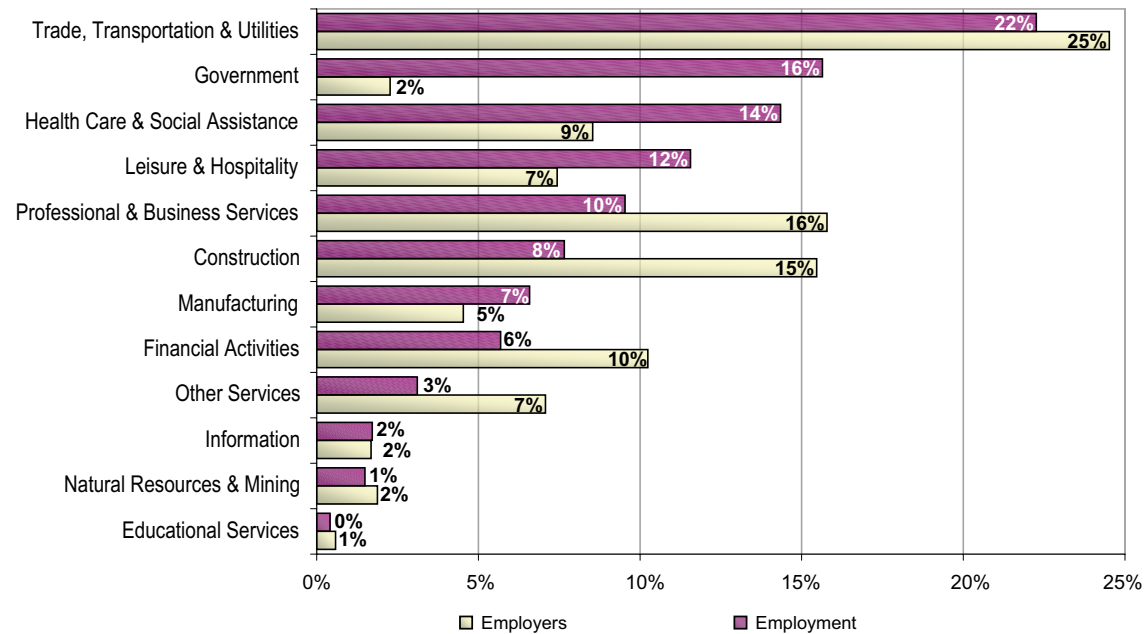
(Not Seasonally Adjusted)



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

Regional Information —continued

Figure 6: Mesa County Employers and Employees, 1st Quarter, 2003



Source: CDLE, Quarterly Census of Employment and Wages (QCEW), 1st Quarter, 2003

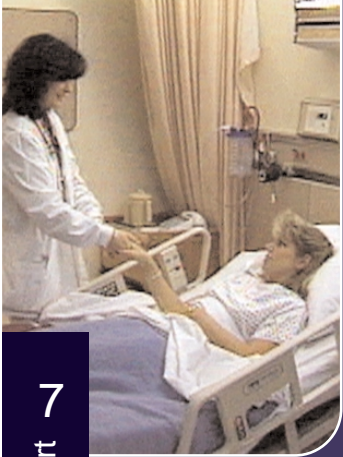
Establishments in Mesa County are grouped into 12 JVS sectors derived from the North American Industrial Classification System (NAICS). These classifications provide a framework for understanding the region's economic activity in both labor and financial terms.

Figure 6 presents employers and employment data for the 12 JVS sectors used in most Metropolitan Statistical Areas (MSAs) in Colorado (Page 28). Data are gathered under the Quarterly Census of Employment and Wages (QCEW) program and include employers required to pay Unemployment Insurance Tax. Although 98%⁴ of the nation's jobs are covered under the Unemployment Insurance program, positions typically excluded are agriculture, railroad, elected officials, student workers, certain non-profits, domestic workers, unpaid family workers and the self-employed.

- **Trade, Transportation & Utilities** is the largest JVS sector representing 22% of the region's employment and 25% of employers. Retail businesses provide more than 40% of this sector's employment. Trade, Transportation & Utilities is also the largest employment sector for the state of Colorado, constituting 20% of total employment as of 1st Quarter, 2003.

- **Government** is the second largest sector in terms of employment. All public employees are included in this sector. These entities perform functions in health care, social services and transportation, including postal services, among other industry categories. Forty-seven percent of the region's Government employment is in Educational Services while 31% is in Public Administration.

⁴U.S. Department of Labor, Bureau of Labor Statistics. <http://www.bls.gov/cew/home.htm>



Survey Findings

Estimated Vacancies: JVS Sectors and Employer Size

Survey results and employer and employment figures are based on a sample of employers that includes all Government institutions and private firms with five or more employees in the region.

During the survey period, an estimated 941 vacancies were open for immediate hire with an average wage of \$10.80 per hour. The overall vacancy rate is 1.9%; this statistic represents the relative demand for additional labor in terms of current employment and open positions.

The Job Vacancy Survey is designed to reflect hiring activity by industry groups. In this survey, 29% of the estimated job openings, or 271 vacancies, are in

the **Healthcare & Social Assistance JVS** sector. Organizations reporting these vacancies are:

- Hospitals: 61%
- Ambulatory Health Care Services: 18%
- Nursing & Residential Care Facilities: 17%
- Social Assistance: 4%

The **Professional & Business Services JVS** sector is estimated to have the second highest number of vacancies. With a vacancy rate of 7.7%, there are an extraordinary number of open positions as compared to currently filled jobs. The 64 estimated job openings fall into these more detailed business groups:

- Administrative & Support Services: 96%
- Professional, Scientific, & Technical Services: 4%

Leisure & Hospitality has an estimated 138 job vacancies, with a vacancy rate that translates to 22 vacancies for every 1,000 positions.

- Food Service & Drinking Places: 77%
- Accommodation: 13%

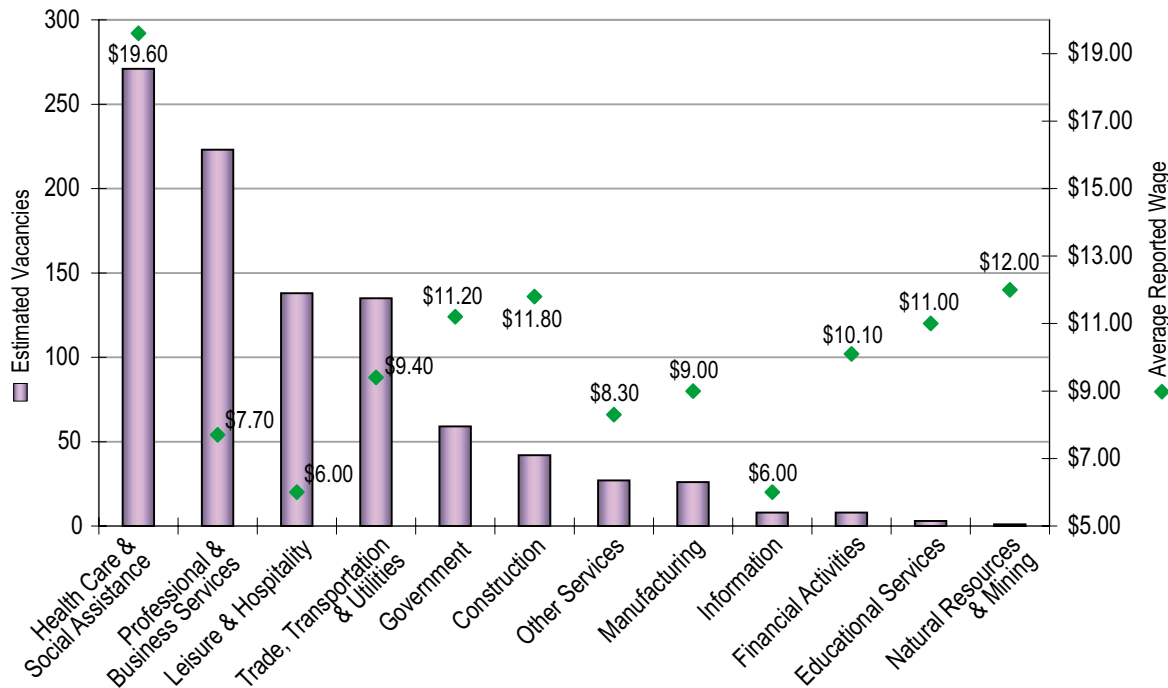
There are also job opportunities with Amusement, Gambling & Recreation Industries; Performing Arts, Spectator Sports & Related Industries; Museums, Historical Sites, & Similar Institutions.

Trade Transportation & Utilities has a 1.3% vacancy rate with an estimated 135 job vacancies distributed among four NAICS Sectors as follows:

- Retail Trade: 66%
- Wholesale Trade: 17%
- Transportation & Warehousing: 15%
- Utilities: 2%.

The remaining eight JVS sectors each offer job vacancies, from 59 in Government down to one in the group representing Natural Resources & Mining businesses. Other Services has a relatively strong

Figure 7: Estimated Vacancies and Average Wages by JVS Sectors



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

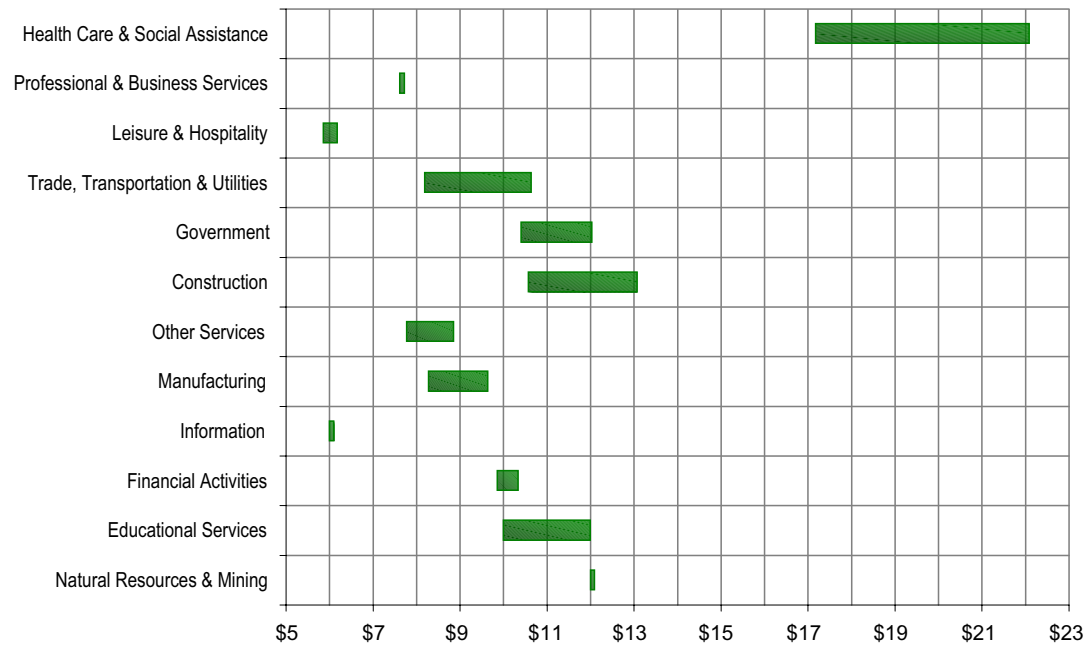
vacancy rate for this survey period. At 2.2%, there are 22 vacancies for every 1,000 positions.

Average wage ranges for each JVS sector are presented in *Figure 8*. These wages are based on data supplied by employers during the survey period and relate specifically to vacancies, not filled positions. In this survey, wages are reported for 86% of all vacancies. The type of occupation, the skills and knowledge required to fill the vacancy, and personnel

practices of the employer offering the position generally influence the wage offered.

Five JVS sectors offer average wages above the overall survey average of \$10.80. Health Care & Social Assistance has the highest number of vacancies as well as the highest average wage reported.

Figure 8: Reported Average Wage Ranges by JVS Sectors



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

Overall, 15% of employers surveyed reported at least one job vacancy. That said, the likelihood of finding an open position at a business varies with employer size, as defined by ownership (government or private) and the number of employees at a firm. About 47% of large and 18% of Government employers surveyed report a vacancy, while 13% of the small to mid-size employers have an opening.

Large private employers (those with 100 or more employees) offer 50% of the estimated vacancies. In prior surveys small to mid-size firms (those with five to 99 employees) have accounted for the greatest number of vacancies. A hiring spree in the Professional & Business Services sector explains the unusually high number of vacancies in the JVS sector and employer size group.

The average wage offered for vacancies with **small to mid-size** firms is \$9.00. Job openings reported by Leisure & Hospitality businesses heavily impact the wage for this size group, representing 30% of the vacancies.

Six percent of the estimated vacancies are with **Government** institutions. Actual reported vacancies show 79% of these vacancies are with local governments and 21% with state, while federal institutions have no vacancies.

Figure 9: Estimated Vacancies and Average Wages by Employer Size

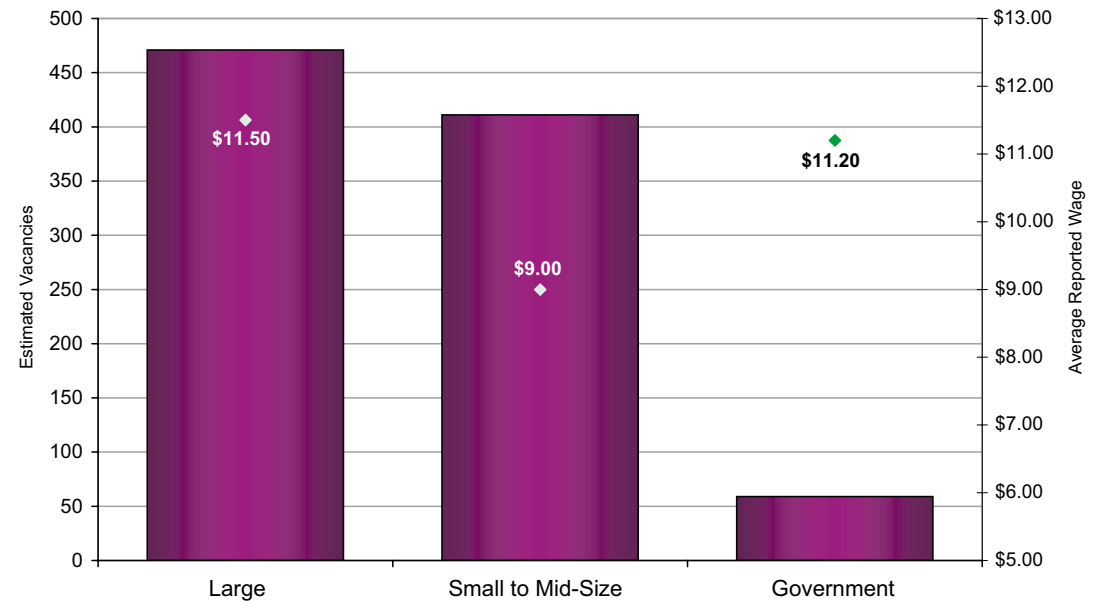
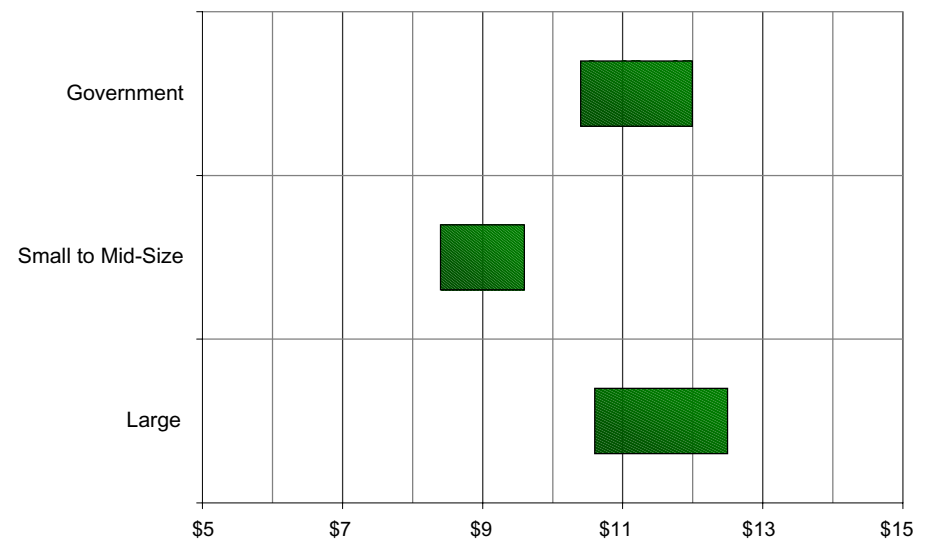


Figure 10: Reported Average Wage Ranges by Employer Size



Survey Findings

The remainder of this report provides descriptive statistics on 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, the following information may be used to understand characteristics of those job vacancies and occupations reported.

Figures 11 and 12 refer to employment status. **Full-time/permanent** positions account for the largest proportion of job vacancies. The group of full-time/permanent job vacancies represents openings with various JVS sectors, but is largely composed of vacancies offered by Government (20%), Trade, Transportation & Utilities (19%) and Health Care & Social Assistance (19%).

An unusually large portion of the vacancies are **full-time/temporary** positions – more than 90% of these are offered by the Professional & Business Services JVS sector. This sector also accounts for all part-time/temporary jobs offered. The wages for these two employment status categories represent the jobs currently offered by this industry group.

Sixty percent of the part-time/permanent positions offered are in the Health Care & Social Assistance sector. A range of industries and occupations are represented by the vacancies for both part-time and full-time/permanent positions with Healthcare Practitioner & Technical occupations supporting the high end of the wage range.

Figure 11: Vacancies by Employment Status

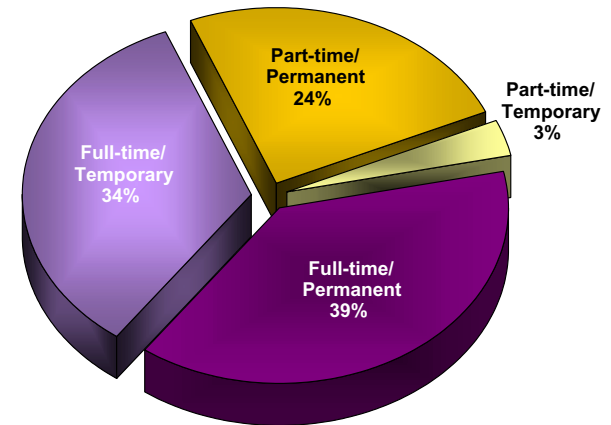


Figure 12: Reported Average Wage Ranges by Employment Status

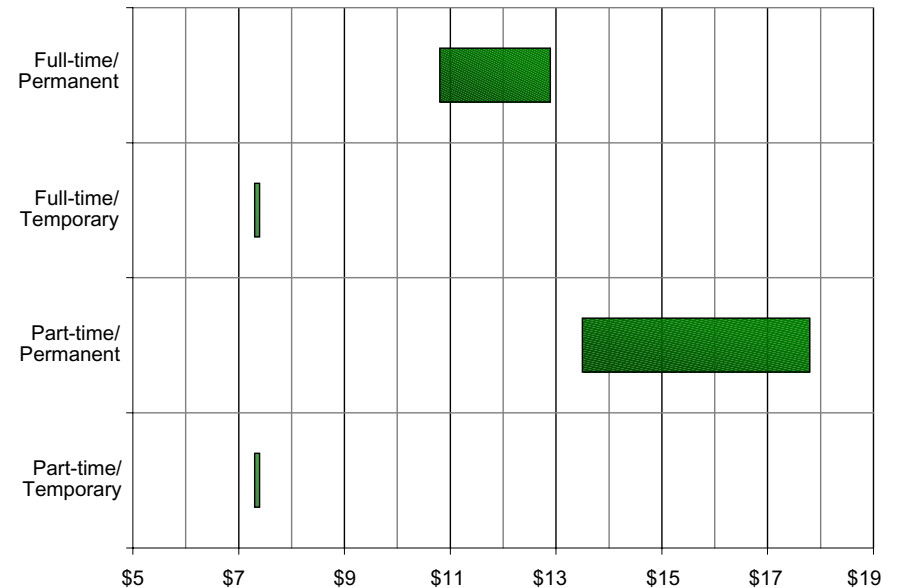


Figure 13: Vacancies by Education

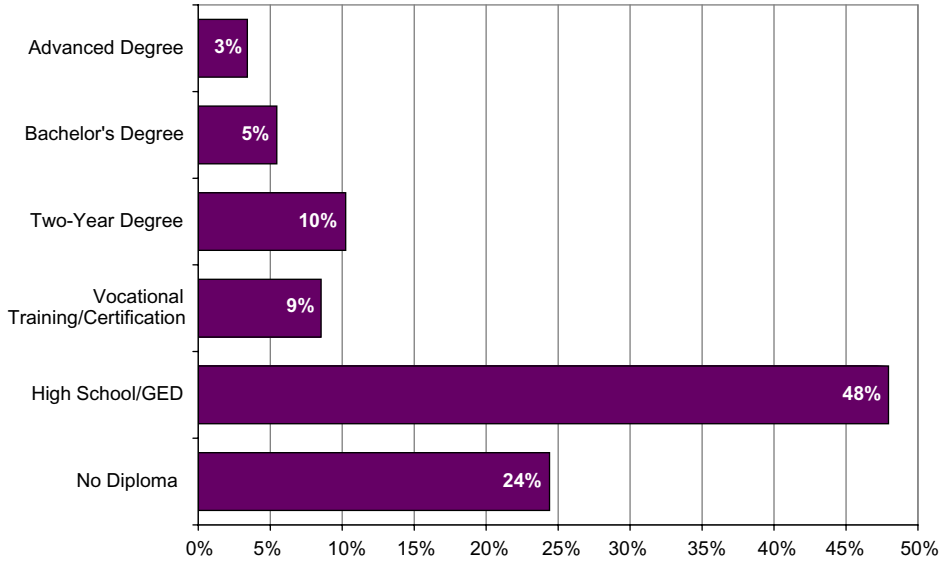
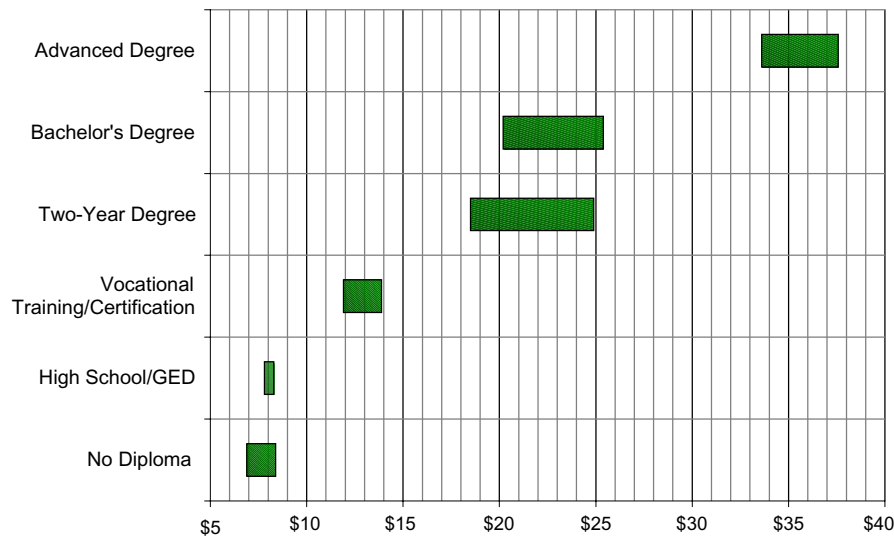


Figure 14: Reported Average Wage Ranges by Education



Assessing labor demand in terms of education and experience requirements provides valuable labor market information. Ninety-eight percent of reported job vacancies include information on the education and experience requirements of hiring employers.

Advanced Degree: Job vacancies available to candidates with advanced degrees are offered by organizations in the Government, Health Care and Social Assistance and Professional & Business Services JVS sectors. They include vacancies in several different major occupational groups, but the majority are for Education, Training, & Library occupations followed by Healthcare Practitioner & Technical. Wages offered for Healthcare Practitioner & Technical job openings are the highest, while Education, Training, & Library positions pay the least for positions requiring an advanced degree.

Bachelor's Degree: Fifty-six percent of the job vacancies requiring bachelor's degrees are offered by Health Care & Social Assistance organizations. The remaining vacancies are with Government, Professional & Business Services, and Other Services firms. Nine different major occupational groups represent the job vacancies employers seek to fill. The highest wages are offered for Computer & Mathematical positions while Community & Social Service jobs offer the lowest salaries of jobs requiring bachelor's degrees. Healthcare Practitioner & Technical positions are most abundant in this educational group and provide the most input to the wage data shown.

Two-Year Degree: Health Care & Social Assistance organizations account for 88% of the job vacancies requiring a two-year degree, while four other JVS sectors represent employers with vacancies in this educational group. Not surprisingly Healthcare Practitioner & Technical occupations account for a vast majority of the vacancies.

Vocational Training/Certification: Once again, Health Care & Social Assistance organizations offer the largest number of job vacancies (42%). Employers seeking candidates whose highest level of education or training is vocational or certification most desire workers to fill Healthcare Support occupations, but nine other major occupational groups also represent the vacancies reported.

High-School/GED: Vacancies offered by Professional & Business Services firms account for 73% of the vacancies in this education group. Meanwhile, jobs in Office & Administrative Support represent 80% of the occupations in demand. Outside of the hiring push for Reservation and Transportation Ticket Agents and Travel Clerks, job vacancies are represented by businesses in nine other JVS sectors and 13 other occupational groups.

No Diploma: Together, the Leisure & Hospitality sector followed by Trade, Transportation & Utilities offer most of the vacancies that do not require high school graduation. Food Preparation & Serving Related jobs, Building & Grounds Cleaning & Maintenance roles, Sales & Related positions, and Transportation & Material Moving vacancies represent most of the opportunities open to candidates with no diploma.

The JVS also collects experience requirements for job vacancies. The experience levels demanded by employers can be used to guide employment-training programs and to help job candidates plan for career development. *Figure 15* shows the percentage distribution of vacancies by experience requirement.

A majority of job vacancies require experience in a field related to that for which the employer is hiring. Sixteen major occupational groups represent the vacancies available to candidates with experience in a related field.

Vacancies for which no experience is required account for 22% of all vacancies reported. Twelve different major occupational groups represent the vacancies with the majority being in Food Preparation & Serving Related; Building & Grounds Cleaning & Maintenance; and Transportation & Material Moving.

Reported job vacancies for candidates with experience in the occupation are available in 21 of the 22 major occupational groups.

There are a limited number of job openings that require general work experience. These pay less than vacancies requiring no prior work experience, because vacancies for well-paying Healthcare Practitioner & Technical jobs and Legal positions are available to candidates with no experience in this survey. However, it is likely that an experienced candidate applying for these positions may be offered a higher wage than a candidate without experience.

Figure 15: Vacancies by Experience

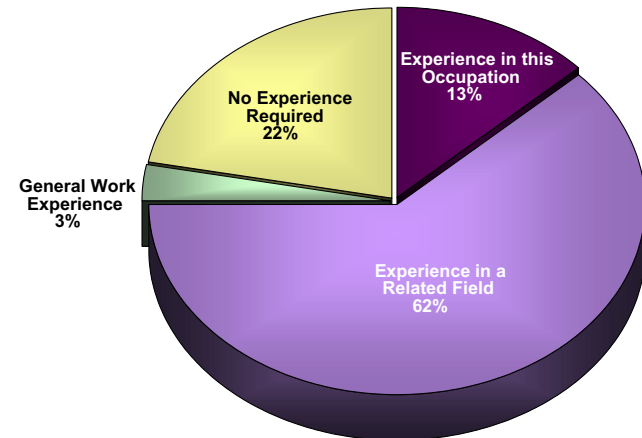
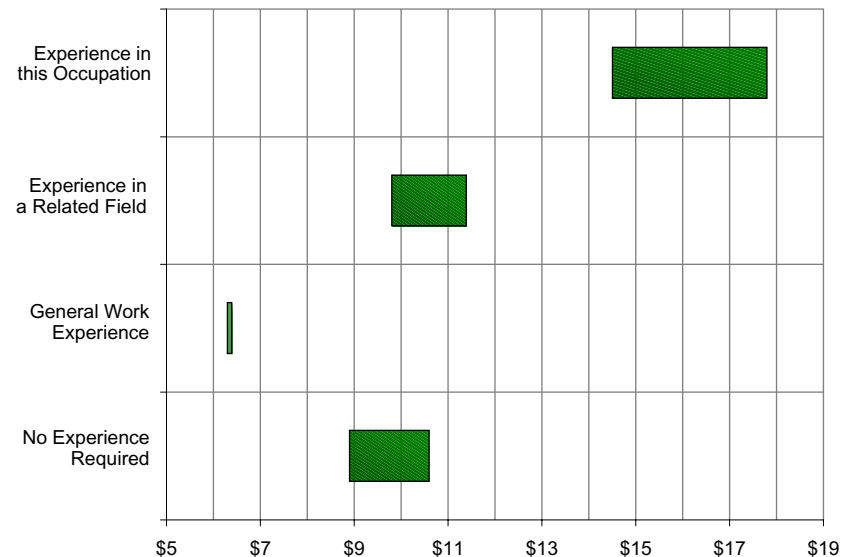
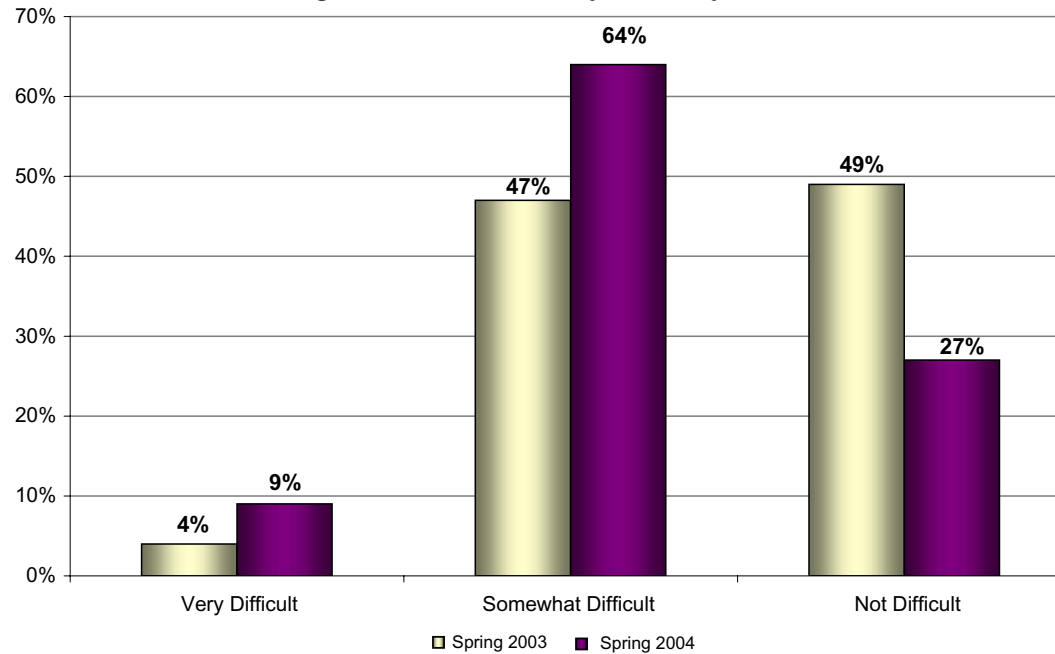


Figure 16: Reported Average Wage Ranges by Experience



Survey Findings

Figure 17: Vacancies by Difficulty to Fill



An employers' ability to find and hire qualified candidates provides important information about the labor force. Mesa County employers are finding it more difficult to fill their vacant positions this spring as compared to last. Sixty-four percent of the job vacancies are described as somewhat difficult to fill.

Office & Administrative Support and Construction & Extraction jobs are most frequent among occupations reported by employers as somewhat difficult to fill.

Although 11 different occupational groups are represented among the vacancies employers describe as very difficult to fill, only Personal Care & Service and Life, Physical & Social Science positions are more often reported as very difficult than somewhat or not difficult to fill.

The length of time that a vacancy is open is a good indicator of the degree of difficulty an employer is having in filling a position. Factors include: the availability of qualified candidates, competition among employers for similar candidates, and the willingness of candidates to accept job duties in light of wages and benefits offered.

The unusually large proportion of vacancies that have been open for **60 or more days** is attributed to the great number of Reservation & Transportation Ticket Agents & Travel Clerks sought during the survey period. Prior to this, a high of 15% of total vacancies was reported as open for 60 or more days in the Fall 2002 survey.

Sixteen different major occupations are identified in this group of vacancies that have been open for **less than 30 days**. The Protective

Service occupations reported are among the lowest paying in this group, while vacancies for Management roles are some of the highest.

Various occupations have gone unfilled for **30 to 59 days**—Construction & Extraction positions are most frequent among them. However, occupations represented in this group range from Transportation & Material Moving jobs with minimal wages to Legal occupations with fairly high pay. The average wage range is relatively broad—employers report a wide range for certain job vacancies. They may choose to pay an inexperienced candidate on the low end, and a highly skilled person at the top of the range.

Employers frequently report that they are always looking to hire Food Preparation & Serving Related workers, Transportation & Material Moving professionals, and Healthcare Practitioner & Technical people. Although ten different occupational groups comprise this segment, wages for Food Preparation & Serving related positions have the most influence on the wage range representing 27% of the vacancies for which employers are **always hiring**.

Figure 18: Vacancies by Time Open for Hire

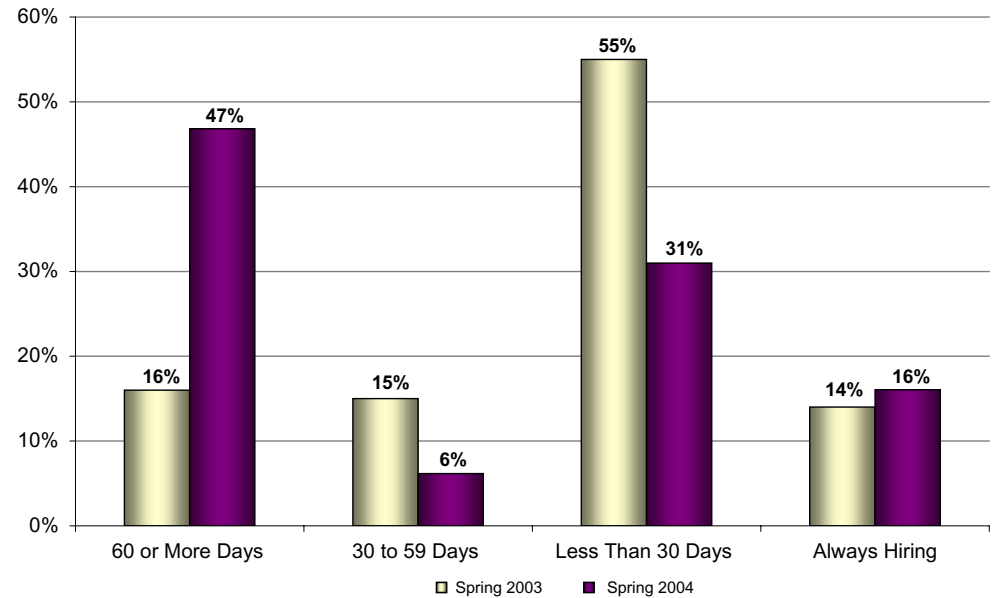
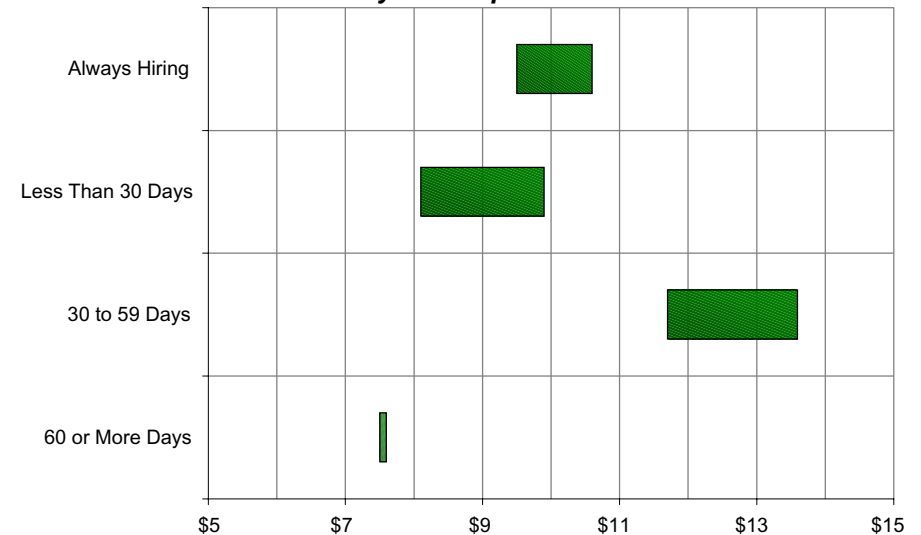


Figure 19: Reported Average Wage Ranges by Time Open for Hire



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 – the employer may pay all, part or none of the monthly insurance premium for employees.

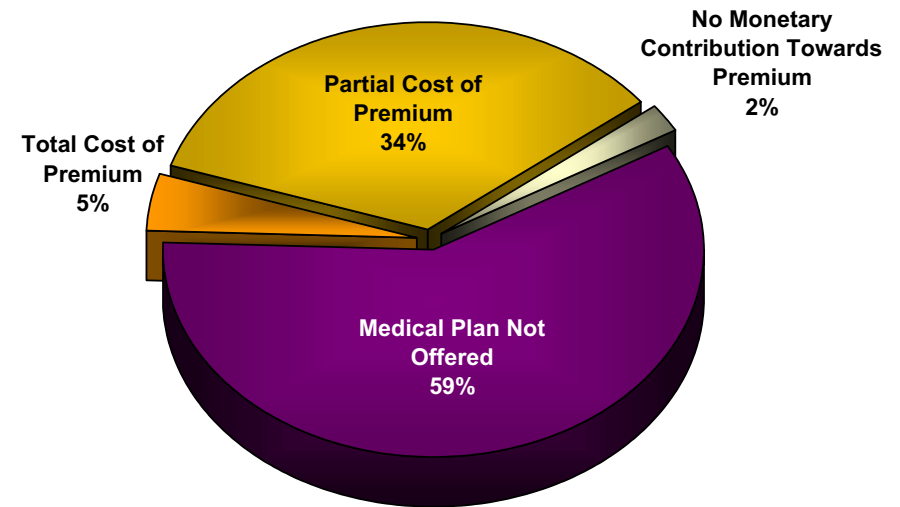
Fifty-nine percent of reported job vacancies are with employers who offer no company sponsored medical plan for the employee. Again, the high number of vacancies for Reservation & Transportation Ticket Agents & Travel Clerks reported has heavily influenced the survey results. In each of the prior Mesa County surveys, more vacancies have included a medical benefit than have not.

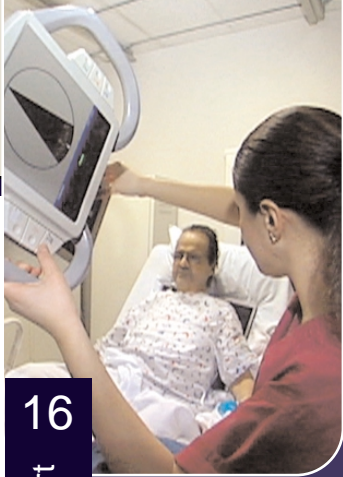
Most job vacancies for which an employer sponsored medical plan is available include a monetary contribution toward the monthly premium paid by the employer.

Sign-On Bonus

No job vacancies in this survey include a sign-on bonus. Sign-on bonuses are virtually nonexistent in this market characterized by a large supply of labor and a limited number of vacancies. The sign-on bonus was a popular recruitment tool in the 1990s economy characterized by a tight labor market.

Figure 20: Employers' Contribution to Medical Insurance





Introduction

Occupational Details

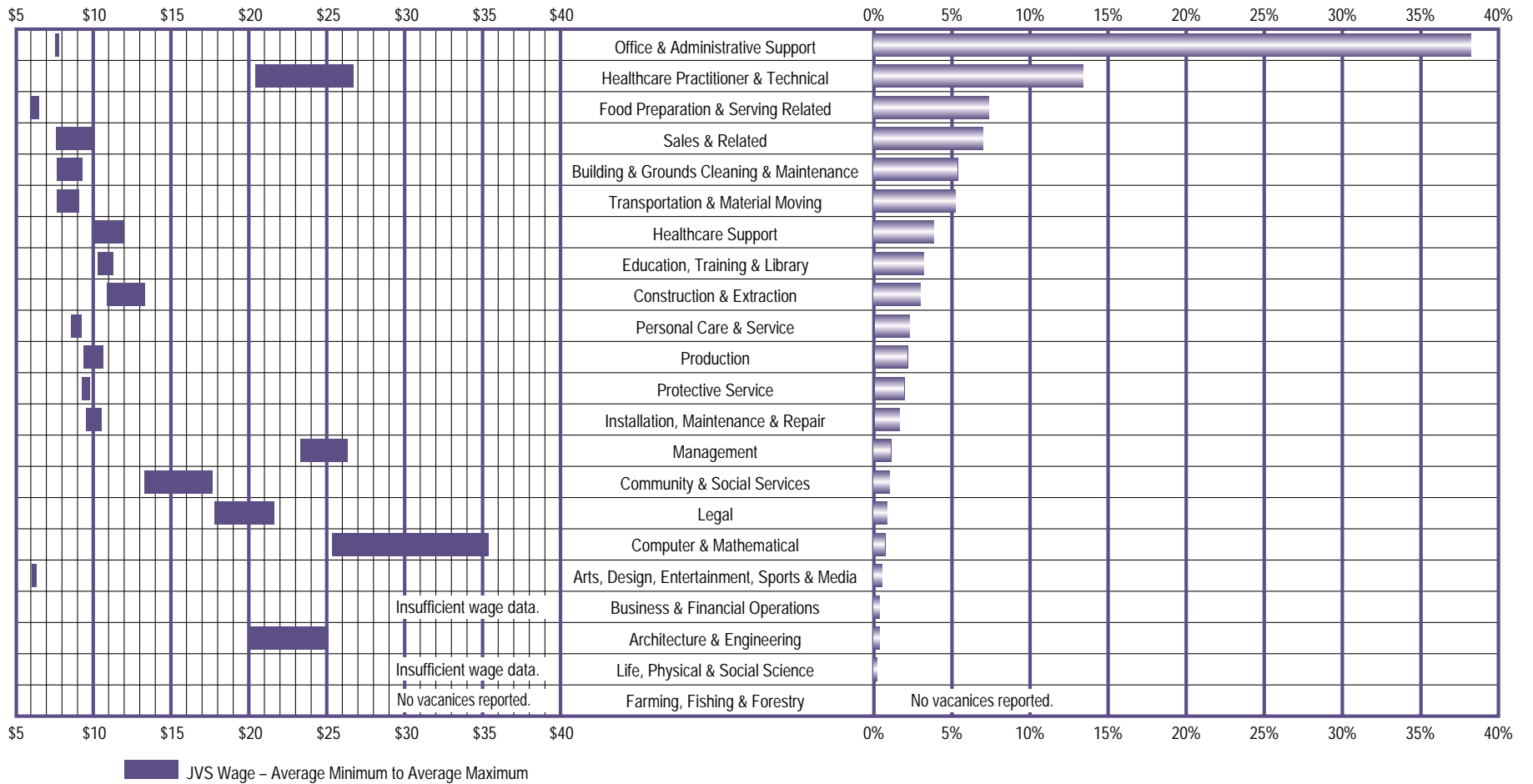
In order to help make comparisons between the results of this survey and other sources of employment statistics, all jobs reported are assigned a Standard Occupational Classification (SOC) code from the *2000 Standard Occupational Classification Manual*. The JVS utilizes 801 detailed SOC titles combined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

At the major SOC occupation level shown in *Figure 21*, job vacancies in Office & Administrative Support occupations top the list representing a great number

of job openings for Reservation & Transportation Ticket Agents & Travel Clerks in addition to other vacancies within this major occupational group. Healthcare Practitioner & Technical vacancies had represented at least 20% of the total job vacancies in the prior four surveys. These occupations continue to be in high demand, but their overall representation in the survey statistics has been diminished with the unusual hiring push in the Office & Administrative Support occupations. Surveyed employers reported no job vacancies in the Farming, Fishing & Forestry occupations.

The wages associated with these occupations reflect the training and education required, as well as the supply of, and demand for labor appropriately skilled for the job.

Figure 21: Vacancies and Reported Average Wage Ranges by Major Occupational Groups



Occupational Estimates

Tables 1 and 2 contain a list of all of the detailed SOC job titles assigned to vacancies reported in this survey. As a census of large employers and Government agencies is conducted, the list contains titles for nearly all of the vacancies available at the time of the survey for those employers. Forty-five percent of small to mid-size employers were contacted for the random sample, and likewise the occupations associated with those vacancies are listed. Though the sample of small to mid-size employers is representative and significant, it is not exhaustive. Most likely, if a different random sample had been drawn there would be some differences in the job titles reported, but there would also be many of the same.

Vacancies estimated and reported are displayed in *Table 1* for those occupations where at least ten vacancies are estimated.

Estimated Vacancies

Because nearly all large employers and Government agencies are contacted, the number of vacancies by occupation for those groups is not estimated; it is an actual accounting of the vacancies. However, in addition to the number found, vacancies are estimated for occupations reported by small to mid-size private firms. The additional estimated occupational vacancies are calculated per the current mix of occupations found in the region, but restricted to the occupation titles reported in the survey.

Vacancies Found

This column of *Table 1* refers to the number of vacancies reported in the survey.

Average JVS Wage

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

Occupational Employment Statistics (OES) Wage Data

Occupational Employment Statistics (OES) wage data are provided for each occupation. OES data are based on a national survey of employers and refer to filled positions, not vacancies. The data provided here are reported for Mesa County when available and statewide otherwise. Data were collected over three years, from 1999 through 2001, and are aged to September 2002. A complete description of the OES survey is available on the Internet at: <http://www.bls.gov/>.

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

Table 1: Occupations with 10 or More Estimated Vacancies

					Occupational Employment Statistics Wage Data (2002)								
					Average Wages			Percentile Distribution					
SOC Code	SOC Occupational Title	Vacancies Estimated	Vacancies Found	Average JVS Wage	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th	
43-4181	Reservation and Transportation Ticket Agents and Travel Clerks	205	201	\$7.30	\$7.70	\$9.81	\$10.87	\$7.32	\$8.04	\$9.27	\$10.80	\$11.85	
29-1111	Registered Nurses	46	43	\$23.20	\$17.71	\$20.73	\$22.24	\$16.70	\$18.38	\$20.08	\$21.76	\$26.38	
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	44	25	\$6.00	\$6.19	\$6.64	\$6.87	\$5.73	\$6.05	\$6.59	\$7.14	\$8.21	
41-2011	Cashiers	28	17	\$7.90	\$6.37	\$9.07	\$10.41	\$6.07	\$6.93	\$8.15	\$10.48	\$14.65	
37-3011	Landscaping and Groundskeeping Workers	25	22	\$8.50	\$7.89	\$10.80	\$12.25	\$7.59	\$8.31	\$10.00	\$12.45	\$16.10	
41-2031	Retail Salespersons	18	12	\$9.50	\$6.79	\$11.17	\$13.35	\$6.25	\$7.43	\$9.47	\$12.58	\$18.96	
11-9199	Managers, All Other	17	2	†	\$16.27	\$27.60	\$33.26	\$14.02	\$19.75	\$27.80	\$34.34	\$42.39	
43-4171	Receptionists and Information Clerks	17	4	\$9.30	\$7.35	\$10.09	\$11.46	\$6.88	\$7.97	\$9.46	\$11.59	\$15.14	
47-2061	Construction Laborers	15	8	\$10.30	\$9.31	\$11.29	\$12.28	\$8.75	\$9.66	\$10.92	\$12.87	\$14.44	
35-3031	Waiters and Waitresses	14	10	\$5.20	\$6.06	\$6.94	\$7.37	\$5.60	\$5.94	\$6.49	\$7.16	\$9.86	
29-2061	Licensed Practical and Licensed Vocational Nurses	13	10	\$16.60	\$13.11	\$14.82	\$15.67	\$12.15	\$13.88	\$15.09	\$16.35	\$17.10	
37-2012	Maids and Housekeeping Cleaners	12	7	\$7.00	\$6.22	\$7.59	\$8.28	\$5.89	\$6.41	\$7.22	\$8.61	\$10.37	
53-7061	Cleaners of Vehicles and Equipment	12	5	\$5.20	\$6.49	\$8.18	\$9.03	\$6.11	\$7.00	\$8.10	\$9.20	\$10.74	
31-1011	Home Health Aides	11	7	\$9.40	\$7.82	\$9.73	\$10.69	\$7.42	\$8.52	\$9.65	\$10.85	\$12.62	
41-9022	Real Estate Sales Agents	11	5	\$8.70	\$12.90	\$14.76	\$15.70	\$12.03	\$12.58	\$13.52	\$14.44	\$23.02	
41-2022	Parts Salespersons	11	5	†	\$7.95	\$13.10	\$15.68	\$7.25	\$8.89	\$10.74	\$16.87	\$21.84	
43-4081	Hotel, Motel, and Resort Desk Clerks	10	2	†	\$6.40	\$7.68	\$8.33	\$6.14	\$6.81	\$7.63	\$8.59	\$9.61	
31-1012	Nursing Aides, Orderlies, and Attendants	10	8	\$11.30	\$7.29	\$8.95	\$9.78	\$6.82	\$7.78	\$8.98	\$10.21	\$10.98	

† Insufficient wage data

Table 2: Occupations with Fewer than 10 Estimated Vacancies

		Occupational Employment Statistics Wage Data (2002)							
		Average Wages			Percentile Distribution				
SOC Code	SOC Occupational Title	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
41-3011	Advertising Sales Agents	\$9.39	\$18.26	\$22.70	\$8.66	\$10.87	\$15.32	\$24.16	\$33.50
* 25-1121	Art, Drama, and Music Teachers, Postsecondary	\$33,499	\$51,196	\$60,045	\$30,461	\$38,691	\$48,297	\$60,841	\$74,984
51-2099	Assemblers and Fabricators, All Other	\$7.64	\$10.16	\$11.43	\$6.86	\$8.64	\$10.04	\$11.27	\$13.79
49-3021	Automotive Body and Related Repairers	\$11.07	\$18.45	\$22.16	\$7.92	\$13.87	\$18.23	\$22.64	\$27.07
49-3023	Automotive Service Technicians and Mechanics	\$8.08	\$14.12	\$17.14	\$6.54	\$9.85	\$13.82	\$17.79	\$22.02
51-3011	Bakers	\$7.86	\$11.77	\$13.74	\$7.56	\$8.44	\$11.35	\$14.45	\$17.04
* 27-4012	Broadcast Technicians	\$8.04	\$15.59	\$19.36	\$7.29	\$9.05	\$13.61	\$18.73	\$26.40
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	\$11.47	\$15.44	\$17.41	\$10.21	\$13.19	\$15.67	\$17.83	\$20.73
* 53-3022	Bus Drivers, School	\$8.38	\$11.31	\$12.78	\$7.37	\$9.44	\$11.19	\$13.43	\$15.56
* 25-1011	Business Teachers, Postsecondary	\$30,901	\$56,825	\$69,787	\$27,574	\$35,766	\$51,011	\$72,554	\$100,682
51-7011	Cabinetmakers and Bench Carpenters	\$7.56	\$11.44	\$13.38	\$6.84	\$8.49	\$10.63	\$13.82	\$17.04
29-2031	Cardiovascular Technologists and Technicians	\$12.13	\$16.81	\$19.16	\$9.70	\$14.64	\$17.44	\$20.18	\$22.19
* 25-1052	Chemistry Teachers, Postsecondary	\$38,338	\$58,785	\$69,008	\$35,619	\$43,356	\$54,499	\$70,991	\$90,671
17-2051	Civil Engineers	\$22.42	\$29.22	\$32.62	\$20.65	\$23.68	\$27.51	\$32.73	\$40.03
19-3031	Clinical, Counseling, and School Psychologists	\$16.13	\$22.83	\$26.18	\$14.22	\$18.15	\$23.72	\$27.88	\$30.96
15-1021	Computer Programmers	\$14.59	\$21.82	\$25.43	\$11.04	\$17.84	\$21.17	\$27.82	\$32.63
* 25-1021	Computer Science Teachers, Postsecondary	\$31,259	\$49,983	\$59,344	\$29,520	\$34,374	\$42,224	\$56,702	\$88,202
15-1051	Computer Systems Analysts	\$24.08	\$30.08	\$33.08	\$22.89	\$24.90	\$28.83	\$33.79	\$42.62
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	\$9.94	\$11.54	\$12.34	\$9.33	\$9.96	\$11.00	\$12.84	\$14.91
* 35-2019	Cooks, All Other	†	†	†	†	†	†	†	†
35-2014	Cooks, Restaurant	\$6.33	\$7.97	\$8.80	\$6.04	\$6.61	\$7.43	\$9.07	\$10.84
* 33-3012	Correctional Officers and Jailers	\$14.11	\$18.74	\$21.06	\$13.46	\$15.68	\$18.83	\$21.78	\$25.51
* 29-2032	Diagnostic Medical Sonographers	\$22.95	\$28.74	\$31.62	\$21.85	\$23.76	\$26.36	\$35.53	\$41.30
29-1031	Dietitians and Nutritionists	\$15.20	\$21.06	\$23.98	\$11.75	\$18.75	\$21.62	\$25.15	\$28.80
* 21-2021	Directors, Religious Activities and Education	\$9.88	\$15.47	\$18.28	\$6.71	\$12.77	\$15.86	\$17.77	\$21.93

* OES wages reported for Colorado statewide

† Insufficient wage data

Table 2: Occupations with Fewer than 10 Estimated Vacancies — Page 2

		Occupational Employment Statistics Wage Data (2002)							
		Average Wages			Percentile Distribution				
SOC Code	SOC Occupational Title	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
* 51-4032	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	\$10.75	\$13.56	\$14.97	\$9.92	\$11.48	\$13.08	\$15.48	\$17.85
53-3031	Driver/Sales Workers	\$9.66	\$12.15	\$13.39	\$9.14	\$9.88	\$11.04	\$13.45	\$17.07
* 11-9032	Education Administrators, Elementary and Secondary School	\$52,308	\$67,240	\$74,706	\$48,916	\$58,348	\$67,972	\$76,698	\$89,938
* 25-1081	Education Teachers, Postsecondary	\$30,621	\$48,689	\$57,723	\$27,721	\$35,764	\$45,860	\$58,310	\$77,875
51-2022	Electrical and Electronic Equipment Assemblers	\$9.95	\$13.39	\$15.10	\$9.54	\$10.75	\$12.93	\$15.48	\$18.17
47-2111	Electricians	\$12.47	\$18.33	\$21.27	\$10.78	\$14.43	\$19.11	\$21.75	\$24.23
* 43-4061	Eligibility Interviewers, Government Programs	\$11.94	\$15.28	\$16.95	\$11.39	\$12.56	\$14.33	\$17.33	\$20.79
* 39-4011	Embalmers	\$9.46	\$13.35	\$15.29	\$9.10	\$10.42	\$12.62	\$14.78	\$20.83
29-2041	Emergency Medical Technicians and Paramedics	\$8.95	\$12.94	\$14.93	\$8.25	\$10.06	\$13.12	\$15.63	\$17.31
43-6011	Executive Secretaries and Administrative Assistants	\$11.74	\$16.23	\$18.48	\$10.81	\$12.91	\$15.86	\$19.03	\$21.66
11-3031	Financial Managers	\$12.68	\$25.28	\$31.58	\$10.77	\$15.22	\$24.56	\$32.35	\$40.80
35-1012	First-Line Supervisors/Managers of Food Preparation and Serving Workers	\$8.79	\$13.22	\$15.45	\$8.08	\$9.42	\$11.76	\$16.36	\$21.30
* 33-1012	First-Line Supervisors/Managers of Police and Detectives	\$23.69	\$31.28	\$35.07	\$22.18	\$26.15	\$31.32	\$36.58	\$42.38
* 25-1124	Foreign Language and Literature Teachers, Postsecondary	\$27,807	\$43,826	\$51,835	\$26,344	\$29,663	\$40,560	\$52,768	\$69,725
* 51-4022	Forging Machine Setters, Operators, and Tenders, Metal and Plastic	\$6.26	\$10.96	\$13.30	\$6.05	\$6.72	\$10.54	\$14.85	\$17.49
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Me	\$9.53	\$10.94	\$11.63	\$9.06	\$9.79	\$11.05	\$12.34	\$13.29
39-5012	Hairdressers, Hairstylists, and Cosmetologists	\$6.18	\$8.18	\$9.17	\$5.79	\$6.28	\$7.06	\$9.25	\$12.23
31-9099	Healthcare Support Workers, All Other	\$8.78	\$12.10	\$13.77	\$8.29	\$9.16	\$10.58	\$15.05	\$19.01
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	\$10.75	\$15.74	\$18.23	\$9.58	\$12.27	\$16.49	\$19.61	\$21.30
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	\$6.13	\$7.06	\$7.53	\$5.74	\$6.19	\$6.94	\$7.96	\$8.76
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	\$9.43	\$13.38	\$15.35	\$8.39	\$10.67	\$13.44	\$16.17	\$18.38

* OES wages reported for Colorado statewide

† Insufficient wage data

Table 2: Occupations with Fewer than 10 Estimated Vacancies — Page 3

		Occupational Employment Statistics Wage Data (2002)							
		Average Wages			Percentile Distribution				
SOC Code	SOC Occupational Title	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
* 13-1079	Human Resources, Training, and Labor Relations Specialists, All Other	†	†	†	†	†	†	†	†
49-9099	Installation, Maintenance, and Repair Workers, All Other	\$12.40	\$17.44	\$19.96	\$11.71	\$13.53	\$17.75	\$20.32	\$21.86
* 13-1032	Insurance Appraisers, Auto Damage	\$15.21	\$20.89	\$23.72	\$13.41	\$17.21	\$22.02	\$25.07	\$27.26
43-9041	Insurance Claims and Policy Processing Clerks	\$11.56	\$18.60	\$22.12	\$10.37	\$11.74	\$17.01	\$24.79	\$30.34
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	\$6.63	\$9.25	\$10.55	\$6.17	\$7.20	\$8.95	\$11.16	\$13.01
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$7.69	\$9.66	\$10.65	\$7.33	\$8.03	\$9.15	\$11.27	\$13.23
23-1011	Lawyers	\$26.29	\$37.42	\$42.98	\$23.42	\$29.72	\$35.08	\$42.71	\$60.36
* 33-9092	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	†	†	†	†	†	†	†	†
43-4131	Loan Interviewers and Clerks	\$8.80	\$12.13	\$13.80	\$7.95	\$9.83	\$12.14	\$14.32	\$16.74
* 53-7063	Machine Feeders and Offbearers	\$8.47	\$11.08	\$12.38	\$7.83	\$8.99	\$10.57	\$12.94	\$15.43
51-4041	Machinists	\$10.51	\$16.32	\$19.23	\$9.76	\$11.61	\$15.57	\$18.44	\$22.34
49-9042	Maintenance and Repair Workers, General	\$8.35	\$12.70	\$14.88	\$7.38	\$9.44	\$12.05	\$15.75	\$19.12
* 39-5092	Manicurists and Pedicurists	\$6.71	\$9.48	\$10.87	\$6.28	\$7.17	\$8.29	\$10.32	\$15.34
* 25-1022	Mathematical Science Teachers, Postsecondary	\$31,583	\$49,224	\$58,044	\$29,601	\$35,893	\$44,180	\$58,585	\$79,657
17-2141	Mechanical Engineers	\$20.41	\$28.01	\$31.81	\$19.03	\$22.03	\$26.54	\$32.87	\$40.00
29-2011	Medical and Clinical Laboratory Technologists	\$14.84	\$19.32	\$21.56	\$13.06	\$16.67	\$19.77	\$22.13	\$25.45
11-9111	Medical and Health Services Managers	\$23.05	\$32.86	\$37.77	\$21.39	\$24.86	\$29.52	\$41.14	\$52.17
21-1022	Medical and Public Health Social Workers	\$12.45	\$14.92	\$16.14	\$11.77	\$12.66	\$14.20	\$16.91	\$19.66
31-9092	Medical Assistants	\$9.76	\$11.45	\$12.29	\$9.23	\$10.06	\$11.28	\$12.95	\$14.13
43-6013	Medical Secretaries	\$9.32	\$11.30	\$12.29	\$8.47	\$9.73	\$10.97	\$12.63	\$14.36
* 25-2022	Middle School Teachers, Except Special and Vocational Education	\$29,603	\$40,171	\$45,455	\$27,342	\$31,471	\$37,652	\$47,979	\$57,270
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	\$14.23	\$17.12	\$18.57	\$13.42	\$15.26	\$17.28	\$19.80	\$21.47
15-1071	Network and Computer Systems Administrators	\$17.40	\$24.26	\$27.70	\$14.65	\$20.06	\$25.00	\$29.32	\$33.07

* OES wages reported for Colorado statewide

† Insufficient wage data

Table 2: Occupations with Fewer than 10 Estimated Vacancies — Page 4

		Occupational Employment Statistics Wage Data (2002)							
		Average Wages			Percentile Distribution				
SOC Code	SOC Occupational Title	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
* 29-2033	Nuclear Medicine Technologists	\$19.26	\$22.78	\$24.55	\$18.46	\$20.30	\$23.07	\$25.90	\$27.71
* 25-1072	Nursing Instructors and Teachers, Postsecondary	\$33,478	\$46,985	\$53,739	\$32,140	\$35,388	\$43,270	\$54,875	\$61,544
43-9061	Office Clerks, General	\$7.17	\$10.25	\$11.79	\$6.46	\$8.07	\$9.90	\$11.93	\$14.53
47-2073	Operating Engineers and Other Construction Equipment Operators	\$12.39	\$14.89	\$16.15	\$11.75	\$12.73	\$14.72	\$16.84	\$18.70
23-2011	Paralegals and Legal Assistants	\$12.21	\$16.72	\$18.99	\$11.54	\$12.44	\$14.67	\$19.03	\$26.78
39-9021	Personal and Home Care Aides	\$6.92	\$7.75	\$8.17	\$6.50	\$7.19	\$7.82	\$8.46	\$9.01
* 37-2021	Pest Control Workers	\$7.30	\$12.10	\$14.50	\$6.73	\$8.07	\$11.25	\$15.71	\$18.52
29-1051	Pharmacists	\$30.65	\$35.64	\$38.13	\$30.05	\$32.70	\$36.47	\$40.52	\$43.36
29-2052	Pharmacy Technicians	\$9.09	\$11.32	\$12.43	\$8.50	\$9.59	\$11.33	\$13.03	\$14.56
29-1123	Physical Therapists	\$21.94	\$24.73	\$26.13	\$20.35	\$22.38	\$24.37	\$26.68	\$29.18
47-2152	Plumbers, Pipefitters, and Steamfitters	\$14.18	\$19.33	\$21.91	\$13.09	\$15.54	\$18.17	\$24.47	\$27.12
* 33-3051	Police and Sheriff's Patrol Officers	\$16.34	\$22.34	\$25.34	\$15.17	\$18.18	\$22.45	\$26.77	\$30.32
* 43-5031	Police, Fire, and Ambulance Dispatchers	\$11.48	\$15.81	\$17.98	\$10.71	\$13.07	\$15.83	\$18.49	\$21.55
25-2011	Preschool Teachers, Except Special Education	\$7.46	\$11.91	\$14.14	\$7.12	\$7.82	\$9.44	\$14.98	\$21.46
* 29-1066	Psychiatrists	\$43.27	\$60.05	\$68.45	\$39.32	\$49.82	\$67.94	†	†
* 27-3012	Public Address System and Other Announcers	†	†	†	†	†	†	†	†
* 27-3011	Radio and Television Announcers	†	†	†	†	†	†	†	†
29-2034	Radiologic Technologists and Technicians	\$12.59	\$17.43	\$19.85	\$12.02	\$14.31	\$17.32	\$20.69	\$24.79
* 29-1126	Respiratory Therapists	\$14.88	\$18.36	\$20.10	\$14.15	\$15.89	\$18.52	\$20.99	\$22.61
* 41-9099	Sales and Related Workers, All Other	\$9.93	\$21.40	\$27.13	\$8.42	\$12.03	\$17.66	\$28.37	\$40.63
* 41-3099	Sales Representatives, Services, All Other	†	†	†	†	†	†	†	†
* 25-2031	Secondary School Teachers, Except Special and Vocational Education	\$29,207	\$42,987	\$49,877	\$27,100	\$31,987	\$40,453	\$53,313	\$65,306
43-6014	Secretaries, Except Legal, Medical, and Executive	\$8.42	\$11.52	\$13.07	\$7.60	\$9.46	\$11.25	\$13.90	\$16.19
47-2211	Sheet Metal Workers	\$13.95	\$17.42	\$19.16	\$12.48	\$15.45	\$17.66	\$20.01	\$22.16
* 29-1127	Speech-Language Pathologists	\$17.90	\$24.11	\$27.21	\$16.37	\$19.68	\$23.96	\$27.58	\$32.81

* OES wages reported for Colorado statewide

† Insufficient wage data

Table 2: Occupations with Fewer than 10 Estimated Vacancies — Page 5

		Occupational Employment Statistics Wage Data (2002)							
		Average Wages			Percentile Distribution				
SOC Code	SOC Occupational Title	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
29-2055	Surgical Technologists	\$11.41	\$16.28	\$18.70	\$10.28	\$12.84	\$15.91	\$18.52	\$24.61
43-2011	Switchboard Operators, Including Answering Service	\$8.25	\$10.24	\$11.25	\$7.68	\$8.89	\$10.25	\$11.80	\$13.27
* 47-2082	Tapers	\$13.16	\$17.20	\$19.21	\$11.84	\$14.55	\$16.53	\$19.32	\$23.62
* 25-3099	Teachers and Instructors, All Other	†	†	†	†	†	†	†	†
* 49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	\$18.04	\$23.40	\$26.07	\$16.55	\$20.44	\$24.73	\$27.20	\$28.90
43-3071	Tellers	\$8.15	\$9.24	\$9.79	\$7.74	\$8.47	\$9.28	\$10.24	\$10.87
* 51-6099	Textile, Apparel, and Furnishings Workers, All Other	\$7.50	\$10.35	\$11.77	\$6.74	\$8.60	\$10.23	\$11.49	\$13.56
53-3032	Truck Drivers, Heavy and Tractor-Trailer	\$11.97	\$14.94	\$16.42	\$11.39	\$12.76	\$15.11	\$17.11	\$18.52
53-3033	Truck Drivers, Light or Delivery Services	\$7.50	\$13.05	\$15.83	\$6.63	\$8.54	\$12.06	\$16.22	\$23.34
51-4121	Welders, Cutters, Solderers, and Brazers	\$9.23	\$13.47	\$15.59	\$7.95	\$10.88	\$13.27	\$16.32	\$19.53

* OES wages reported for Colorado statewide

† Insufficient wage data



Professional & Business Services

Sector Briefs

Professional & Business Services is the fifth largest JVS sector in Mesa County in terms of employment, representing 10%; 16% of employers in the region⁵ are classified as such. In this Job Vacancy Survey this sector accounts for 24% of all estimated vacancies, or 223 positions. The survey vacancy rate for Professional & Business Services is 7.7%—for every 1,000 positions in the field, there are 77 currently open. The vacancy rate does not distinguish between new and replacement positions.

The Professional & Business Services JVS sector is composed of three NAICS Sectors. A more detailed look at these helps to explain the business activity in the area.

Administrative & Support & Waste Management & Remediation Services

Establishments in this NAICS sector perform routine support activities for the day-to-day operations of other organizations. Services provided are typically on a contract or fee basis. This NAICS sector is further divided into two subsectors: Administrative & Support Services and Waste Management & Remediation Services.

Administrative & Support Services accounts for 53% of the total employment in Professional & Business Services. Companies in this subsector provide a range of services to other businesses. Personnel administration, clerical activities and cleaning are often integral parts of the activities of establishments found in all sectors of the economy; however, businesses classified in this subsector have specialized in one or more administrative or support activities in order to provide for

clients in a variety of industries and sometimes households. Ninety-six percent of the vacancies reported by the Professional & Business Services JVS sector, and 34% of total surveyed vacancies are posted by firms performing Administrative & Support Services.

Industries in the **Waste Management & Remediation Services** subsector are engaged in the collection, treatment, and disposal of waste materials. Sewage treatment facilities are excluded here as they are classified under the Utilities NAICS sector. Waste Management & Remediation Services accounts for 3% of employers and 7% of employees within the Professional & Business Services JVS sector in Mesa County.

Professional, Scientific, & Technical Services

This sector is comprised of establishments that specialize in performing professional, scientific, and technical activities for others that require a high degree of expertise and training. These businesses provide knowledge services in specialized areas including legal, accounting, engineering, design, and science. This NAICS sector accounts for 38% of the Professional & Business Services employment and 64% of the employers. Four percent of the JVS sector vacancies in this survey are with businesses in these industries.

Management of Companies & Enterprises

This sector comprises establishments that own or influence other enterprises; those that administer, oversee, and manage companies; and those that undertake the strategic or organizational planning and decision-making role of a company. This type of business constitutes 3% of Mesa employers and 2% of employment within the Professional & Business Services JVS sector. There are no vacancies reported with such firms for this survey period.

⁵CDLE. Quarterly Census of Employment & Wages (QCEW). 1st Quarter 2003.



How to Use This Report

Appendix

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

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

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

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

Employers

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 *—continued*

Caveats

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

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

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

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

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

The occupational detail provided is supplemental data believed to be of interest to the reader. The survey design does not allow for application of this detail to the region as a whole, but it can be used to understand characteristics of those job vacancies reported. These vacancy characteristics are not estimated and therefore do contain significant bias. Approximately 69% of the non-estimated information comes from large employers and government agencies, but they represent approximately 37% of the employment in the region. The vacancy characteristics therefore are heavily influenced by what is being demanded by large employers and government agencies. This information is still useful and important, but the user of this data needs to keep in mind its inherent bias.

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

Methodology

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

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

Survey Design

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

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

Stratifications containing small and medium sized private employers are randomly sampled. In order to report vacancy characteristics such as education and experience requirements demanded, the survey must contact more employers than would be necessary if the survey only estimated the total number of vacancies. For this reason all of the large employers and government agencies are contacted in the region. These employers provide the most cost effective means of obtaining large amounts of vacancy information. Approximately 37% of the region's employment is found with large and government employers that make up only 2% of the total number of firms. Conducting a census of these entities allows us to cover a large portion of the region's employment while contacting relatively few entities.

Survey Sample

The Mesa County survey was conducted from March 22nd through 31st. 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 85% of the region's total employment.

The Job Vacancy Survey separates employers into either government or private industry. Private firms are then split into large and small to mid-size categories. Firms with at least 100 employees are considered large employers. Attempts are made to contact all government agencies and large firms in the sample frame. The remaining small to mid-size firms are split into JVS industry sectors.

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

Government makes up almost 15% of the employment in the sample frame, while private industry employers make up the remaining 85%. Large firms account for 34% of private industry employment in the sample frame. Firms employing from five to 99 individuals are considered small to mid-size employers, and account for the remaining 66% of private industry employment.

The margin of sampling error for the overall vacancy estimate is plus or minus 3.6%, meaning that in 95 out of 100 surveys the number of vacancies in the region would be between 907 and 975. Labor Market Information is confident that the estimates in this survey are accurate and that the survey was conducted according to recognized survey research standards.

The survey response rate is 82.9%. This measures the quality of the survey database, or the success experienced in contacting eligible employers. The cooperation rate is 99.4% 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 Mesa County, the 20 NAICS sectors have been combined into 12 JVS sectors. These groupings are based on the NAICS sectors, but are somewhat unique to the Job Vacancy Survey. The new groupings allow the Job Vacancy Survey to study local Colorado labor markets in a more relevant and meaningful way.

For more information on the North American Industry Classification System see Page 29.

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

Appendix: Methodology —continued

North American Industry Classification System

Data Collection

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

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

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

Occupational Coding

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

Data Editing

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

Wage Conversion

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

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

North American Industry Classification System (NAICS)

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

History of Process

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

Industrial Classification vs. Occupational Classification

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

Benefits

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

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

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

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

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

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

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

Things to Consider

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

New Industries Reflected in NAICS

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

Comparison of NAICS and SIC Major Industry Groups

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

Appendix

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

Average Maximum Wage

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

Average Minimum Wage

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

Computer Assisted Telephone Interviewing (CATI)

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

Cooperation Rate

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

Educational Attainment

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

Effective Response Rate

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

Employed Persons (Employment)

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

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

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

Employer

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

Full-time Employee

Employees who usually work 35 hours per week or more.

Goods Producing Industries (NAICS)

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

Industry

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

Job Seeker

A person actively looking for employment or researching career options.

Job Vacancy

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

Job Vacancy Rate

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

Labor Force

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

Medical Insurance

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

Medical Insurance Premium

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

North American Industry Classification System (NAICS)

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

Not Seasonally Adjusted

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

Occupation

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

Part-time Employee

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

Percentile Wage Estimate

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

Permanent Employment

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

Sample

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

Sample Frame

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

Seasonally Adjusted

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

Service Producing Industries (NAICS)

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

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

Sign-on Bonus

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

Standard Occupational Classification (SOC) System

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

Temporary Employment

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

Unemployed Persons

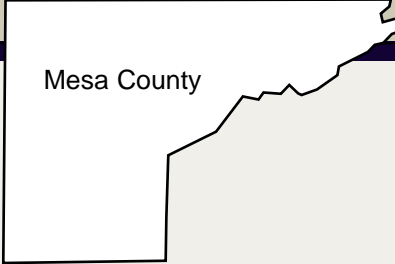
Persons 16 years of age and over who had no employment during the reference week, were available for work, except for temporary illness, and had made specific efforts to find employment sometime during the four-week period ending with the reference week. Persons who were waiting to be recalled to a job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

Unemployment Rate

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

Wages

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



Mesa County



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