

Colorado

Denver Metro Region

Job Vacancy Survey

Spring 2005



Photo: Colorado State Parks

Visitors Center, Golden Gate Canyon State Park, Jefferson County

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

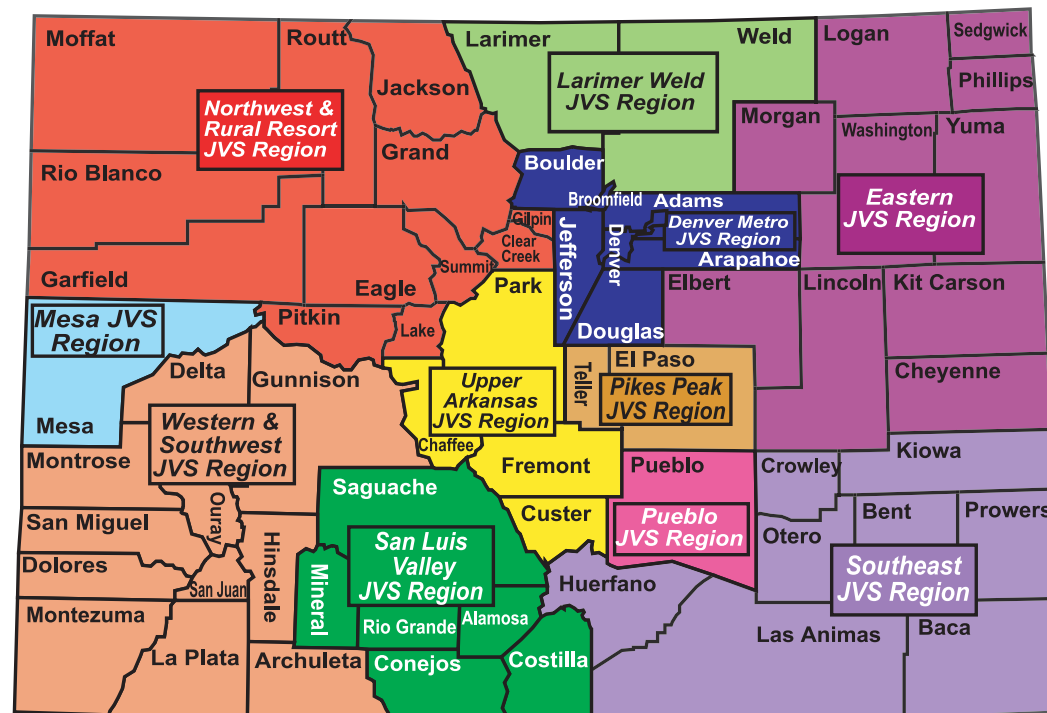
Job seekers and employers, as well as Workforce Centers and economic developers, need more than a measure of demand for workers at a specific point in time. They also need a measure of where in the economy that demand is located and what education and experience levels are most preferred. The Colorado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

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

The 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 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.

Figure 1: Colorado Job Vacancy Survey Regions



The Spring 2005 Denver Metro Job Vacancy Survey (JVS) was conducted from April 5th through May 25rd, 2005.

The goal of the survey is to provide current information on the demand for workers so that employers, job seekers, economic developers, educators, and workforce centers can make more informed decisions in the Denver Metro Region.

Over the survey period, all large and government employers as well as a random sample of private employers with at least five employees in the Denver Metro Region were contacted. Employers were asked if they were actively hiring at the time of the survey and a variety of questions about the positions they were seeking to fill.

A total of 5,923 employers, representing 36% of the region's employment, responded to the survey. Of these, 320 are large employers, 310 are Government employers and 5,293 are small to mid-size employers. The survey has an effective response rate of 94%% and a cooperation rate of 99%. The margin of sampling error for the overall vacancy estimate is plus or minus 1.86% or about 435 vacancies.

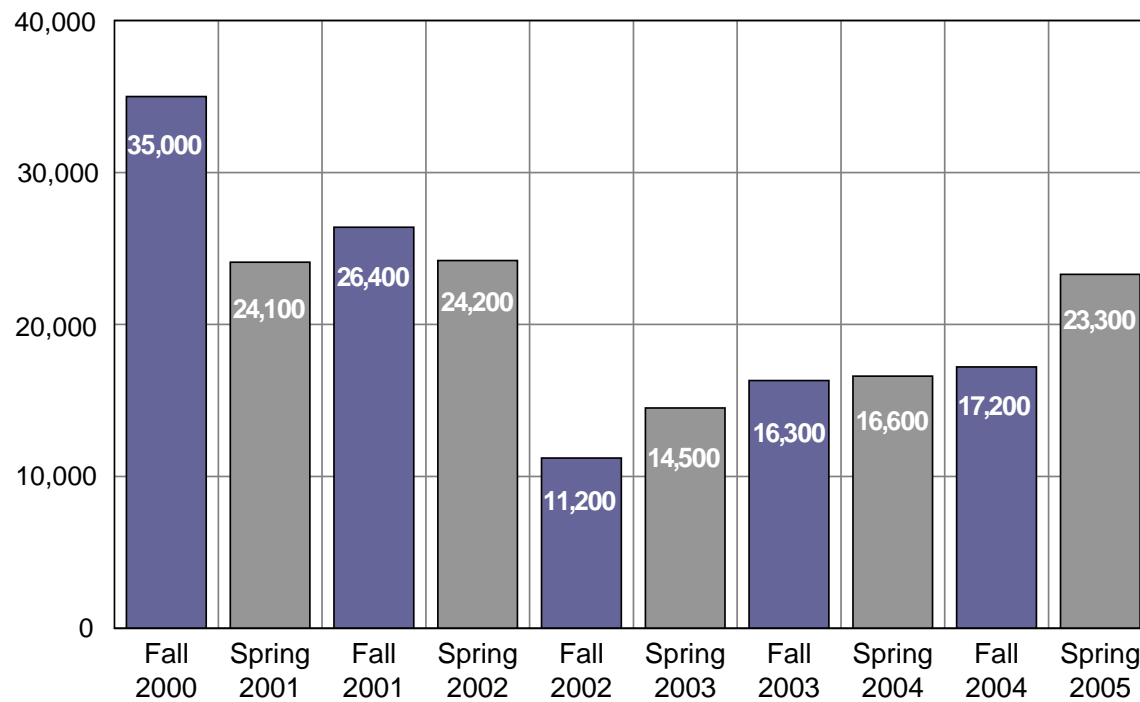
Major Findings of the Survey:

- ◆ Vacancies open for immediate hire total 23,300, compared to 16,600 a year ago.Page 8
- ◆ The overall average wage is \$16.10 per hour.Page 8
- ◆ Sixteen percent of the employers responding to this survey report at least one vacancy.Page 8
- ◆ The Healthcare and Social Assistance sector has the most vacancies.Page 8
- ◆ The Utilities sector offers the highest average wage but low number of vacancies.Page 9
- ◆ Denver County has the most vacancies and offers the highest wages.Page 10
- ◆ Small to mid-size employers account for 57% of the total vacancies.Page 11
- ◆ Of the openings, 82% are full-time positions and 95% are for permanent employment.Page 12
- ◆ Post-secondary education is required for 65% of the openings.Page 13
- ◆ Related or specific experience is required by 80% of all openings.Page 14
- ◆ Compared to Spring 2004, vacancies reported as not difficult to fill increased from 50% to 61%, while vacancies reported as very difficult to fill decreased from 18% to 10%.Page 15
- ◆ Medical benefits are offered for 82% of the vacancies.Page 17

The Denver Metro Region consists of Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, and Jefferson counties. According to the State Demographer’s Office, the Denver Metro Region covers an area of 4,531 square miles or 4.3% of Colorado’s total area. With 1,182 square miles, Adams is the largest county in the region, while Broomfield is the smallest with only 34 square

miles. Although the region accounts for only 4.3% of Colorado’s geographical size it is estimated to be home to 2.5 million residents, representing 56% of the State’s population. The three most populated counties, Arapahoe, Denver, and Jefferson, make up 63% of the region’s population. Since 1990, the region’s population has grown by 33%, a rate about equal to that experienced by the state as a whole.

Figure 2: Job Vacancies—Denver Metro Region



The Denver Metro Region has a diverse economy with no single sector dominating economic activity. The region has strong employment in Retail Trade; Professional, Scientific & Technical Services; HealthCare & Social Assistance; Government; and Accommodation & Food Services. Employment is lowest in the Utilities; Mining and Agricultural, Forestry, and Fishing & Hunting sectors.

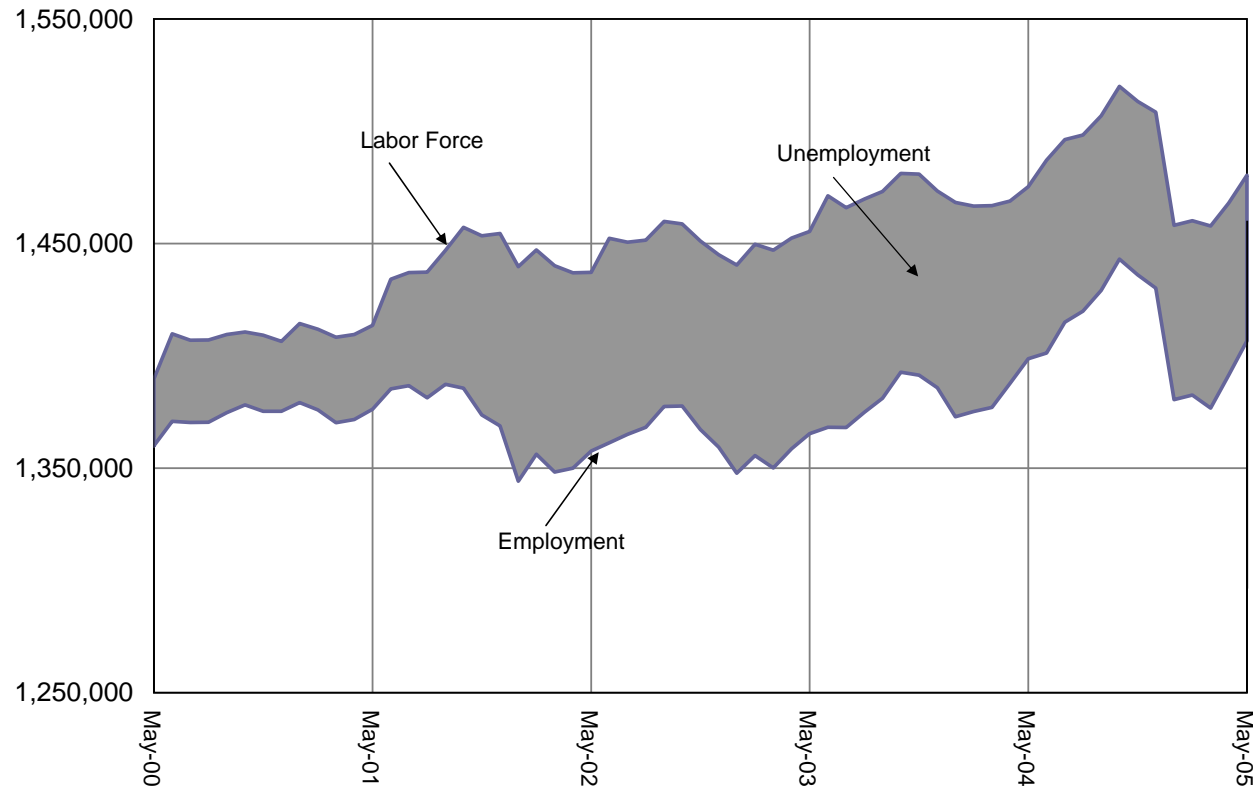
The Denver Metro Region accounts for 58% of Colorado’s total employment and labor force. According to Colorado’s Labor Market Information Section, the region’s employment was approximately 1,376,086 from a labor force of about 1,448,438 in May 2005. Since conducting the Spring 2004 survey, the labor force increased by 35,789, while employment increased by 28,733. The unemployment rate rose from 4.6% to 5.0% between the two periods. Unemployment rates peaked in early 2002 at levels above 6% —jobless rates in the Region had not been that high since 1993. In May, the unemployment rate was highest in Denver County at 5.7%; the lowest rate in the region occurred in Douglas County at 3.7%.

The 23,300 estimated vacancies in this survey represent a 40% increase in vacancies since the Spring 2004 survey, and a 35% increase since the fall of 2004. This increase is the most significant since the Fall 2002 survey bringing the number of estimated vacancies an arm length to the pre September 11th levels.

	Fall 2000	Spring 2001	Fall 2001	Spring 2002	Fall 2002	Spring 2003	Fall 2003	Spring 2004	Fall 2004	Spring 2005
Vacancies	35,000	24,100	26,400	24,200	11,200	14,500	16,300	16,600	17,200	23,300
Employment	1,320,773	1,341,197	1,343,048	1,330,038	1,343,484	1,350,265	1,357,994	1,377,860	1,405,075	1,406,633
Unemployed	30,984	36,157	71,100	75,397	82,790	79,326	82,378	66,754	73,055	73,770
Unemployment Rate	2.3%	2.6%	5.0%	5.4%	5.8%	5.5%	5.7%	4.6%	4.9%	5%

Source: CDLE, Local Area Unemployment Statistics, June 2005

Figure 3: Employment and Labor Force Trends for the Denver Metro Region
(Not Seasonally Adjusted)



Source: CDLE, Local Area Unemployment Statistics, Released June 2005

Figure 3 illustrates the progression of both the region's labor force and employment levels. The region's employment has grown annually at an average rate of only 0.7% from May 2000 to May 2005. Employment in the region increased slightly in 2001 but fell 1.3% the next year. Growth accelerated to 2.7% in 2004, the fastest increase since 1999. Improvements in the labor market are expected to continue through the current year.

The labor force has maintained positive annual growth rates in the Denver Metro Region since 1998. In some years, such as 1998, 1999 and 2000, the

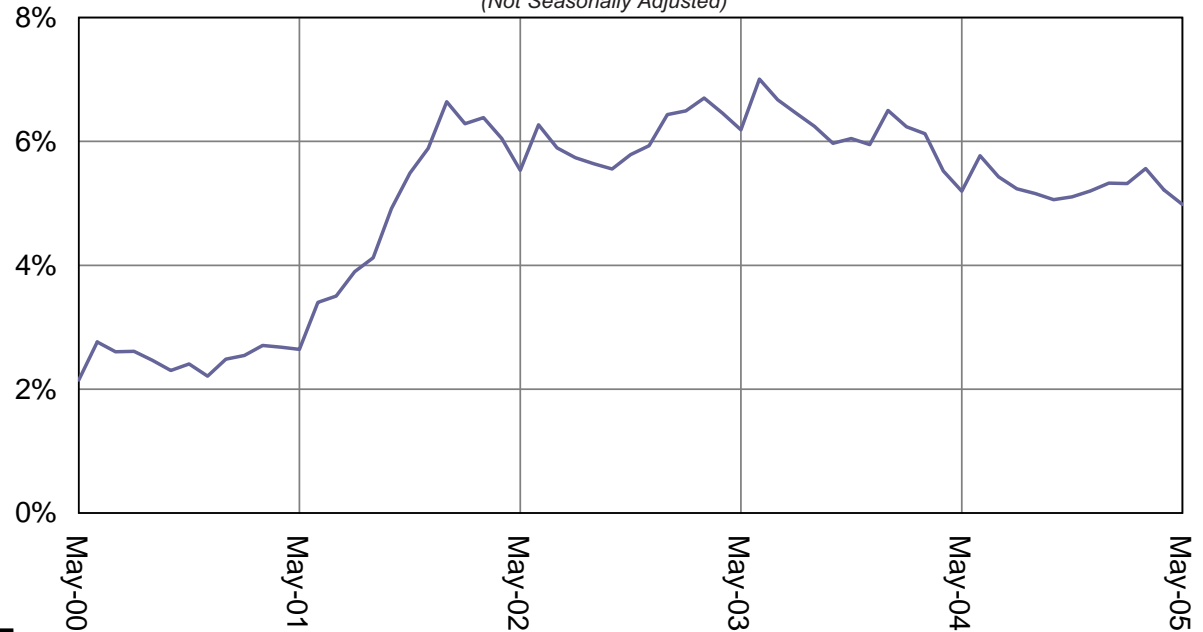
average annual employment growth exceeded that of the labor force. Record low unemployment rates of 2.8% or less were registered in these years. In 2004, both labor force and employment expanded at a rate of 2.7% while labor force expanded by only 1.8%.

Figure 3 and Figure 4 provide visual representations of unemployment. In Figure 3, unemployment is represented by the gap between labor force and employment; the wider the distance between the two lines, the higher the number of unemployed.

Analysis of historical employment trends for the Denver Metro Region indicates that employment reaches its lowest level in January and peaks around October. Employers in the region are contacted semi-annually in the spring and fall in order to measure the demand for labor at intervals that provide the most useful information.

Surveys conducted in spring represent the demand for labor at the time of the year when employment is expanding. Vacancies found in the Fall Survey reflect the demand for labor at a time when employment is around its peak.

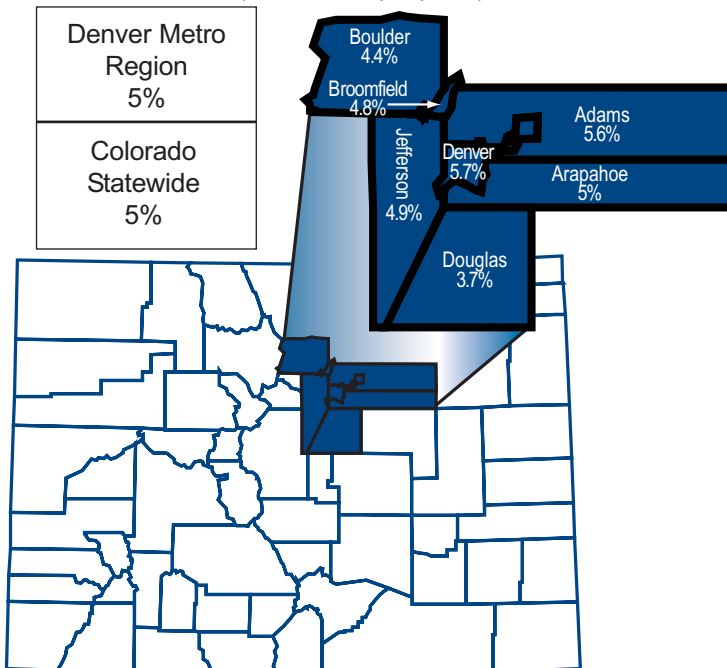
Figure 4: Denver Metro Region Unemployment Rates
(Not Seasonally Adjusted)



Source: CDLE, Local Area Unemployment Statistics, Released June 2005

The non-seasonally adjusted unemployment rate in the region was as high as 6.6% in March and June 2003 but has gradually declined since. Between May 2004 and May 2005, the unemployment rate for the Denver Metro region decreased from 5.2% to 5.0%.

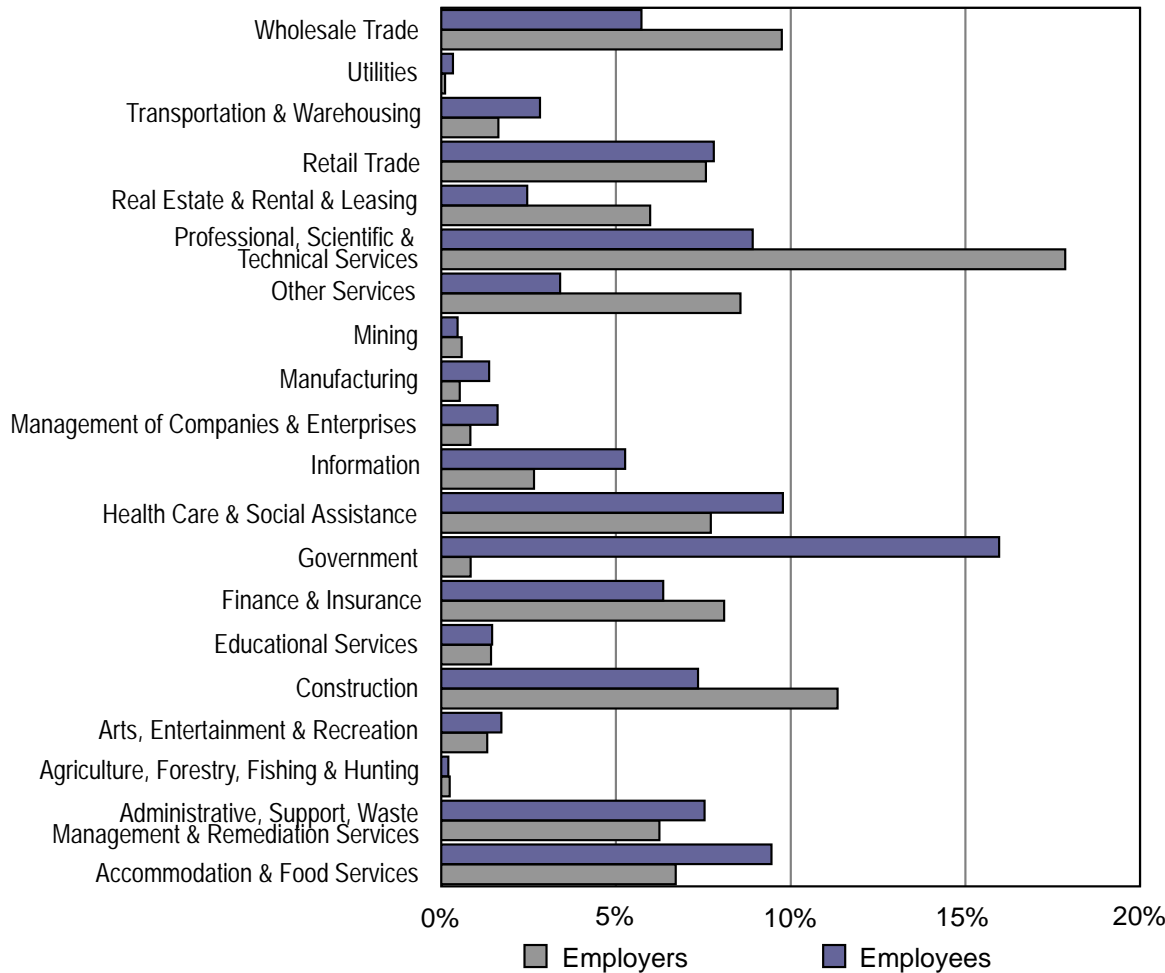
Figure 5: Unemployment Rates for May 2005
(Not Seasonally Adjusted)



Source: CDLE, Local Area Unemployment Statistics, June 2005

continued

Figure 6: Denver Metro Region Employers and Employees, 2nd Quarter, 2004



Source: CDLE, Quarterly Census of Employment and Wages (QCEW), 2nd Quarter, 2004

Since the beginning of 2003, all firms in the Denver Metro Region were grouped into 20 sectors under the North American Industry Classification System (NAICS). This system has replaced the Standard Industrial Classification System (SIC) and better reflects today's economic activity. Advantages to the new system include a greater breakdown of the old SIC Services industry, and direct comparability with industries in Mexico and Canada.

Data for *Figure 6* are gathered under the Quarterly Census of Employment and Wages program (QCEW), which includes employers covered under the State's unemployment insurance program. Although 97% of the nation's civil employment is covered under the Unemployment Insurance program, some industries/positions are typically excluded. These include agriculture, railroad, some state and local government, certain non-profits, the self-employed, domestic workers, and unpaid family workers.

Although the Government sector comprises less than 1% of the region's employers it accounts for 16% of the region's total employment. Thirty-six percent of the sector's employment in the region is concentrated in Denver County while Jefferson County accounts for another 18%. The Government sector includes educational services owned by state or local governments.

The Health Care & Social Assistance sector accounts for the second highest number of employees but the sixth highest number of employers in the region. This sector makes up 10% of the region's employment and 8% of the region's employers. The Denver Metro Region accounts for 59% of Colorado's employment in this sector.

Accommodation & Food Services, with 9.5% of the region's employment, is the third largest sector in the region. The Region accounts for just over half of Colorado's employment in this sector.

Sectors such as Finance & Insurance; Information; Educational Services; Management of Companies & Enterprises; Professional, Scientific & Technical Services; Transportation & Warehousing; and Wholesale Trade have the bulk of their statewide employment in the Denver Metro Region. Each of these sectors has 70% or more of its statewide employment in the region. Employment levels for these sectors are significant with the exception of Management of Companies & Enterprises.

The Denver Metro Region has a sizeable Construction sector, which makes up 7% of the region's employment. Fifty-six percent of Colorado's Construction sector is concentrated in the Denver Metro region. Thirty-three percent of the region's Construction employment is in Denver County while 21% is in Arapahoe.

The Denver Metro Region accounts for 59% of Colorado's manufacturing sector, although this sector makes up only 1.4% of the region's workers. Employment in manufacturing has been declining in the region over time. Job losses within this sector nationally are a major concern for labor union groups who charge that economic blocks such as NAFTA and the WTO are causing an outflow of manufacturing jobs to less developed countries. Of the manufacturing industry employment in the region, 27% is concentrated in Denver County, 22% in Boulder County, and 20% in Jefferson County.

Utilities; Mining; and Agriculture, Forestry, Fishing & Hunting are the smallest sectors in the Denver Metro Region in terms of the number of employers and employees. These sectors combined account for 1% of employers and employees in the region.

During the survey period, an estimated 23,300 vacancies were open for immediate hire in the Denver Metro Region. The overall average wage for the reported vacancies in this survey is \$16.10. Private firms from the American Labor Market Information System (ALMIS) employer database with five or more employees and all government agencies constitute the sample frame. All survey data refer to this subset of the population.

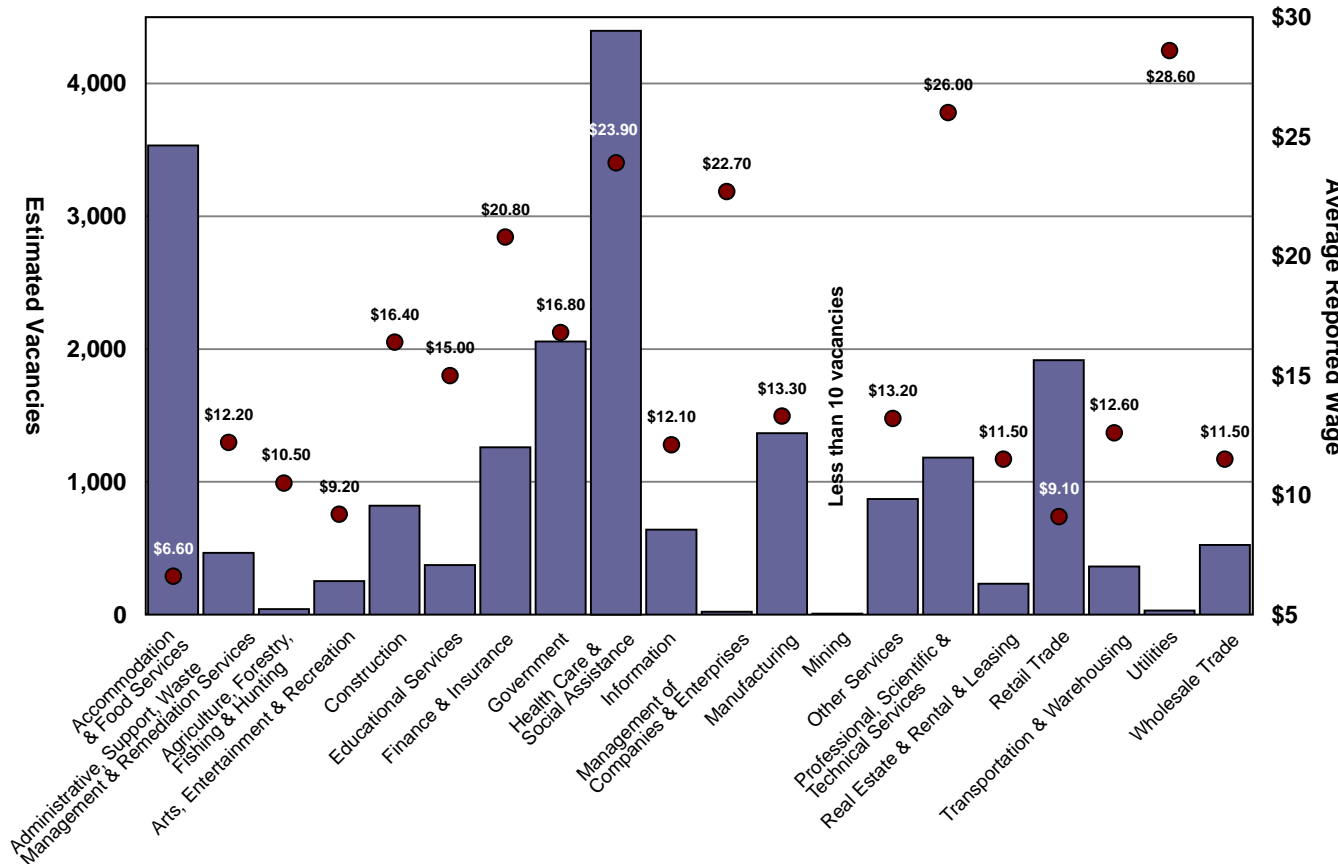
Results from this survey represent an improvement in both the quantity and quality of vacancies in the Denver Metro’s economy since the Spring 2004 survey. Between the two surveys, number of estimated vacancies increased by 6,700 and the overall average wage increased from \$15.50 to \$16.10.

Sixteen percent of the employers responding to the survey reported having at least one vacancy. The overall vacancy rate found in this survey is 1.7%. The overall vacancy rate is calculated by dividing the estimated vacancies by the sum of the estimated vacancies and total employment. The vacancy rate for the Spring 2004 survey was 1.3%.

Hiring activity in this survey is highest in the Health Care & Social Assistance sector followed by Accommodation & Food Services. Together, they account for one-fifth of the regional employment and 39% of the estimated vacancies. An addition of 1,900 vacancies to the level estimated in the Spring 2004 survey ranks the Health Care & Social Assistance as the top hiring sector in this survey, up from the second rank last spring. The Accommodation & Food Services sector, offering the lowest average wages, comes second with 17% of the vacancies. Over 1,700 vacancies were added in this sector from a year earlier. Thirty-nine percent of the vacancies reported in the Healthcare & Social Assistance sector are Registered Nurses occupations. Twenty-eight percent of Retail Trade vacancies are for Waiters and Waitresses and 24% are Combined Food Preparation and Serving Workers.

The Government sector ranked third with 10% of the estimated vacancies. A decline of 662 vacancies caused this sector to fall from the top rank it occupied in the Spring 2004 survey. Retail Trade added 223 and maintained the fourth rank. Wages offered in the Retail Trade sector are next to lowest with Retail Salespersons and Cashiers making up almost half of these vacancies. Wages offered in the Government sector are in the mid range with almost half of the positions being education and training related.

Figure 7: Estimated Vacancies and Average Wages by JVS Sectors



Significant hiring increases were reported in the high paying Professional, Scientific & Technical Services and the Finance & Insurance sectors. The Professional, Scientific & Technical Services sector, which offers the second highest average wage and accounts for 6% of the vacancies in this survey, added 570 vacancies since the spring 2004 survey. Similarly, 500 vacancies were added in the Finance & Insurance sector. The bulk of the vacancies reported in the Professional, Scientific & Technical Services sector are for high-paying Architecture and Engineering and Management occupations. Office and Administrative Support; Business and Financial Operations; and Management occupations are the highest in demand in the Finance and Insurance sector.

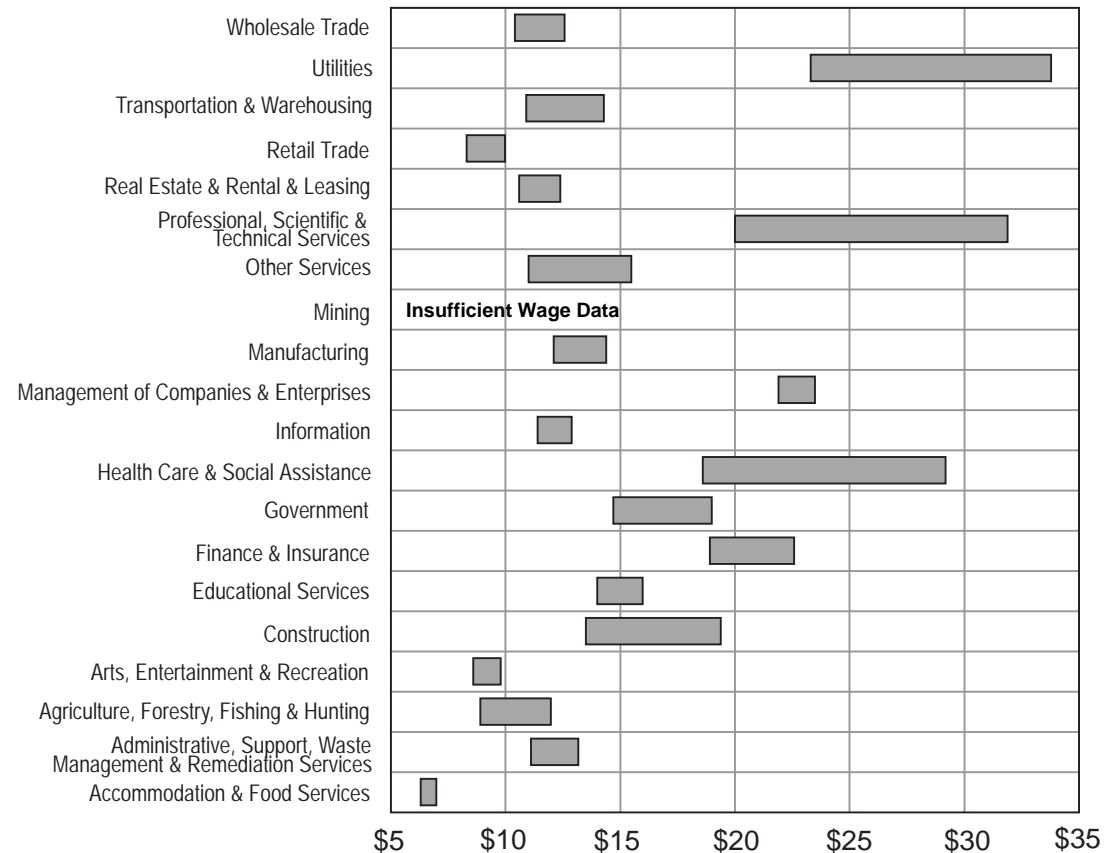
Other Services, a sector that includes repairs and maintenance; personal laundry services; membership associations and organizations; and private households added the third highest number of vacancies, 630, over the one-year period. This small and low paying sector accounts for less than 4% of Denver Metro’s employment and vacancies. Manufacturing added 310 vacancies above last year’s level. Seven percent of the vacancies are estimated in this sector but wages offered fell far short of the \$20.60 offered last spring.

Hiring activity is low in all remaining sectors. Although the Utilities sector account for very few vacancies, wages offered are the highest in the region. Less than 10 vacancies are estimated in the Mining sectors. Wage information reported in the Mining sector is less than the required level needed for reporting.

Wages reflect labor force supply and demand along with the set of skills and experience required for occupations. A wide range between the average minimum and the average maximum wages within a sector reflects a wide range of skills and experience in occupations for which employers are hiring.

The Utilities; Professional, Scientific & Technical Services, and Health Care & Social Assistance sectors offer the widest wage ranges. These industries account for a sizeable number of Healthcare Practitioners and Technical;

Figure 8: Reported Average Wage Ranges by JVS Sectors



Management; Architecture and Engineering; Business and Financial Operations; and Computer and Mathematical that offer some of the highest wages in the region.

The Accommodation & Food Services; Retail Trade; and Arts, Entertainment & Recreation sectors offer the lowest average wages and the narrowest ranges. Occupations for which employers are hiring within these sectors require limited sets of skills and experience to perform the jobs needed.

This report is the first in which Broomfield County is surveyed and analyzed separately from Boulder. This county currently accounts for 1.7% of the regional employment and only 0.2% of the vacancies.

Denver and Boulder counties continued this spring to account for more vacancies than their individual shares of regional employment. Denver County expanded its leading position as its share of the region's vacancies increased from 26% to 33%. The 2.2% vacancy rate estimated for Denver County is the highest in the region followed by Boulder at 2%. Sixteen percent of the vacancies are now estimated in Boulder County after the addition of 460 vacancies and after losing 50 vacancies to Broomfield County. Large increases are estimated in the vacancies of the Health Care & Social Assistance (1,470), the Accommodation & Food Services (880), and the Finance & Insurance (420) sectors of Denver County. The Government sector showed the largest decline in vacancies (150) in this county. Gainers in Boulder County include Manufacturing (340) and Retail Trade (300) while Government declined by 740 vacancies

While estimated vacancies increased in all the metro region counties, Jefferson County lost 170 vacancies from last spring's level. This resulted in a decline in share of vacancies for the county that accounts for largest share of regional employment from 19% to 13%. Most vacancy losses in this county are in the Retail Trade (410) and the Manufacturing (320) sectors. The 0.9% vacancy rate for Jefferson County is the second lowest after Broomfield.

Adams, Arapahoe and Douglas counties added vacancies that slightly improved their shares of vacancies from last year. Big gainers include Other services (180) and Government (175) in Adams County; Health Care & Social Assistance (400) and Accommodation & Food Services in Arapahoe County; and Accommodation & Food Services (74) and Arts, Entertainment & Recreation (60) in Douglas County.

Figure 9: Distribution of Employment and Vacancies by County

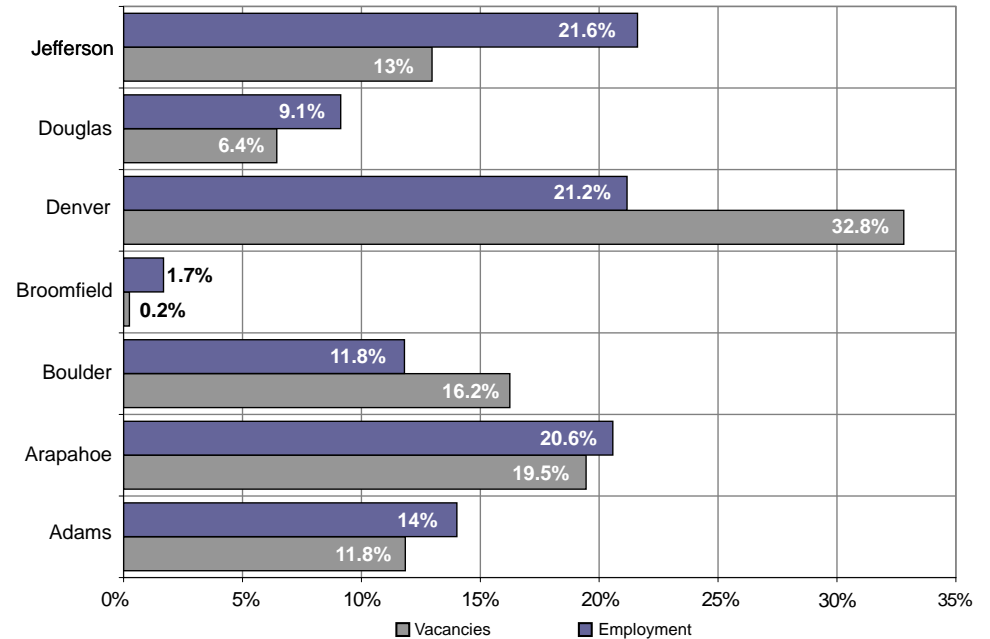


Figure 10: Vacancies and Wages by County

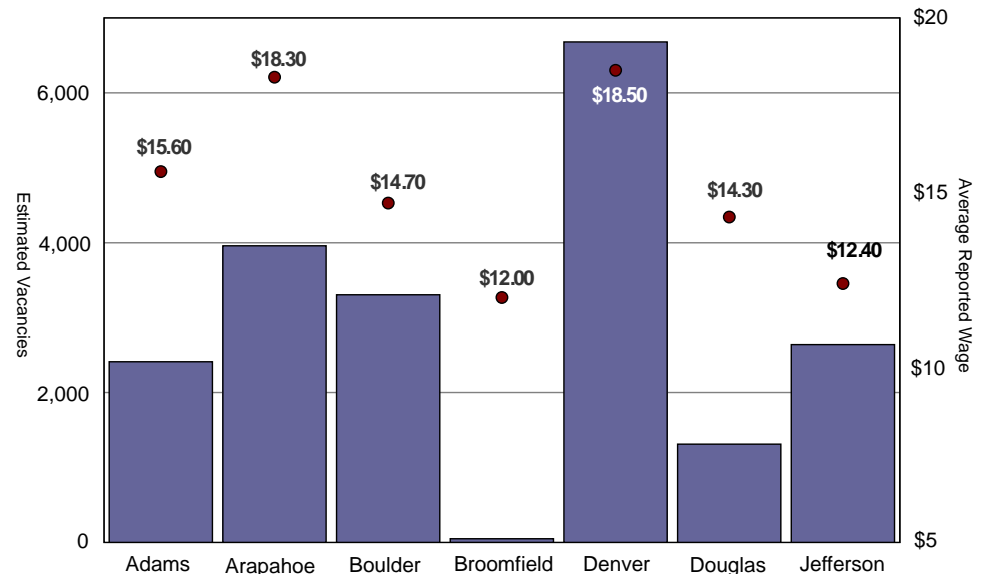
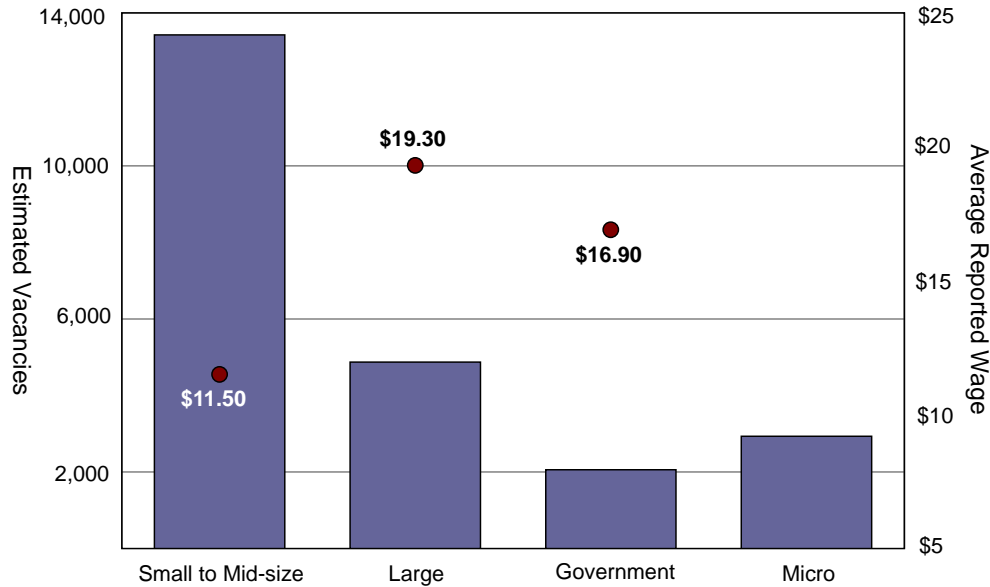


Figure 11: Estimated Vacancies and Average Wages by Employer Size

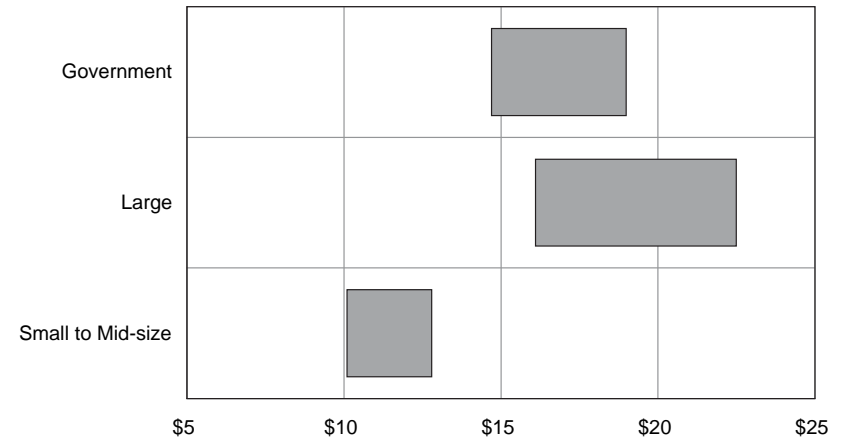


Small to mid-size employers account for 68% of the region’s sample frame employment and 58% of the estimated vacancies with a vacancy rate of 1.7%. Vacancies for this size class increased by 76% from last year with Accommodation & Food Services and Health Care & Social Assistance combining for more than half of this increase.

Large employers account for 18% of Denver Metro Region employment in the survey sample. Twenty-one percent of the region’s vacancies are estimated within this class size compared with 26% last year. Health Care & Social Assistance employers reported 38% of the vacancies within this size class after adding 270 vacancies over last year’s level. Vacancy rate for large employers is the highest at 2.2%.

Vacancies in the Government sector declined by 660 from last year level. Only 9% of the vacancies are estimated with government employers, compared to 16% a year earlier. Government accounts for 14% of the region’s sample frame employment.

Figure 12: Reported Average Wage Ranges by Employer Size



While employers with fewer than five employees, micro-employers, are not contacted by the Colorado Department of Labor and Employment, the department does estimate the vacancy rate for this size class. It is estimated that employers in this size category have a vacancy rate of 2.0%. Thirteen percent of the vacancies are open within this size category, one percentage point higher than last spring.

Of any size class, large employers offer the highest average wage of \$19.30. High wages in this class size resulted from high concentration of high-paying occupations such as Healthcare Practitioners and Technical, Management, Computer and Mathematical, and Architecture and Engineering occupations. Forty-four percent of the Government reported vacancies are classified as Education, Training, and Library occupations. Food Preparation and Serving Related, Transportation and Material Moving and Office and Administrative Support occupations make up half of the vacancies reported by small to mid-size employers.

The remainder of this report provides descriptive statistics of the vacancies reported in and unique to this survey. The survey design does not allow for application of this detail to the region as a whole, but can be used to understand characteristics of those job vacancies and occupations reported.

Ninety-five percent of the vacancies for which employment status is reported are permanent positions. Permanent positions accounted for 84% of the vacancies in the Spring 2004 report. Full-time/Permanent positions offer an average wage of \$17.40 while Part-time/Permanent vacancies offer an average wage of \$13.60. Government has 26% of the full-time/permanent positions and Health Care & Social Assistance has another 15%.

Half of the temporary positions are for Building and Grounds Cleaning and Maintenance or Food Preparation and Serving Related occupations. The average wage offered for part-time/temporary positions is the lowest among all employment status categories. Small to mid-size firms are the largest seekers of part-time/temporary workers.

Two-thirds of the full-time/temporary positions are for Building and Grounds Cleaning and Maintenance or Food Preparation and Serving Related occupations. Government is the largest provider for such temporary opportunities, offering \$11.60 on average.

Figure 13: Vacancies by Employment Status

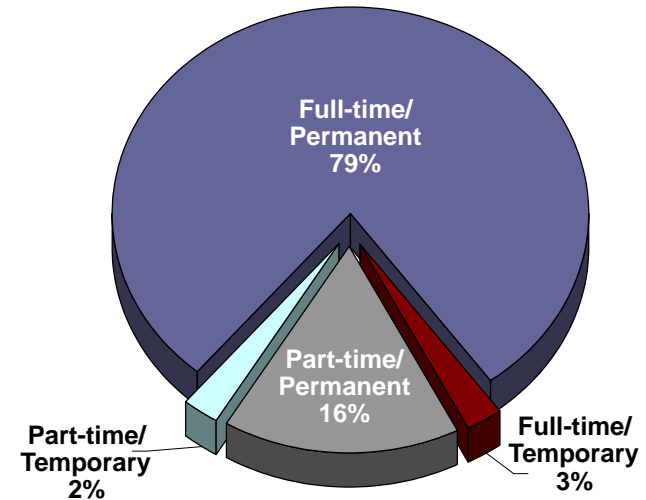
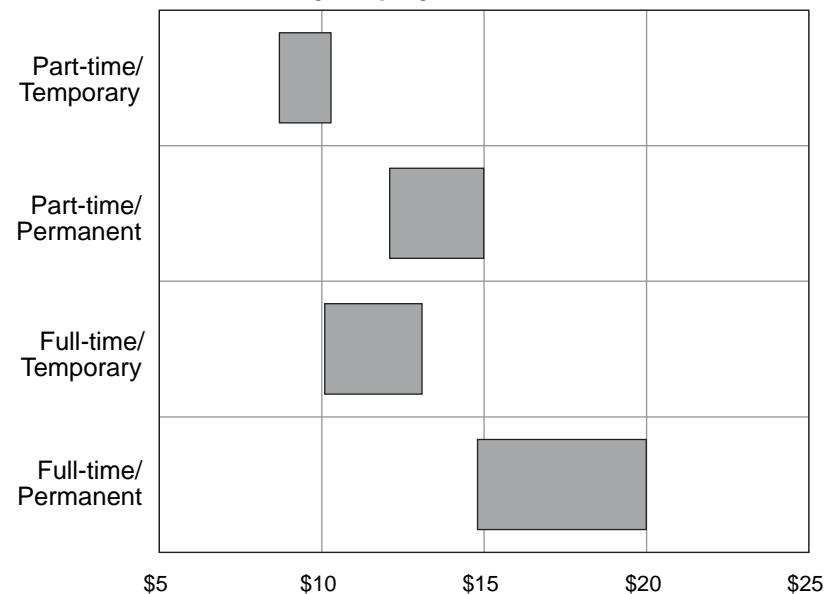


Figure 14: Reported Average Wage Ranges by Employment Status



During periods of high unemployment, it might be assumed that there are too many qualified candidates and too few job openings. However, even in recessions there are employers who cannot find qualified candidates to fill their open positions. Because a region’s labor force is made up of multiple smaller groups defined by various skills, experience, and education only a certain number of qualified candidates can compete for any given job. It is important, therefore, that job seekers have accurate information regarding what type of education and experience levels are in highest demand.

Thirty-five percent of the reported vacancies require a high school education or less. Vacancies with these minimal educational requirements are for occupations such as Cashiers; Laborers and Freight, Hand Stock; and Material Movers and Hand Packers and Packagers.

As with the Spring 2005 survey, positions requiring a bachelor’s degree have the highest concentration of vacancies in this survey. The percentage of positions

requiring advanced degrees slightly decreased from 5% to 4% between the two surveys. Education, Training, & Library, Management, Computer and Mathematical and Architecture and Engineering occupations account for two-third of the vacancies requiring a bachelor’s or an advanced degree.

For vacancies requiring vocational training or certification, 41% are reported in Health Care and Social Assistance and 23% in Government. Forty-one percent of these openings are either Healthcare Practitioners and Technical or Healthcare Support occupations.

Generally, the more education required for a position, the higher the wages offered and the wider the gap between the highest and lowest wages offered. Three-fourths of the positions requiring a two-years degree are for Healthcare Practitioners and Technical occupations.

Figure 15: Vacancies by Education

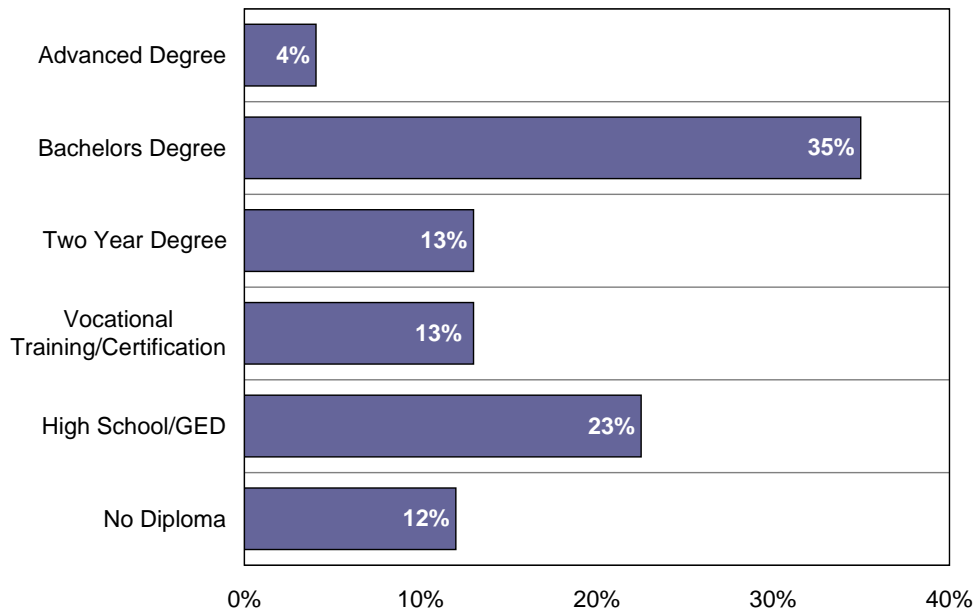


Figure 16: Reported Average Wage Ranges by Education

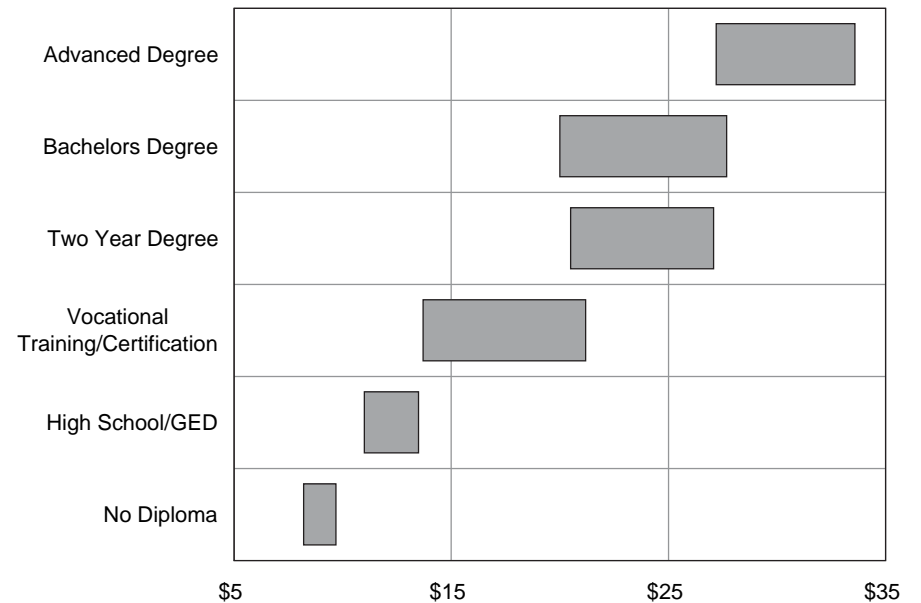


Figure 17: Vacancies by Experience

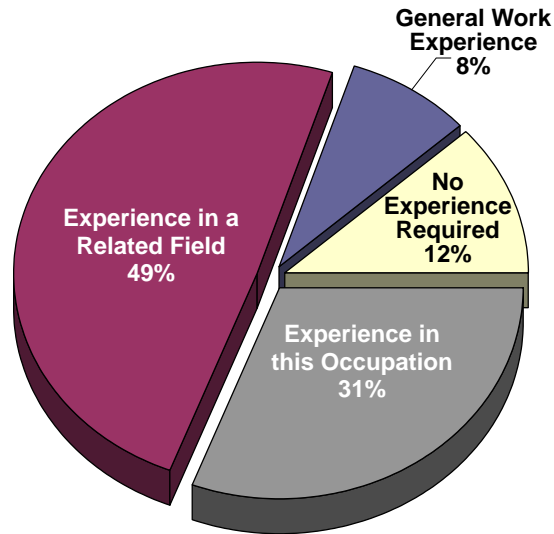
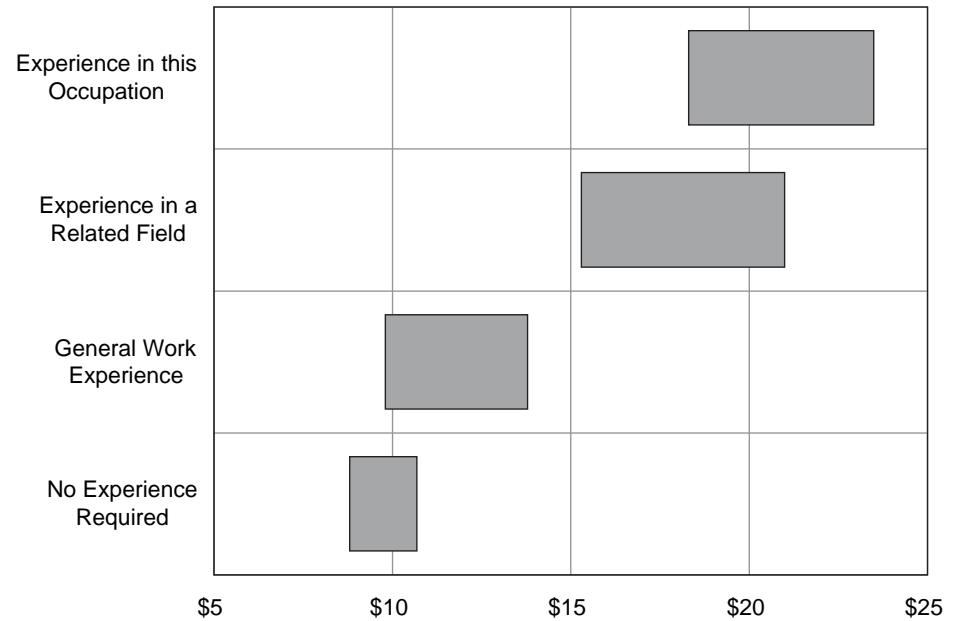


Figure 17 shows the breakdown of vacancies by experience requirements. The percentage of positions requiring specific experience in the occupation increased from 27% in the Spring 2004 Survey to 31% in this report. Positions requiring no previous work experience also slightly increased. No change occurred in the percentage of vacancies requiring general work experience. Almost one half of the reported vacancies need some kind of related experience.

Wages offered for vacancies not only increase with higher levels of experience, but also become wider in range. Variations in wages are mostly due to the types of occupations for which employers are hiring under each experience level. Higher levels of experience are mostly required for highly professional occupations that require specific experience and higher levels of education. Employers offer higher wages for these types of occupations to compensate candidates for their professionalism, education, and experience.

Figure 18: Reported Average Wage Ranges by Experience



Healthcare Practitioner & Technical occupations are the most demanded occupations that require high levels of experience. Of the vacancies requiring experience in the specific occupation, 20% are Healthcare Practitioner & Technical, 18% are Education, Training, and Library and 10% are Management occupations. Topping the list again, with 21% of all vacancies requiring experience in a related field, is the Healthcare Practitioner & Technical occupational group.

Twenty percent of the vacancies requiring general work experience are Office and Administrative Support occupations and 15% are Food Preparation and Serving Related occupations. Forty percent of the vacancies requiring no previous work experience are Food Preparation and Serving and Sales and Related occupations.

Employers' ability to find and hire qualified candidates is an important indicator of the supply side of the labor force. Fewer employers claim greater difficulty in filling their vacant positions in this survey, compared to the Spring 2004 Survey.

The percentage of vacancies reported as not difficult to fill increased from 50% to 61% between the two surveys. Thirty percent of the vacancies reported as not difficult to fill are Education, Training, and Library and Food Preparation and Serving Related occupations.

The proportion of both positions reported as somewhat difficult to fill and very difficult to fill decreased from last year's levels. The most significant decrease was for positions reported at very difficult to fill from 18% to 10% within the one-year span. Sixty-one percent of the vacancies reported as very difficult to fill are Healthcare Practitioners and Technical occupations with the majority of these being registered nurses positions.

Vacancies reported as difficult to fill are generally assumed to offer higher average wages because they require more education and experience. Wage information provided in this survey back this general notion as average wages offered for very difficult to fill positions are almost \$7.50 higher than wages offered for somewhat difficult to fill positions and \$11.60 higher than not difficult to fill positions as perceived by employers.

Figure 19: Vacancies by Difficulty to Fill

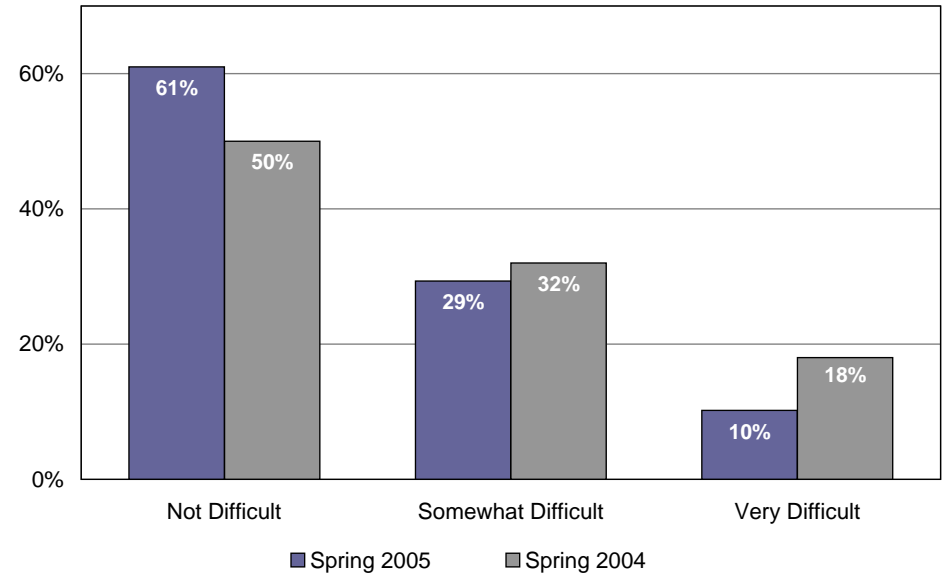
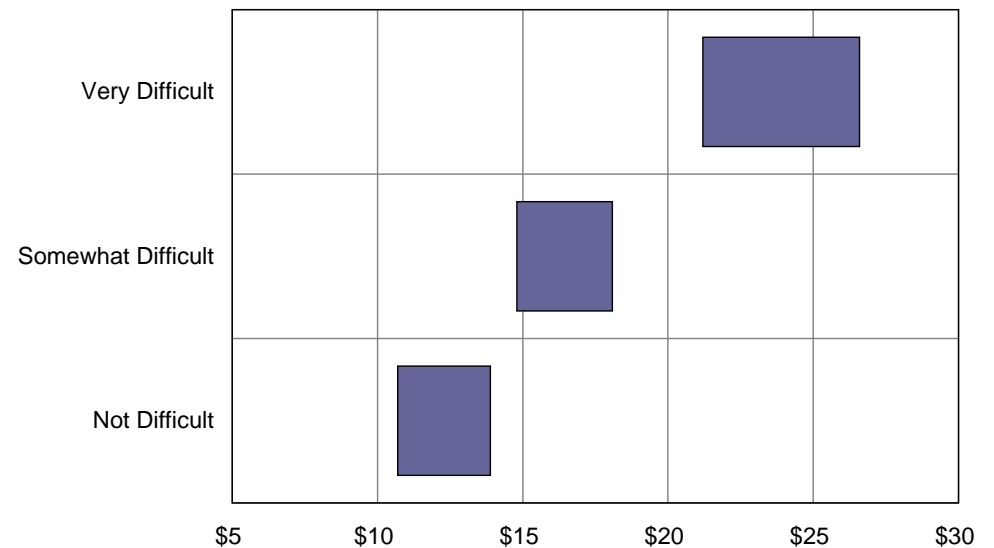


Figure 20: Reported Average Wage Ranges by Difficulty to Fill



Ironically, positions remain open for longer time periods compared to last year in spite of employers reporting less difficulty in filling positions in this survey. The percentage of vacancies open for less than 30 days dropped from 51% to 30% while increasing all other time periods. The most significant gain is among positions open for 60 or more days — the proportion of these vacancies increased from 19% to 33% between the two spring surveys. Average wages offered for this category of vacancies is the highest. Thirty-three percent of these vacancies are Healthcare Practitioners and Technical occupations while Education, Training, and Library occupations make up another 12%. Positions open between 30 and 59 days increased from 16% to 25% between the two surveys.

Vacancies for which employers are always hiring offer the lowest average wages among all groups. Thirty-eight percent of these vacancies are Sales and Related and Food Preparation and Serving Related occupations.

The connection between the perceived level of difficulty in filling a vacant position and the time for which the vacancy remains open is less obvious in this survey compared to previous ones. Seventy-two percent of the positions open for less than 30 days are reported as not difficult to fill. Only 41% of the positions reported as not difficult to fill have been open for less than 30 days while 29% are open for 60 or more days. Less clear is the relation between difficult to fill positions and the time period for which they remain open. Sixty-three percent of these positions are open for 60 or more days but the majority of the positions open for 60 or more days are perceived by employers as not difficult to fill.

Positions always open for hire but with low perceived levels of difficulty in filling may indicate that employers are having more difficulty retaining workers than getting them hired. Low wages, demanding work duties, and harsh working conditions are some of the reasons a turnover rate may be high, leaving a position open for continuous hiring. Two-thirds of positions always open for hire are reported as not difficult to fill. Average wages offered for positions always open for hire are the lowest in this survey. Over one half of these vacancies are Sales & Related, Food Preparation and Office and Administrative Support occupations.

Figure 21: Vacancies by Time Open for Hire

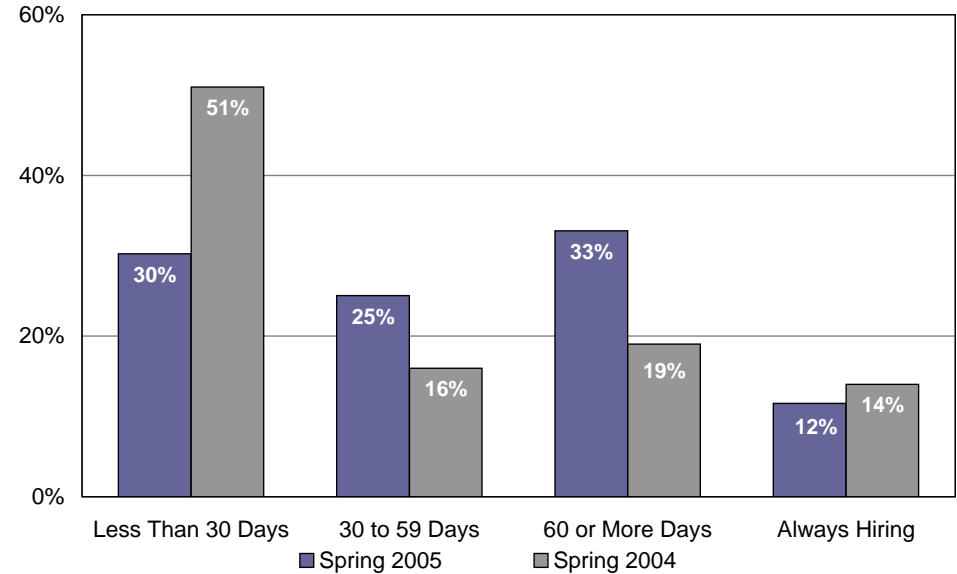
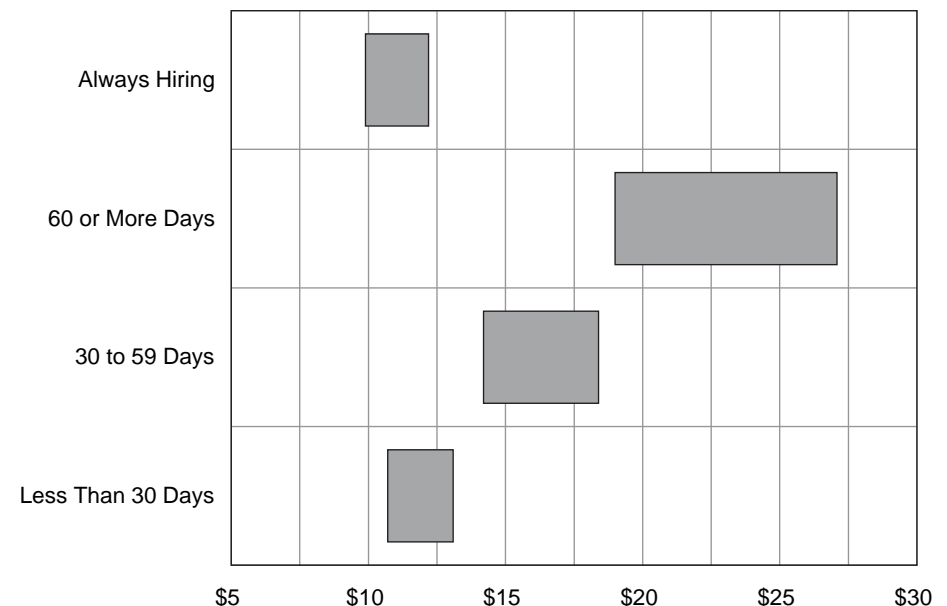


Figure 22: Reported Average Wage Ranges by Time Open for Hire



Medical Insurance

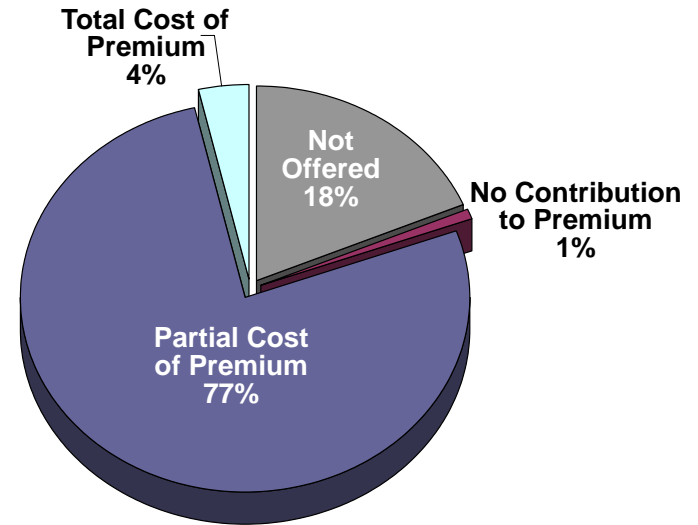
Employers frequently offer compensation related benefits to recruit qualified candidates. Some of these perks are paid time off, transportation or parking vouchers, and subsidized child-care. One of the most common benefits offered to employees is a group medical insurance plan, of which the employer may pay all, part, or none of the monthly insurance premium.

Medical benefits are offered for 82% of the vacancies reported in this survey, compared to 77% in the Spring 2004 report. Almost half of the vacancies offered with no medical insurance coverage are for Production, Sales and Related, Transportation and Material Moving and Food Preparation and Serving Related occupations. Of the vacancies offered with medical insurance benefits, 17% are Healthcare Practitioners and Technical, 13% are Education, Training, and Library, and 11% are Office and Administrative Support occupations. Almost all vacancies in Architecture & Engineering, Business & Financial Operations, Computer & Mathematical, and Management occupations are offered with medical insurance benefits.

Sign-On Bonus

Employers offer sign-on bonus information for 75% of the reported vacancies. A sign-on bonus is offered for only 21 of the vacancies.

Figure 23: Employers' Contribution to Medical Insurance



The information reported in the Job Vacancy Survey is intended to provide job seekers and employers with useful and current information to help them make informed labor market decisions. Estimating the number of overall vacancies in a region, and breaking those numbers down by sectors and size, provides a useful overview of the job market. When it comes down to filling a particular opening, the more detailed information is better. Reporting vacancies at the individual occupation level is the most detailed information the survey can provide without breaking confidentiality with those employers who participated in the survey.

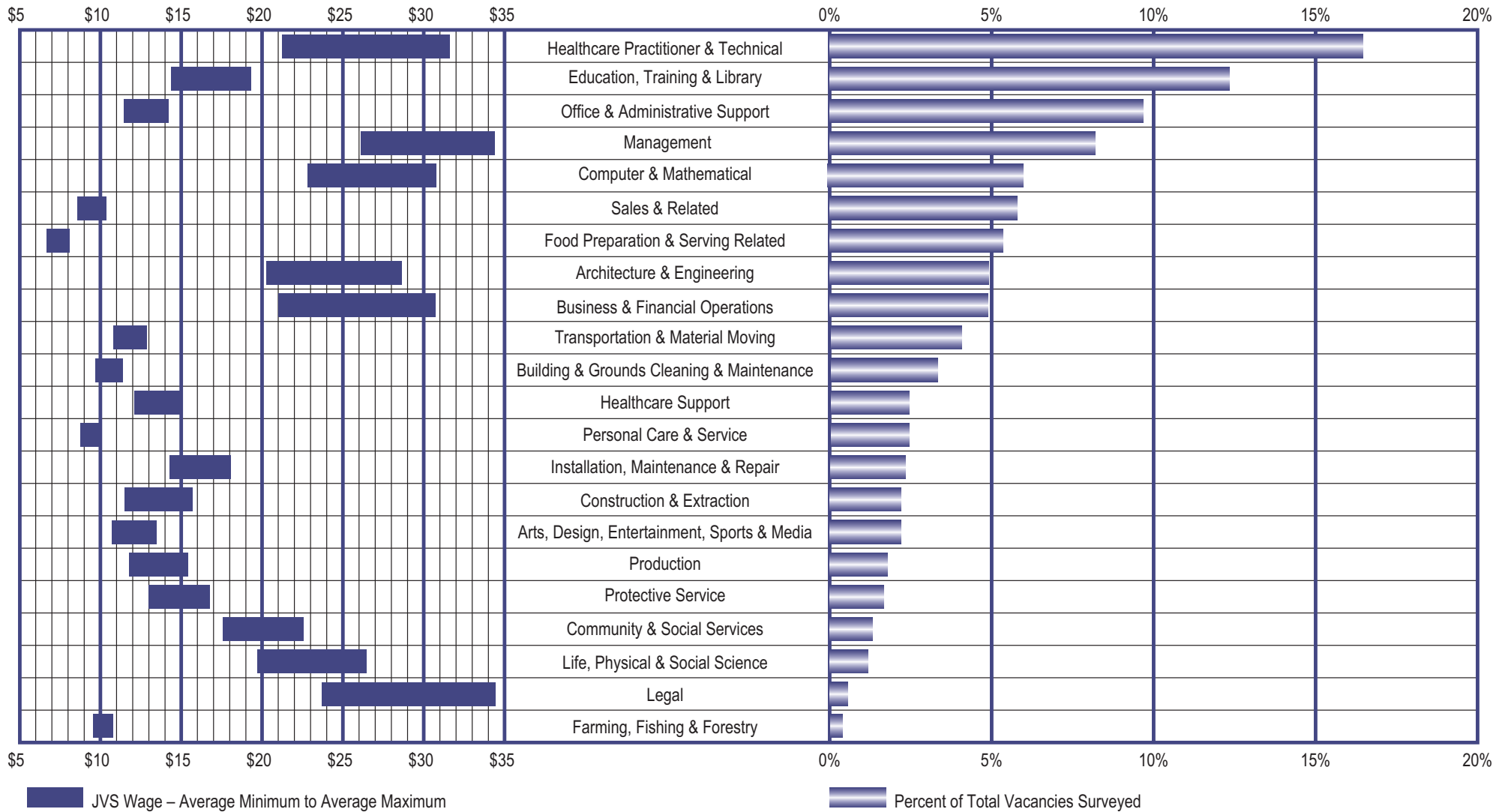
In order to help make comparisons between this survey and other sources of employment statistics, all jobs reported are assigned a Standard Occupational Classification (SOC) code from the *2000 Standard Occupational Classification Manual*. Ten out of the 22 major occupational groups offer an average wage above the overall average of \$16.10 reported for all vacancies in this report. These ten major occupational groups account for 58% of the reported vacancies.

Occupational groups offering average wages at or below the overall average wage account for the remaining 42% of the vacancies.

Survey results show that the major occupational groups with the most vacancies are not necessarily offering the highest wages. Wages accompanying vacancy information reflects both the degree of skill and experience required to do the job and/or the supply and demand for an occupation in the labor market.

Both the Healthcare Practitioners & Technical and Management occupational groups account for a large percentage of the vacancies, while offering relatively high wages. Healthcare Practitioners & Technical occupations account for 17% of all vacancies reported in the region and offer an average wage of \$26.40 while Management occupations account for 8% and offer a wage of \$30.30. Life, Physical & Social Science and Legal occupations offer the highest average wages in this survey, yet, they are among the least for which employers are hiring. Opportunities for Office and Administrative and Support workers are abundant but the average wage offered is only \$12.90.

Figure 24: Vacancies and Reported Average Wage Ranges by Major Occupational Groups



Occupational Estimates

Tables 1 and 2 contain a list of all 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. Nearly 13% percent of small to mid-size employers were contacted for the random sample, and likewise the occupations associated with these vacancies are listed.

Vacancies estimated and reported along with wages offered are displayed in Table 1 for those occupations where at least 10 vacancies are estimated.

Estimated Vacancies

Because nearly all large employers and Government agencies are contacted, the number of vacancies by occupation for these groups is not estimated; it is an actual count 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 occupational titles 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.

Average OES Wage

Occupational Employment Statistics (OES) wage data are provided for each occupation. OES data are based on a national survey of employers and refer to filled positions, not vacancies. The data provided here are reported for the Denver Metro Region when available and statewide otherwise. 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.

High Demand Occupations

From the 22 major occupational groups, one can find 800 detailed occupation titles designed to classify work activity. The top twenty occupations found in this survey account for 45% of the total estimated vacancies. These occupations are accompanied by wage data, as reported by surveyed employers.

Table 1: Occupations with 10 or More Estimated Vacancies

Soc Code	SOC Occupational Title	Vacancies Estimated	Average JVS Wage	Occupational Employment Statistics Wage Data (2004)							
				Average Wages			Percentile Distribution				
				Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
35-3021	Combined food preparation and serving workers, including fast food	1,370	\$7.12	\$6.97	\$8.23	\$8.87	\$6.49	\$7.27	\$8.01	\$8.96	\$10.56
35-3031	Waiters and waitresses	1,364	\$5.89	\$5.93	\$8.21	\$9.35	\$5.60	\$6.08	\$6.99	\$10.54	\$12.52
29-1111	Registered nurses	1,269	\$29.37	\$22.09	\$27.78	\$30.63	\$20.22	\$23.67	\$27.49	\$32.10	\$35.75
41-2031	Retail salespersons	808	\$8.22	\$7.15	\$11.66	\$13.91	\$6.84	\$7.84	\$9.78	\$13.21	\$19.30
31-1012	Nursing aides, orderlies, and attendants	426	\$12.97	\$9.67	\$12.27	\$13.56	\$9.20	\$10.48	\$12.18	\$14.00	\$16.10
37-3011	Landscaping and groundskeeping workers	362	\$10.06	\$8.55	\$11.45	\$12.90	\$7.82	\$9.05	\$10.31	\$13.67	\$16.77
43-4051	Customer service representatives	359	\$10.93	\$10.30	\$14.36	\$16.39	\$9.50	\$11.31	\$13.48	\$16.74	\$20.88
43-4171	Receptionists and information clerks	328	\$10.71	\$9.01	\$12.61	\$14.41	\$8.23	\$10.26	\$12.50	\$14.95	\$17.16
*25-2021	Elementary school teachers, except special education	314	\$16.76	\$30,940	\$45,080	\$52,150	\$30,020	\$34,090	\$43,650	\$56,220	\$66,340
39-9011	Child care workers	269	\$9.18	\$7.11	\$9.50	\$10.69	\$6.76	\$7.61	\$8.90	\$10.78	\$12.96
35-2014	Cooks, restaurant	260	\$9.45	\$7.69	\$10.36	\$11.69	\$7.05	\$8.53	\$10.06	\$12.20	\$14.47
*25-2031	Secondary school teachers, except special and vocational education	253	\$19.02	\$34,170	\$48,180	\$55,180	\$31,750	\$36,650	\$47,840	\$59,420	\$68,240
41-2011	Cashiers	244	\$8.20	\$7.21	\$9.81	\$11.11	\$6.93	\$7.71	\$9.14	\$11.05	\$15.00
43-6011	Executive secretaries and administrative assistants	237	\$18.03	\$14.72	\$19.46	\$21.83	\$14.05	\$15.98	\$19.03	\$22.14	\$26.39
*25-9041	Teacher assistants	212	\$11.27	\$17,290	\$22,190	\$24,650	\$16,000	\$18,660	\$21,810	\$25,440	\$28,750
43-9061	Office clerks, general	209	\$12.46	\$9.57	\$13.60	\$15.62	\$8.93	\$10.91	\$13.41	\$16.35	\$18.88
11-9111	Medical and health services managers	201	\$33.28	\$24.05	\$37.19	\$43.76	\$21.74	\$27.56	\$34.84	\$44.94	\$55.11
35-9011	Dining room and cafeteria attendants and bartender helpers	200	\$8.60	\$5.85	\$7.40	\$8.17	\$5.57	\$6.10	\$7.06	\$8.24	\$10.45
29-1123	Physical therapists	190	\$23.02	\$19.45	\$25.52	\$28.55	\$18.12	\$21.97	\$26.05	\$30.01	\$33.21
35-2021	Food preparation workers	188	\$7.50	\$7.19	\$9.49	\$10.64	\$6.90	\$7.69	\$9.09	\$11.12	\$13.11
47-2111	Electricians	184	\$16.26	\$15.45	\$21.75	\$24.90	\$13.49	\$17.92	\$22.77	\$26.12	\$28.47

* annual wage data

† insufficient wage data

continued

Table 1: Occupations with 10 or More Estimated Vacancies
Page 2

				Occupational Employment Statistics Wage Data (2004)							
				Average Wages			Percentile Distribution				
Soc Code	SOC Occupational Title	Vacancies Estimated	Average JVS Wage	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
15-1032	Computer software engineers, systems software	177	\$33.67	\$28.28	\$38.23	\$43.20	\$26.46	\$31.31	\$38.08	\$44.79	\$53.08
53-3032	Truck drivers, heavy and tractor-trailer	177	\$13.63	\$13.92	\$17.53	\$19.33	\$13.03	\$14.92	\$16.95	\$20.13	\$23.49
47-2031	Carpenters	176	\$17.22	\$11.12	\$18.14	\$21.65	\$9.72	\$13.58	\$17.68	\$21.73	\$27.32
51-4121	Welders, cutters, solderers, and brazers	175	\$17.69	\$12.91	\$16.77	\$18.69	\$12.08	\$14.02	\$16.64	\$19.76	\$21.80
11-3031	Financial managers	171	\$37.08	\$30.46	\$49.34	\$58.78	\$27.80	\$34.44	\$43.78	\$56.78	†
53-3033	Truck drivers, light or delivery services	171	\$10.69	\$9.72	\$14.42	\$16.77	\$8.94	\$10.80	\$14.20	\$16.93	\$21.39
13-2011	Accountants and auditors	150	\$22.78	\$17.89	\$29.46	\$35.24	\$16.32	\$20.34	\$25.64	\$33.87	\$43.89
*25-2022	Middle school teachers, except special and vocational education	146	\$15.53	\$32,430	\$45,740	\$52,390	\$30,960	\$34,910	\$44,410	\$55,980	\$65,870
37-2012	Maids and housekeeping cleaners	146	\$8.27	\$7.31	\$8.96	\$9.78	\$6.99	\$7.54	\$8.44	\$10.27	\$11.96
43-3071	Tellers	142	\$10.58	\$10.06	\$12.06	\$13.06	\$9.58	\$10.51	\$11.91	\$13.49	\$15.22
29-2061	Licensed practical and licensed vocational nurses	137	\$16.38	\$14.57	\$18.67	\$20.72	\$13.71	\$16.14	\$18.87	\$21.16	\$24.18
49-9042	Maintenance and repair workers, general	125	\$13.02	\$10.91	\$16.71	\$19.61	\$10.17	\$12.52	\$16.04	\$20.42	\$25.28
37-2011	Janitors and cleaners, except maids and housekeeping cleaners	122	\$10.42	\$7.57	\$9.87	\$11.02	\$7.26	\$7.94	\$9.11	\$10.97	\$14.12
47-2061	Construction laborers	121	\$10.58	\$8.88	\$12.82	\$14.79	\$8.37	\$10.01	\$12.51	\$15.49	\$17.90
15-1041	Computer support specialists	119	\$21.15	\$15.26	\$23.62	\$27.80	\$13.87	\$17.18	\$22.39	\$27.57	\$36.37
*27-2022	Coaches and scouts	117	\$10.48	\$19,570	\$39,220	\$49,040	\$16,630	\$23,320	\$30,730	\$41,720	\$64,260
17-2051	Civil engineers	115	\$24.86	\$22.68	\$31.48	\$35.88	\$21.01	\$24.38	\$29.70	\$37.34	\$45.99
43-3031	Bookkeeping, accounting, and auditing clerks	111	\$13.68	\$11.13	\$15.87	\$18.24	\$10.34	\$12.91	\$15.70	\$18.86	\$21.90
11-2021	Marketing managers	109	\$30.34	\$25.63	\$44.03	\$53.22	\$23.49	\$28.77	\$37.58	\$54.82	†
13-2051	Financial analysts	109	\$28.23	\$19.07	\$34.07	\$41.58	\$17.36	\$21.34	\$28.39	\$39.27	\$55.93
29-2011	Medical and clinical laboratory technologists	109	\$22.16	\$16.17	\$22.06	\$25.00	\$14.92	\$17.98	\$22.73	\$26.11	\$28.67
39-5012	Hairdressers, hairstylists, and cosmetologists	109	\$9.08	\$9.06	\$13.63	\$15.91	\$8.71	\$9.64	\$11.76	\$16.58	\$22.16
31-9092	Medical assistants	108	\$12.99	\$11.65	\$14.89	\$16.51	\$11.07	\$12.79	\$15.08	\$16.87	\$19.13

* annual wage data
† insufficient wage data

continued

Table 1: Occupations with 10 or More Estimated Vacancies
Page 3

				Occupational Employment Statistics Wage Data (2004)							
				Average Wages			Percentile Distribution				
Soc Code	SOC Occupational Title	Vacancies Estimated	Average JVS Wage	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
53-3021	Bus drivers, transit and intercity	107	\$13.37	\$12.31	\$15.15	\$16.57	\$11.77	\$12.70	\$14.24	\$17.95	\$20.61
35-3022	Counter attendants, cafeteria, food concession, and coffee shop	103	\$7.09	\$7.14	\$8.38	\$9.01	\$6.82	\$7.30	\$8.05	\$9.27	\$10.66
11-1021	General and operations managers	102	\$32.48	\$25.11	\$51.25	\$64.31	\$22.28	\$30.37	\$44.64	\$67.68	†
41-2022	Parts salespersons	102	\$11.76	\$10.94	\$15.87	\$18.34	\$10.00	\$11.69	\$14.29	\$18.16	\$25.21
43-6013	Medical secretaries	100	\$12.62	\$12.55	\$17.02	\$19.26	\$11.95	\$13.38	\$15.78	\$19.58	\$26.02
53-7064	Packers and packagers, hand	98	\$9.34	\$7.10	\$9.24	\$10.31	\$6.81	\$7.41	\$8.36	\$10.43	\$13.98
29-2055	Surgical technologists	95	\$18.04	\$10.96	\$16.50	\$19.27	\$9.58	\$12.66	\$16.66	\$20.18	\$23.79
41-4011	Sales representatives, wholesale and manufacturing, technical and scientific products	94	\$34.19	\$17.95	\$37.28	\$46.94	\$15.54	\$20.80	\$31.94	\$49.13	\$66.97
13-1111	Management analysts	92	\$36.13	\$20.25	\$35.86	\$43.67	\$18.38	\$23.45	\$30.90	\$42.54	\$63.54
49-3023	Automotive service technicians and mechanics	91	\$17.06	\$12.41	\$19.51	\$23.07	\$11.05	\$14.45	\$19.05	\$24.34	\$28.17
29-2034	Radiologic technologists and technicians	86	\$25.08	\$17.69	\$22.17	\$24.41	\$16.34	\$18.92	\$21.99	\$25.62	\$28.23
53-7062	Laborers and freight, stock, and material movers, hand	85	\$10.21	\$8.24	\$11.19	\$12.67	\$7.41	\$9.09	\$10.74	\$13.12	\$15.72
53-3031	Driver/sales workers	79	\$11.46	\$8.81	\$13.56	\$15.94	\$8.61	\$9.87	\$12.62	\$16.63	\$20.49
21-1014	Mental health counselors	73	\$21.15	\$11.94	\$16.92	\$19.41	\$11.42	\$12.69	\$15.16	\$19.48	\$24.83
33-9092	Lifeguards, ski patrol, and other recreational protective service workers	73	\$9.39	\$7.54	\$9.08	\$9.84	\$7.26	\$7.95	\$9.04	\$10.17	\$10.87
31-9091	Dental assistants	72	\$14.86	\$15.20	\$18.43	\$20.05	\$13.87	\$16.88	\$19.12	\$20.80	\$21.90
15-1051	Computer systems analysts	71	\$32.90	\$24.93	\$35.07	\$40.15	\$21.70	\$28.52	\$36.10	\$42.01	\$46.87
23-1011	Lawyers	70	\$34.53	\$27.36	\$48.56	\$59.16	\$24.60	\$31.88	\$45.06	\$58.56	†
41-9041	Telemarketers	69	\$9.94	\$7.81	\$12.62	\$15.02	\$7.26	\$8.61	\$10.22	\$13.21	\$21.17
13-1041	Compliance officers, except agriculture, construction, health and safety, and transportation	68	\$27.58	\$19.68	\$27.18	\$30.92	\$18.00	\$21.77	\$26.43	\$31.85	\$37.68
53-7061	Cleaners of vehicles and equipment	68	\$9.15	\$7.10	\$10.57	\$12.30	\$6.19	\$8.27	\$10.30	\$12.80	\$15.24

* annual wage data

† insufficient wage data

continued

Table 1: Occupations with 10 or More Estimated Vacancies
Page 4

				Occupational Employment Statistics Wage Data (2004)							
				Average Wages			Percentile Distribution				
Soc Code	SOC Occupational Title	Vacancies Estimated	Average JVS Wage	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
41-3031	Securities, commodities, and financial services sales agents	67	\$18.03	\$18.28	\$42.02	\$53.88	\$16.97	\$20.19	\$28.25	\$59.78	†
31-9099	Healthcare support workers, all other	67	\$15.75	\$10.79	\$13.60	\$15.01	\$9.91	\$11.41	\$13.16	\$15.57	\$17.79
29-2012	Medical and clinical laboratory technicians	66	\$13.83	\$11.76	\$16.50	\$18.86	\$11.04	\$13.01	\$16.10	\$19.83	\$22.75
15-1031	Computer software engineers, applications	63	\$33.50	\$27.91	\$37.39	\$42.13	\$25.82	\$30.92	\$37.47	\$43.08	\$50.47
49-3031	Bus and truck mechanics and diesel engine specialists	63	\$18.65	\$15.45	\$21.52	\$24.55	\$14.23	\$17.29	\$20.19	\$24.13	\$33.04
13-2072	Loan officers	62	\$34.33	\$15.50	\$28.70	\$35.29	\$14.21	\$17.98	\$24.83	\$32.80	\$43.14
53-6031	Service station attendants	61	\$8.20	\$6.94	\$10.16	\$11.77	\$6.39	\$7.74	\$9.71	\$12.37	\$15.07
29-2056	Veterinary technologists and technicians	59	\$14.50	\$9.68	\$11.04	\$11.72	\$9.10	\$9.66	\$10.59	\$12.13	\$13.92
35-9031	Hosts and hostesses, restaurant, lounge, and coffee shop	59	\$6.53	\$6.13	\$8.13	\$9.13	\$5.79	\$6.65	\$7.81	\$9.21	\$10.84
11-2022	Sales managers	57	\$29.05	\$22.01	\$45.43	\$57.14	\$20.15	\$24.26	\$40.70	\$58.73	†
17-2011	Aerospace engineers	57	†	\$28.15	\$36.79	\$41.11	\$25.78	\$30.91	\$37.14	\$42.99	\$49.52
15-1071	Network and computer systems administrators	56	\$25.57	\$20.98	\$30.91	\$35.87	\$19.09	\$23.13	\$29.80	\$38.06	\$44.25
*11-9032	Education administrators, elementary and secondary school	55	\$35.42	\$56,490	\$74,280	\$83,170	\$50,080	\$63,140	\$75,600	\$87,730	\$97,370
13-1071	Employment, recruitment, and placement specialists	54	\$19.79	\$14.46	\$24.36	\$29.31	\$13.66	\$16.34	\$21.20	\$29.70	\$37.19
49-9021	Heating, air conditioning, and refrigeration mechanics and installers	54	\$15.38	\$14.82	\$20.01	\$22.60	\$14.15	\$16.21	\$19.71	\$23.92	\$26.83
35-9021	Dishwashers	54	\$9.00	\$7.04	\$8.10	\$8.63	\$6.70	\$7.29	\$8.05	\$9.01	\$10.18
17-2061	Computer hardware engineers	53	†	\$32.42	\$50.12	\$58.97	\$30.03	\$36.19	\$47.82	\$57.79	†
47-4051	Highway maintenance workers	53	\$10.99	\$14.62	\$17.39	\$18.77	\$13.86	\$15.17	\$17.22	\$19.81	\$21.53
13-1051	Cost estimators	52	\$17.88	\$18.36	\$27.42	\$31.95	\$17.54	\$20.41	\$26.00	\$33.21	\$41.46
15-1061	Database administrators	51	\$30.45	\$20.38	\$30.54	\$35.61	\$18.37	\$23.17	\$28.26	\$38.27	\$45.28

* annual wage data

† insufficient wage data

Table 1: Occupations with 10 or More Estimated Vacancies
Page 5

				Occupational Employment Statistics Wage Data (2004)							
				Average Wages			Percentile Distribution				
Soc Code	SOC Occupational Title	Vacancies Estimated	Average JVS Wage	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
43-1011	First-line supervisors/managers of office and administrative support workers	51	\$18.11	\$16.80	\$23.85	\$27.37	\$15.19	\$18.70	\$22.52	\$27.98	\$34.29
43-5081	Stock clerks and order fillers	51	\$11.32	\$8.52	\$11.99	\$13.72	\$7.79	\$9.19	\$11.28	\$14.66	\$16.88
11-9041	Engineering managers	50	\$27.52	\$36.67	\$50.06	\$56.76	\$35.25	\$40.25	\$47.84	\$57.30	\$69.52
29-1126	Respiratory therapists	50	\$26.68	\$18.52	\$21.61	\$23.15	\$17.65	\$19.03	\$21.27	\$24.53	\$26.84
33-9032	Security guards	50	\$11.55	\$9.46	\$12.87	\$14.58	\$9.03	\$9.95	\$11.72	\$14.62	\$18.86
17-2071	Electrical engineers	49	†	\$25.57	\$35.68	\$40.73	\$23.65	\$28.37	\$35.29	\$42.52	\$50.04
13-2061	Financial examiners	48	\$28.95	\$19.58	\$34.02	\$41.24	\$17.22	\$22.20	\$33.42	\$41.94	\$52.67
43-3011	Bill and account collectors	48	\$14.24	\$10.89	\$14.84	\$16.81	\$9.87	\$12.03	\$14.36	\$16.98	\$20.67
35-1012	First-line supervisors/managers of food preparation and serving workers	48	\$17.72	\$9.21	\$13.94	\$16.30	\$8.69	\$10.43	\$13.08	\$16.86	\$20.83
21-1013	Marriage and Family Therapists	47	†	†	†	†	†	†	†	†	†
39-3091	Amusement and recreation attendants	47	\$8.81	\$6.66	\$8.73	\$9.76	\$6.14	\$7.14	\$8.30	\$10.15	\$12.16
17-2072	Electronics engineers, except computer	46	†	\$28.05	\$36.75	\$41.10	\$25.75	\$30.13	\$35.15	\$42.43	\$52.41
29-1122	Occupational therapists	46	\$21.90	\$18.21	\$23.16	\$25.64	\$17.28	\$19.47	\$22.86	\$26.65	\$30.74
47-2152	Plumbers, pipefitters, and steamfitters	46	\$23.56	\$13.25	\$19.59	\$22.75	\$12.03	\$14.89	\$19.63	\$24.27	\$27.19
43-5061	Production, planning, and expediting clerks	46	\$31.03	\$14.16	\$19.30	\$21.86	\$13.09	\$16.32	\$19.35	\$22.12	\$26.03
*25-1042	Biological science teachers, postsecondary	45	\$32.75	\$31,560	\$65,760	\$82,860	\$26,180	\$38,100	\$54,280	\$84,980	\$118,090
11-9021	Construction managers	45	\$26.50	\$25.93	\$37.75	\$43.66	\$23.40	\$28.94	\$35.72	\$43.15	\$53.91
15-1081	Network systems and data communications analysts	45	\$21.19	\$21.95	\$31.06	\$35.62	\$19.89	\$24.19	\$30.33	\$36.97	\$43.99
41-3099	Sales representatives, services, all other	45	\$17.61	\$15.88	\$26.54	\$31.87	\$14.50	\$17.99	\$22.94	\$32.86	\$42.26
11-3021	Computer and information systems managers	44	\$30.62	\$35.83	\$51.76	\$59.72	\$33.88	\$40.98	\$50.25	\$60.64	†
11-3011	Administrative services managers	44	\$24.32	\$21.51	\$34.16	\$40.48	\$19.60	\$24.96	\$32.22	\$41.44	\$52.90
11-9141	Property, real estate, and community association managers	44	\$17.68	\$13.33	\$25.70	\$31.88	\$12.32	\$14.58	\$20.27	\$32.09	\$47.28

* annual wage data

† insufficient wage data

Table 1: Occupations with 10 or More Estimated Vacancies
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				Occupational Employment Statistics Wage Data (2004)								
				Average Wages			Percentile Distribution					
Soc Code	SOC Occupational Title	Vacancies Estimated	Average JVS Wage	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th	
39-9032	Recreation workers	44	\$10.42	\$9.03	\$13.24	\$15.34	\$8.38	\$9.78	\$11.93	\$15.48	\$21.38	
49-3053	Outdoor power equipment and other small engine mechanics	44	\$10.27	\$8.05	\$12.28	\$14.39	\$7.73	\$8.52	\$10.06	\$15.05	\$22.48	
43-6014	Secretaries, except legal, medical, and executive	43	\$12.48	\$10.90	\$15.01	\$17.06	\$9.90	\$12.25	\$14.95	\$17.67	\$20.74	
25-2011	Preschool teachers, except special education	42	\$11.77	\$9.79	\$11.50	\$12.35	\$9.19	\$9.69	\$10.54	\$11.40	\$15.59	
35-2011	Cooks, fast food	42	\$6.88	\$6.95	\$8.21	\$8.84	\$6.58	\$7.21	\$8.12	\$9.45	\$10.40	
33-3051	Police and sheriff's patrol officers	40	\$21.75	\$20.33	\$25.77	\$28.49	\$19.12	\$21.71	\$25.96	\$30.46	\$33.43	
51-2021	Coil winders, tapers, and finishers	40	\$10.50	\$10.61	\$14.38	\$16.26	\$9.82	\$11.22	\$12.83	\$16.18	\$23.22	
29-1051	Pharmacists	38	\$40.15	\$36.11	\$43.07	\$46.56	\$35.92	\$38.28	\$41.90	\$46.03	\$53.56	
15-1021	Computer programmers	38	\$30.57	\$21.16	\$32.74	\$38.53	\$18.72	\$24.31	\$31.02	\$40.13	\$50.34	
43-9041	Insurance claims and policy processing clerks	38	\$13.13	\$11.46	\$14.87	\$16.57	\$10.81	\$12.25	\$14.80	\$17.24	\$19.87	
17-2141	Mechanical engineers	37	†	\$23.08	\$33.21	\$38.27	\$21.74	\$25.73	\$32.24	\$39.74	\$45.37	
29-1127	Speech-language pathologists	37	\$18.59	\$19.16	\$25.38	\$28.49	\$18.14	\$21.11	\$25.46	\$30.17	\$33.67	
43-3021	Billing and posting clerks and machine operators	36	\$10.35	\$10.26	\$14.19	\$16.16	\$9.05	\$12.09	\$14.46	\$16.60	\$18.90	
*25-2043	Special education teachers, secondary school	35	\$18.74	\$32,590	\$48,300	\$56,150	\$30,360	\$35,520	\$49,300	\$60,920	\$68,570	
51-6011	Laundry and dry-cleaning workers	35	\$8.63	\$8.13	\$11.73	\$13.53	\$7.49	\$8.80	\$10.31	\$14.08	\$19.36	
41-2021	Counter and rental clerks	35	\$7.00	\$7.11	\$10.91	\$12.81	\$6.64	\$7.92	\$10.00	\$12.59	\$16.60	
17-2112	Industrial engineers	34	\$30.80	\$24.03	\$34.27	\$39.39	\$22.52	\$27.10	\$33.66	\$41.19	\$48.62	
13-2041	Credit analysts	33	\$21.63	\$16.71	\$26.19	\$30.94	\$14.66	\$19.12	\$24.35	\$31.16	\$39.93	
19-4021	Biological technicians	33	\$12.38	\$12.11	\$16.12	\$18.12	\$11.61	\$13.02	\$15.62	\$19.04	\$21.69	
43-4111	Interviewers, except eligibility and loan	33	\$15.61	\$9.28	\$13.42	\$15.49	\$8.21	\$10.52	\$13.18	\$16.06	\$18.60	
29-2081	Opticians, dispensing	31	†	\$12.76	\$17.15	\$19.34	\$11.86	\$13.86	\$16.24	\$19.29	\$21.67	
13-1081	Logisticians	30	†	\$21.83	\$30.40	\$34.68	\$20.03	\$23.85	\$28.92	\$36.09	\$43.27	
37-1011	First-line supervisors/managers of housekeeping and janitorial workers	30	\$17.00	\$10.19	\$14.56	\$16.75	\$9.57	\$10.84	\$13.26	\$17.00	\$21.75	

* annual wage data

† insufficient wage data

continued

Table 1: Occupations with 10 or More Estimated Vacancies
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Occupational Employment Statistics Wage Data (2004)

Soc Code	SOC Occupational Title	Vacancies Estimated	Average JVS Wage	Average Wages			Percentile Distribution				
				Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
11-3049	Human resources managers, all other	29	\$36.34	\$30.00	\$44.80	\$52.20	\$26.74	\$34.96	\$42.76	\$53.50	\$65.51
41-1011	First-line supervisors/managers of retail sales workers	29	\$12.25	\$12.83	\$19.87	\$23.40	\$11.83	\$14.08	\$17.96	\$22.16	\$28.17
29-2071	Medical records and health information technicians	29	\$18.89	\$11.27	\$15.45	\$17.53	\$10.26	\$12.04	\$14.06	\$18.48	\$22.05
11-9033	Education administrators, postsecondary	28	\$18.56	\$21.51	\$34.32	\$40.72	\$18.32	\$24.43	\$29.42	\$41.51	\$55.05
17-3023	Electrical and electronic engineering technicians	28	†	\$11.57	\$21.23	\$26.06	\$10.28	\$13.03	\$22.27	\$27.00	\$33.16
11-9199	Managers, all other	27	†	\$28.16	\$44.99	\$53.41	\$24.14	\$33.48	\$44.77	\$53.73	\$65.78
43-4131	Loan interviewers and clerks	27	\$12.00	\$13.14	\$17.12	\$19.11	\$12.22	\$14.37	\$16.95	\$20.12	\$22.43
*25-2041	Special education teachers, preschool, kindergarten, and elementary school	26	\$18.03	\$35,660	\$49,480	\$56,390	\$32,770	\$39,120	\$50,000	\$60,060	\$68,280
21-1012	Educational, vocational, and school counselors	26	\$20.23	\$14.85	\$24.02	\$28.61	\$13.62	\$16.62	\$23.85	\$30.88	\$34.42
13-1073	Training and development specialists	26	\$26.44	\$13.84	\$23.46	\$28.27	\$12.91	\$16.60	\$22.55	\$30.39	\$36.80
31-9093	Medical equipment preparers	26	†	\$9.74	\$12.63	\$14.07	\$9.27	\$10.53	\$12.38	\$14.15	\$16.73
13-2052	Personal financial advisors	25	\$27.56	\$17.40	\$31.31	\$38.27	\$16.09	\$19.41	\$25.74	\$35.48	\$61.18
13-1072	Compensation, benefits, and job analysis specialists	25	\$18.96	\$17.03	\$26.18	\$30.75	\$15.60	\$18.91	\$24.72	\$31.78	\$38.06
49-9012	Control and valve installers and repairers, except mechanical door	25	\$13.50	\$14.00	\$23.37	\$28.05	\$12.24	\$15.69	\$23.47	\$31.66	\$34.71
17-1022	Surveyors	25	†	\$15.25	\$21.91	\$25.25	\$14.64	\$16.27	\$20.91	\$26.36	\$32.12
29-1031	Dietitians and nutritionists	25	\$23.60	\$12.25	\$19.05	\$22.45	\$11.34	\$13.33	\$18.98	\$24.07	\$27.41
45-4011	Forest and conservation workers	25	\$10.60	\$11.24	\$16.11	\$18.55	\$9.05	\$14.22	\$17.12	\$19.84	†
43-5071	Shipping, receiving, and traffic clerks	25	\$9.82	\$9.20	\$13.28	\$15.32	\$8.49	\$10.24	\$12.97	\$15.89	\$18.67
39-3031	Ushers, lobby attendants, and ticket takers	25	\$6.45	\$5.93	\$7.04	\$7.59	\$5.68	\$6.29	\$7.11	\$7.92	\$8.40
21-1093	Social and human service assistants	24	\$16.20	\$9.35	\$13.44	\$15.48	\$8.13	\$10.94	\$13.26	\$16.04	\$19.16
43-2011	Switchboard operators, including answering service	24	\$10.26	\$9.00	\$11.92	\$13.37	\$8.73	\$9.81	\$11.65	\$13.55	\$16.49

* annual wage data

† insufficient wage data

continued

Table 1: Occupations with 10 or More Estimated Vacancies
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Occupational Employment Statistics Wage Data (2004)

Soc Code	SOC Occupational Title	Vacancies Estimated	Average JVS Wage	Average Wages			Percentile Distribution				
				Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
29-1131	Veterinarians	23	†	\$13.54	\$30.37	\$38.79	\$11.89	\$16.28	\$26.96	\$36.77	\$57.90
29-2033	Nuclear medicine technologists	23	\$28.87	\$20.31	\$25.28	\$27.77	\$19.15	\$22.03	\$25.57	\$28.87	\$32.73
39-2021	Nonfarm animal caretakers	23	†	\$7.81	\$10.57	\$11.96	\$7.29	\$8.57	\$9.76	\$11.34	\$16.70
15-2031	Operations research analysts	22	\$21.63	\$21.91	\$31.08	\$35.67	\$20.17	\$23.93	\$29.43	\$38.30	\$45.06
29-2031	Cardiovascular technologists and technicians	22	\$29.88	\$13.13	\$20.37	\$23.99	\$11.93	\$14.55	\$19.61	\$26.06	\$31.32
31-9011	Massage therapists	22	\$26.50	\$11.25	\$16.84	\$19.63	\$10.68	\$12.00	\$13.27	\$21.90	\$31.75
11-3042	Training and development managers	21	\$27.20	\$23.80	\$39.02	\$46.63	\$21.09	\$27.33	\$34.96	\$43.54	\$59.63
27-1024	Graphic designers	21	\$12.02	\$13.93	\$19.79	\$22.72	\$12.96	\$15.53	\$19.06	\$22.94	\$28.11
43-6012	Legal secretaries	21	\$17.69	\$15.89	\$18.15	\$19.28	\$14.95	\$15.81	\$17.23	\$19.65	\$24.43
53-3041	Taxi drivers and chauffeurs	21	\$10.01	\$7.83	\$10.14	\$11.29	\$7.34	\$8.64	\$10.02	\$11.72	\$13.17
13-1199	Business operations specialists, all other	20	\$25.10	\$19.16	\$30.08	\$35.54	\$17.27	\$21.78	\$28.00	\$36.42	\$45.40
41-3011	Advertising sales agents	20	†	\$13.65	\$26.52	\$32.96	\$12.84	\$15.69	\$21.51	\$34.37	\$47.10
51-9083	Ophthalmic laboratory technicians	20	\$18.43	\$12.69	\$15.76	\$17.30	\$11.98	\$13.92	\$15.95	\$17.77	\$20.30
*25-1081	Education teachers, postsecondary	19	\$27.61	\$28,190	\$48,100	\$58,050	\$25,610	\$32,540	\$44,850	\$58,770	\$77,290
49-1011	First-line supervisors/managers of mechanics, installers, and repairers	19	\$26.07	\$17.13	\$27.51	\$32.70	\$15.81	\$19.66	\$26.03	\$33.10	\$40.49
49-3093	Tire repairers and changers	19	\$10.33	\$8.07	\$10.22	\$11.29	\$7.64	\$8.71	\$10.04	\$11.33	\$13.32
*25-1032	Engineering teachers, postsecondary	18	\$19.23	\$52,340	\$84,180	\$100,100	\$46,120	\$62,170	\$80,740	\$102,910	†
29-1069	Physicians and surgeons, all other	18	†	\$33.83	\$60.56	\$73.93	\$22.99	\$43.88	\$54.20	†	†
29-2032	Diagnostic medical sonographers	18	\$29.57	\$17.11	\$28.45	\$34.12	\$13.11	\$22.65	\$28.63	\$38.15	\$42.62
19-1022	Microbiologists	18	†	\$21.62	\$28.01	\$31.21	\$19.01	\$23.56	\$26.44	\$32.82	\$40.77
41-9091	Door-to-door sales workers, news and street vendors, and related workers	18	\$10.48	\$8.28	\$13.98	\$16.84	\$6.71	\$10.33	\$13.32	\$16.53	†
45-2092	Farmworkers and laborers, crop, nursery, and greenhouse	18	\$8.44	\$6.50	\$11.39	\$13.83	\$5.99	\$7.08	\$8.71	\$17.48	\$20.27
43-4081	Hotel, motel, and resort desk clerks	18	\$9.00	\$8.72	\$9.72	\$10.22	\$8.01	\$8.92	\$9.71	\$10.50	\$11.36

* annual wage data

† insufficient wage data

Table 1: Occupations with 10 or More Estimated Vacancies
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				Occupational Employment Statistics Wage Data (2004)							
				Average Wages			Percentile Distribution				
Soc Code	SOC Occupational Title	Vacancies Estimated	Average JVS Wage	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
11-9039	Education administrators, all other	17	\$25.03	\$22.43	\$32.18	\$37.06	\$21.71	\$25.55	\$31.43	\$39.35	\$44.33
51-1011	First-line supervisors/managers of production and operating workers	17	\$21.04	\$16.85	\$24.55	\$28.39	\$15.33	\$18.78	\$23.55	\$28.93	\$36.46
49-9011	Mechanical door repairers	17	\$13.50	\$12.16	\$17.64	\$20.39	\$11.58	\$13.43	\$17.81	\$20.98	\$25.12
51-4022	Forging machine setters, operators, and tenders, metal and plastic	17	\$9.50	\$9.80	\$14.35	\$16.62	\$8.93	\$11.04	\$14.76	\$17.41	†
53-7051	Industrial truck and tractor operators	17	\$11.79	\$11.16	\$14.14	\$15.63	\$10.33	\$11.85	\$13.63	\$16.21	\$19.06
51-9131	Photographic process workers	17	†	\$8.73	\$13.60	\$16.04	\$7.91	\$9.89	\$12.55	\$16.50	\$21.30
43-4141	New accounts clerks	17	\$14.66	\$11.22	\$13.24	\$14.25	\$10.36	\$11.76	\$13.07	\$14.72	\$16.76
43-9021	Data entry keyers	17	\$13.14	\$10.05	\$12.99	\$14.47	\$9.43	\$10.99	\$12.79	\$15.06	\$17.15
51-3011	Bakers	17	\$11.83	\$8.72	\$12.88	\$14.96	\$7.99	\$9.59	\$12.35	\$15.72	\$18.32
31-1011	Home health aides	17	\$10.45	\$8.79	\$10.38	\$11.18	\$8.09	\$9.22	\$10.14	\$11.21	\$13.41
51-3093	Food cooking machine operators and tenders	17	†	\$7.20	\$9.78	\$11.07	\$6.61	\$7.82	\$9.23	\$11.08	\$14.60
29-1062	Family and general practitioners	16	†	\$35.64	\$52.46	\$60.87	\$32.33	\$40.32	\$48.13	\$54.04	†
29-2021	Dental hygienists	16	\$37.00	\$28.29	\$35.87	\$39.67	\$25.27	\$32.06	\$38.09	\$41.69	\$43.89
29-1011	Chiropractors	16	†	\$19.24	\$32.68	\$39.41	\$18.32	\$19.65	\$21.85	\$40.55	\$62.82
49-3042	Mobile heavy equipment mechanics, except engines	16	\$18.14	\$16.11	\$19.78	\$21.61	\$14.71	\$17.51	\$19.80	\$21.94	\$25.25
47-2073	Operating engineers and other construction equipment operators	16	\$16.45	\$14.53	\$18.67	\$20.73	\$14.19	\$15.77	\$18.37	\$21.31	\$25.10
39-9031	Fitness trainers and aerobics instructors	16	\$14.92	\$9.60	\$17.41	\$21.32	\$8.04	\$11.41	\$17.32	\$21.80	\$26.78
51-2041	Structural metal fabricators and fitters	16	\$15.00	\$12.93	\$16.85	\$18.80	\$11.78	\$14.06	\$16.48	\$19.70	\$22.92
47-2071	Paving, surfacing, and tamping equipment operators	16	\$12.13	\$13.71	\$16.78	\$18.32	\$12.74	\$14.53	\$16.33	\$19.30	\$21.74
47-2081	Drywall and ceiling tile installers	16	\$15.00	\$10.55	\$15.97	\$18.68	\$8.84	\$12.56	\$15.90	\$19.20	\$23.14
35-2019	Cooks, all other	16	†	\$10.37	\$13.30	\$14.76	\$9.47	\$11.34	\$13.17	\$15.34	†

* annual wage data

† insufficient wage data

Table 1: Occupations with 10 or More Estimated Vacancies
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				Occupational Employment Statistics Wage Data (2004)							
				Average Wages			Percentile Distribution				
Soc Code	SOC Occupational Title	Vacancies Estimated	Average JVS Wage	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
51-2022	Electrical and electronic equipment assemblers	16	\$22.50	\$9.29	\$11.76	\$12.99	\$8.91	\$9.76	\$11.13	\$13.31	\$16.25
51-3092	Food batchmakers	16	\$8.50	\$6.68	\$10.31	\$12.12	\$6.19	\$7.18	\$9.06	\$13.20	\$16.09
35-3041	Food servers, nonrestaurant	16	\$9.67	\$7.27	\$9.77	\$11.03	\$7.01	\$7.99	\$9.66	\$11.73	\$13.17
19-1021	Biochemists and biophysicists	15	\$25.72	\$19.94	\$33.04	\$39.59	\$18.15	\$21.80	\$37.11	\$41.80	\$44.62
19-2041	Environmental scientists and specialists, including health	15	\$24.46	\$18.01	\$30.37	\$36.55	\$15.80	\$20.95	\$30.99	\$39.15	\$45.33
19-3031	Clinical, counseling, and school psychologists	15	\$18.20	\$18.71	\$29.75	\$35.27	\$17.12	\$21.31	\$28.07	\$33.20	\$39.76
47-1011	First-line supervisors/managers of construction trades and extraction workers	15	\$21.49	\$19.77	\$27.23	\$30.96	\$18.18	\$21.85	\$26.02	\$32.02	\$38.16
47-4099	Construction and related workers, all other	15	\$14.91	\$12.04	\$15.78	\$17.65	\$11.84	\$12.90	\$14.79	\$19.48	\$21.54
49-9099	Installation, maintenance, and repair workers, all other	15	\$15.00	\$9.27	\$15.72	\$18.95	\$8.17	\$10.59	\$15.87	\$20.22	\$23.05
51-3091	Food and tobacco roasting, baking, and drying machine operators and tenders	15	\$11.52	\$10.43	\$14.26	\$16.18	\$9.13	\$12.27	\$15.44	\$16.83	\$17.67
43-9071	Office machine operators, except computer	15	†	\$9.39	\$13.03	\$14.85	\$8.98	\$10.26	\$12.50	\$15.50	\$18.92
35-3011	Bartenders	15	\$5.15	\$5.93	\$7.87	\$8.83	\$5.61	\$6.11	\$6.99	\$8.89	\$12.02
19-3021	Market research analysts	14	\$21.63	\$18.27	\$31.40	\$37.97	\$16.53	\$20.82	\$30.70	\$40.47	\$47.61
13-2053	Insurance underwriters	14	\$35.00	\$18.20	\$30.63	\$36.84	\$16.24	\$20.64	\$27.31	\$35.86	\$43.59
13-1031	Claims adjusters, examiners, and investigators	14	\$28.71	\$17.97	\$29.26	\$34.90	\$17.19	\$19.92	\$24.99	\$33.25	\$42.92
17-1012	Landscape architects	14	\$28.85	\$18.83	\$27.27	\$31.49	\$18.00	\$20.88	\$26.62	\$33.20	\$39.35
49-3021	Automotive body and related repairers	14	†	\$15.57	\$24.92	\$29.59	\$13.97	\$17.99	\$25.33	\$31.36	\$35.09
51-4031	Cutting, punching, and press machine setters, operators, and tenders, metal and plastic	14	\$10.97	\$10.85	\$16.69	\$19.61	\$9.98	\$12.25	\$16.24	\$20.98	\$24.97
49-2097	Electronic home entertainment equipment installers and repairers	14	†	\$10.76	\$15.25	\$17.50	\$9.94	\$11.52	\$14.41	\$18.43	\$22.04
51-7011	Cabinetmakers and bench carpenters	14	\$16.00	\$9.96	\$14.09	\$16.16	\$9.40	\$10.97	\$13.60	\$17.05	\$20.24
35-2012	Cooks, institution and cafeteria	14	\$12.42	\$8.39	\$11.31	\$12.77	\$7.63	\$9.10	\$10.91	\$13.15	\$15.97

* annual wage data

† insufficient wage data

continued

Table 1: Occupations with 10 or More Estimated Vacancies
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				Occupational Employment Statistics Wage Data (2004)							
				Average Wages			Percentile Distribution				
Soc Code	SOC Occupational Title	Vacancies Estimated	Average JVS Wage	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
17-2111	Health and safety engineers, except mining safety engineers and inspectors	13	\$27.70	\$25.82	\$35.23	\$39.93	\$23.95	\$28.55	\$36.09	\$41.58	\$46.04
13-2031	Budget analysts	13	\$28.89	\$21.95	\$30.05	\$34.10	\$20.15	\$23.92	\$29.31	\$36.30	\$41.55
27-3042	Technical writers	13	\$25.94	\$20.98	\$29.25	\$33.39	\$18.90	\$23.18	\$27.84	\$36.37	\$42.38
37-1012	First-line supervisors/managers of landscaping, lawn service, and groundskeeping workers	13	\$15.25	\$17.58	\$23.05	\$25.79	\$16.57	\$19.39	\$22.92	\$26.06	\$30.51
51-4041	Machinists	13	\$20.62	\$13.33	\$18.55	\$21.16	\$12.06	\$14.83	\$18.36	\$22.18	\$25.96
25-3011	Adult literacy, remedial education, and GED teachers and instructors	13	\$21.83	\$10.71	\$15.30	\$17.59	\$9.90	\$11.35	\$13.59	\$19.04	\$23.21
53-7081	Refuse and recyclable material collectors	13	\$14.97	\$10.96	\$14.28	\$15.93	\$10.14	\$11.64	\$13.26	\$16.77	\$20.47
27-2031	Dancers	13	\$5.15	\$5.99	\$9.94	\$11.92	\$5.80	\$6.52	\$9.77	\$11.17	\$13.80
53-6021	Parking lot attendants	13	†	\$6.06	\$8.10	\$9.12	\$5.82	\$6.51	\$7.69	\$9.44	\$11.30
47-4031	Fence Erectors	12	†	†	†	†	†	†	†	†	†
*25-1123	English language and literature teachers, postsecondary	12	\$19.69	\$27,370	\$45,450	\$54,490	\$25,290	\$29,120	\$40,070	\$53,630	\$73,330
19-2042	Geoscientists, except hydrologists and geographers	12	\$18.03	\$26.67	\$42.57	\$50.51	\$23.09	\$32.23	\$42.94	\$53.45	\$63.39
11-2031	Public relations managers	12	\$19.95	\$24.10	\$40.31	\$48.42	\$21.14	\$27.64	\$37.40	\$50.46	\$62.40
17-2041	Chemical engineers	12	\$18.03	\$25.63	\$36.68	\$42.20	\$22.88	\$28.66	\$36.36	\$43.68	\$53.17
11-3041	Compensation and benefits managers	12	\$16.52	\$22.27	\$35.65	\$42.35	\$20.58	\$24.66	\$31.83	\$41.00	\$56.08
21-1092	Probation officers and correctional treatment specialists	12	\$23.48	\$18.93	\$25.70	\$29.09	\$17.81	\$20.84	\$26.06	\$31.00	\$33.91
25-9031	Instructional coordinators	12	\$28.69	\$15.71	\$25.28	\$30.07	\$13.85	\$17.81	\$27.49	\$32.01	\$34.53
51-8093	Petroleum pump system operators, refinery operators, and gaugers	12	\$13.00	\$21.80	\$24.44	\$25.76	\$20.04	\$22.64	\$24.66	\$26.63	\$28.37
19-4091	Environmental science and protection technicians, including health	12	†	\$14.08	\$23.45	\$28.13	\$12.62	\$15.98	\$23.02	\$30.64	\$35.74
43-4031	Court, municipal, and license clerks	12	\$13.70	\$13.72	\$17.04	\$18.70	\$12.64	\$14.46	\$16.71	\$19.68	\$21.77

* annual wage data

† insufficient wage data

Table 1: Occupations with 10 or More Estimated Vacancies
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Occupational Employment Statistics Wage Data (2004)

Soc Code	SOC Occupational Title	Vacancies Estimated	Average JVS Wage	Average Wages			Percentile Distribution				
				Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
43-5032	Dispatchers, except police, fire, and ambulance	12	\$11.39	\$11.19	\$16.59	\$19.29	\$10.48	\$12.58	\$16.15	\$20.25	\$24.17
51-4035	Milling and planing machine setters, operators, and tenders, metal and plastic	12	\$11.88	\$10.79	\$15.57	\$17.97	\$9.83	\$11.77	\$14.27	\$18.08	\$24.08
51-4033	Grinding, lapping, polishing, and buffing machine tool setters, operators, and tenders, metal and plastic	12	\$10.75	\$9.81	\$12.66	\$14.09	\$9.36	\$10.43	\$12.21	\$14.21	\$17.37
51-9031	Cutters and trimmers, hand	12	\$9.00	\$8.36	\$11.82	\$13.55	\$7.71	\$9.03	\$11.90	\$14.60	\$16.32
51-2099	Assemblers and fabricators, all other	12	\$10.50	\$9.24	\$11.60	\$12.78	\$8.70	\$9.58	\$10.73	\$12.78	\$17.04
*25-1011	Business teachers, postsecondary	11	†	\$26,130	\$56,930	\$72,340	\$23,660	\$29,330	\$49,930	\$76,080	\$103,870
41-4012	Sales representatives, wholesale and manufacturing, except technical and scientific products	11	\$20.43	\$14.78	\$26.57	\$32.47	\$13.27	\$17.72	\$23.53	\$32.16	\$44.14
41-9022	Real estate sales agents	11	\$8.00	\$12.79	\$25.56	\$31.95	\$12.00	\$13.50	\$20.39	\$30.98	\$47.78
21-1021	Child, family, and school social workers	11	\$17.67	\$15.21	\$21.16	\$24.14	\$14.35	\$16.57	\$20.52	\$25.45	\$30.23
29-2052	Pharmacy technicians	11	\$14.40	\$10.88	\$14.10	\$15.71	\$9.95	\$11.71	\$13.97	\$16.29	\$18.54
15-2041	Statisticians	10	\$25.06	\$21.13	\$30.19	\$34.73	\$19.41	\$23.11	\$27.77	\$34.50	\$41.32
27-3031	Public relations specialists	10	\$33.20	\$15.17	\$25.49	\$30.65	\$14.03	\$16.74	\$22.17	\$31.24	\$41.66
23-2011	Paralegals and legal assistants	10	\$22.70	\$17.53	\$21.76	\$23.88	\$16.13	\$18.40	\$20.82	\$24.48	\$29.37
17-3011	Architectural and civil drafters	10	\$22.04	\$15.22	\$21.47	\$24.59	\$14.35	\$16.81	\$21.44	\$25.68	\$29.64
21-1091	Health educators	10	\$21.39	\$12.54	\$20.43	\$24.37	\$10.48	\$14.59	\$18.66	\$25.77	\$33.58
25-1199	Postsecondary teachers, all other	10	†	\$12.24	\$17.97	\$20.83	\$11.40	\$12.01	\$13.04	\$20.85	\$33.56
49-2011	Computer, automated teller, and office machine repairers	10	†	\$11.72	\$17.82	\$20.87	\$10.51	\$13.08	\$17.09	\$22.27	\$26.29
53-3022	Bus drivers, school	10	\$11.90	\$11.26	\$14.11	\$15.53	\$10.67	\$11.98	\$14.11	\$16.29	\$17.86

* annual wage data

† insufficient wage data

Table 2: Occupations with Fewer than 10 Estimated Vacancies

		Occupational Employment Statistics Wage Data (2004)							
		Average Wages			Percentile Distribution				
SOC Code	SOC Occupational Title	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
11-9031	Administrative law judges, adjudicators, and hearing officers	\$30.25	\$45.84	\$53.64	\$27.57	\$33.92	\$40.14	\$48.94	†
13-2021	Aerospace engineering and operations technicians	\$25.51	\$30.21	\$32.56	\$23.60	\$27.80	\$30.54	\$33.35	\$36.78
51-9198	All other information and record clerks	\$12.47	\$20.55	\$24.59	\$11.52	\$13.74	\$17.89	\$24.95	\$34.51
43-4121	Anesthesiologists	\$88.77	\$93.10	\$95.27	†	†	†	†	†
53-7011	Anthropologists and archeologists	\$14.81	\$30.61	\$38.51	\$11.37	\$18.21	\$33.97	\$41.53	\$48.73
*47-2131	Anthropology and archeology teachers, postsecondary	\$41,750	\$61,010	\$70,640	\$36,470	\$47,840	\$57,250	\$71,700	†
27-4099	Appraisers and assessors of real estate	\$18.02	\$32.29	\$39.42	\$17.64	\$20.34	\$27.14	\$39.60	\$63.38
17-2031	Architects, except landscape and naval	\$18.46	\$29.41	\$34.88	\$17.87	\$20.23	\$25.77	\$36.33	\$43.35
*51-4122	Area, ethnic, and cultural studies teachers, postsecondary	\$40,870	\$60,750	\$70,690	\$37,310	\$46,000	\$54,660	\$71,590	\$91,920
43-5031	Art directors	\$22.29	\$40.65	\$49.83	\$19.74	\$25.69	\$34.14	\$48.72	†
*21-2021	Art, drama, and music teachers, postsecondary	\$36,190	\$52,290	\$60,350	\$33,080	\$40,810	\$49,980	\$60,560	\$78,050
*13-1023	Athletic trainers	\$32,350	\$58,110	\$70,990	\$27,510	\$37,860	\$47,850	\$62,950	\$126,880
37-2021	Atmospheric and space scientists	\$35.53	\$42.50	\$45.98	\$34.69	\$37.79	\$42.99	\$49.44	\$53.35
*19-1042	Atmospheric, earth, marine, and space sciences teachers, postsecondary	\$43,660	\$72,390	\$86,760	\$38,570	\$52,460	\$69,320	\$91,060	†
47-4071	Audio and video equipment technicians	\$10.80	\$17.52	\$20.88	\$9.38	\$12.46	\$15.58	\$21.06	\$28.81
35-1011	Audiologists	\$20.80	\$25.52	\$27.87	\$18.34	\$22.88	\$25.84	\$29.29	\$33.06
51-4081	Automotive glass installers and repairers	\$8.06	\$12.36	\$14.51	\$7.71	\$8.50	\$11.66	\$13.57	†
17-3027	Avionics technicians	\$16.81	\$23.63	\$27.04	\$15.21	\$18.67	\$22.61	\$30.09	\$32.74
51-3022	Baggage porters and bellhops	\$6.36	\$12.46	\$15.52	\$5.90	\$6.95	\$10.94	\$18.76	\$20.53
17-3024	Bailiffs	\$11.74	\$16.77	\$19.29	\$11.23	\$12.64	\$16.06	\$20.25	\$23.87
49-9041	Bindery workers	\$8.57	\$12.82	\$14.95	\$7.67	\$9.51	\$11.51	\$15.92	\$20.18
33-1099	Biomedical engineers	\$27.47	\$31.68	\$33.79	\$25.84	\$29.17	\$31.78	\$34.40	\$38.85
23-2099	Brokerage clerks	\$12.32	\$16.15	\$18.06	\$11.84	\$12.98	\$15.23	\$18.09	\$21.86
51-9141	Building cleaning workers, all other	\$7.74	\$11.63	\$13.57	\$7.32	\$7.86	\$8.76	\$15.71	\$16.80

* annual wage data

† insufficient wage data

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

		Occupational Employment Statistics Wage Data (2004)							
		Average Wages			Percentile Distribution				
SOC Code	SOC Occupational Title	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
29-1066	Butchers and meat cutters	\$10.81	\$14.79	\$16.78	\$9.85	\$11.83	\$14.77	\$18.03	\$20.47
21-1011	Cartographers and photogrammetrists	\$19.69	\$28.01	\$32.18	\$18.09	\$21.97	\$27.88	\$33.35	\$39.88
25-4031	Chefs and head cooks	\$11.05	\$18.59	\$22.36	\$9.91	\$12.50	\$18.73	\$21.71	\$26.95
41-2012	Chemical technicians	\$12.64	\$18.09	\$20.81	\$11.64	\$13.91	\$17.97	\$21.38	\$25.62
*25-4021	Chemistry teachers, postsecondary	\$42,240	\$71,130	\$85,580	\$38,030	\$49,410	\$64,750	\$87,700	\$109,770
49-2092	Chief executives	\$54.90	\$81.28	\$94.47	\$48.62	\$63.54	†	†	†
25-1113	Choreographers	\$14.06	\$18.78	\$21.14	\$13.40	\$15.15	\$16.97	\$22.41	†
25-1065	Civil engineering technicians	\$13.54	\$19.39	\$22.31	\$12.37	\$15.20	\$19.48	\$22.87	\$26.85
51-6052	Cleaning, washing, and metal pickling equipment operators and tenders	\$8.71	\$12.26	\$14.04	\$7.98	\$9.24	\$10.67	\$15.12	†
25-1053	Clergy	\$7.66	\$15.83	\$19.91	\$6.16	\$9.47	\$15.79	\$20.33	\$25.07
43-4041	Coating, painting, and spraying machine setters, operators, and tenders	\$10.70	\$13.97	\$15.61	\$9.31	\$11.80	\$13.42	\$16.13	\$19.62
25-9099	Coin, vending, and amusement machine servicers and repairers	\$10.35	\$15.24	\$17.68	\$9.62	\$11.44	\$14.35	\$17.55	\$24.26
*39-5094	Communications teachers, postsecondary	\$25,450	\$41,250	\$49,150	\$24,110	\$26,130	\$36,350	\$52,240	\$70,380
21-1022	Computer and information scientists, research	\$31.35	\$44.13	\$50.52	\$25.80	\$36.80	\$44.84	\$52.34	\$59.58
35-2015	Computer operators	\$13.62	\$18.28	\$20.61	\$12.46	\$14.85	\$17.12	\$21.48	\$26.33
*27-1011	Computer science teachers, postsecondary	\$28,060	\$48,360	\$58,520	\$25,320	\$31,850	\$47,100	\$57,040	\$77,780
25-1054	Computer specialists, all other	\$22.90	\$33.43	\$38.70	\$21.04	\$26.04	\$32.09	\$39.98	\$48.25
23-1023	Computer-controlled machine tool operators, metal and plastic	\$11.18	\$16.23	\$18.75	\$10.04	\$12.85	\$16.44	\$19.79	\$21.90
51-4011	Concierges	\$9.50	\$12.40	\$13.84	\$8.70	\$10.65	\$12.51	\$14.67	\$16.25
17-3022	Conservation scientists	\$17.69	\$28.82	\$34.39	\$15.40	\$20.23	\$27.56	\$37.37	\$41.77
23-1021	Construction and building inspectors	\$16.14	\$22.96	\$26.37	\$14.62	\$18.06	\$22.98	\$27.55	\$32.38
47-2151	Conveyor operators and tenders	\$10.94	\$13.22	\$14.36	\$9.90	\$11.53	\$12.69	\$13.90	\$19.04

* annual wage data

† insufficient wage data

continued

Table 2: Occupations with Fewer than 10 Estimated Vacancies
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		Occupational Employment Statistics Wage Data (2004)							
		Average Wages			Percentile Distribution				
SOC Code	SOC Occupational Title	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
51-2023	Cooks, short order	\$9.24	\$10.72	\$11.45	\$8.95	\$9.69	\$10.86	\$12.00	\$13.11
19-2043	Correctional officers and jailers	\$15.25	\$19.99	\$22.36	\$14.37	\$16.52	\$20.03	\$23.85	\$26.24
29-2091	Counselors, all other	\$11.30	\$18.32	\$21.83	\$10.27	\$12.59	\$18.41	\$22.18	\$28.40
25-1121	Court reporters	\$16.91	\$27.36	\$32.59	\$15.53	\$18.02	\$22.75	\$32.26	\$51.19
31-9096	Credit authorizers, checkers, and clerks	\$12.17	\$14.47	\$15.61	\$11.70	\$12.44	\$13.65	\$15.77	\$19.61
*27-2041	Criminal justice and law enforcement teachers, postsecondary	\$32,630	\$70,110	\$88,850	\$28,440	\$37,190	\$51,950	\$87,570	†
49-9094	Demonstrators and product promoters	\$7.73	\$12.49	\$14.87	\$7.38	\$8.04	\$9.94	\$13.23	\$24.41
51-9122	Dentists, general	\$35.27	\$75.11	\$95.04	\$32.78	\$39.92	†	†	†
17-1011	Designers, all other	\$15.51	\$24.07	\$28.36	\$12.14	\$19.03	\$24.01	\$30.83	\$33.71
25-1126	Desktop publishers	\$14.93	\$18.69	\$20.58	\$12.39	\$17.79	\$19.47	\$21.22	\$22.25
43-4151	Dietetic technicians	\$6.77	\$10.97	\$13.07	\$6.09	\$7.71	\$11.58	\$13.53	\$15.93
41-9011	Directors, religious activities and education	\$6.87	\$17.95	\$23.49	\$6.09	\$7.02	\$19.22	\$25.92	\$32.03
*19-1012	Economics teachers, postsecondary	\$44,050	\$73,760	\$88,620	\$39,280	\$52,560	\$69,620	\$90,720	\$111,660
15-1099	Editors	\$15.85	\$24.10	\$28.23	\$14.39	\$17.72	\$23.45	\$28.35	\$35.80
25-1061	Education administrators, preschool and child care center/program	\$10.66	\$15.71	\$18.24	\$9.89	\$11.25	\$13.75	\$17.94	\$25.76
21-1015	Education, training, and library workers, all other	\$15.92	\$23.29	\$26.97	\$14.62	\$17.67	\$21.58	\$29.03	\$34.62
27-3011	Electric motor, power tool, and related repairers	\$11.78	\$18.32	\$21.59	\$10.93	\$12.99	\$19.06	\$23.33	\$25.92
51-9061	Electrical and electronics drafters	\$15.97	\$24.12	\$28.20	\$14.78	\$17.63	\$22.84	\$28.96	\$37.23
29-2053	Electrical and electronics installers and repairers, transportation equipment	\$17.01	\$21.24	\$23.35	\$15.38	\$18.61	\$21.43	\$24.56	†
27-4014	Electrical and electronics repairers, commercial and industrial equipment	\$14.78	\$21.79	\$25.30	\$13.07	\$16.90	\$21.40	\$26.50	\$32.03
49-2094	Electromechanical Equipment Assemblers	\$9.90	\$13.04	\$14.61	\$9.51	\$10.61	\$12.57	\$15.11	\$17.41
19-3051	Electro-mechanical technicians	\$17.78	\$23.36	\$26.15	\$16.37	\$19.67	\$24.12	\$27.06	\$29.44

* annual wage data

† insufficient wage data

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

		Occupational Employment Statistics Wage Data (2004)							
		Average Wages			Percentile Distribution				
SOC Code	SOC Occupational Title	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
13-1079	Eligibility interviewers, government programs	\$13.92	\$16.82	\$18.28	\$12.75	\$14.65	\$16.63	\$19.13	\$21.52
25-1022	Emergency management specialists	\$21.79	\$35.18	\$41.87	\$20.38	\$25.24	\$32.32	\$40.80	\$50.68
11-1101	Emergency medical technicians and paramedics	\$11.27	\$16.90	\$19.71	\$10.60	\$12.76	\$16.42	\$20.63	\$24.64
13-2099	Engine and Other Machine Assemblers	†	†	†	†	†	†	†	†
41-3021	Engineering technicians, except drafters, all other	\$19.52	\$25.26	\$28.12	\$18.30	\$21.75	\$25.22	\$29.07	\$33.48
49-9062	Engineers, all other	\$26.62	\$39.51	\$45.95	\$24.40	\$30.43	\$38.68	\$48.58	\$56.83
25-1193	Entertainers and performers, sports and related workers, all other	\$9.47	\$22.73	\$29.37	\$7.94	\$10.92	\$16.09	\$19.70	\$28.63
27-3022	Environmental engineering technicians	\$16.21	\$21.84	\$24.65	\$14.86	\$17.77	\$20.68	\$25.98	\$32.33
51-9195	Environmental engineers	\$26.23	\$36.46	\$41.57	\$23.60	\$29.82	\$37.04	\$42.24	\$48.86
*47-2044	Environmental science teachers, postsecondary	\$39,360	\$62,290	\$73,760	\$35,890	\$43,670	\$61,870	\$71,700	†
27-2032	Excavating and loading machine and dragline operators	\$15.80	\$18.46	\$19.78	\$15.07	\$16.36	\$18.50	\$20.82	\$22.23
43-5041	Extruding, forming, pressing, and compacting machine setters, operators, and tenders	\$9.63	\$13.41	\$15.31	\$8.89	\$10.54	\$12.81	\$16.07	\$19.60
43-4181	Farm equipment mechanics	\$9.83	\$13.68	\$15.60	\$9.14	\$10.80	\$13.44	\$16.35	†
51-7042	File clerks	\$9.32	\$12.21	\$13.66	\$9.01	\$10.11	\$11.90	\$13.95	\$16.66
27-2023	Film and video editors	\$13.19	\$32.62	\$42.33	\$10.41	\$16.13	\$32.67	\$50.43	\$54.64
33-3012	Financial specialists, all other	\$20.04	\$31.52	\$37.26	\$17.66	\$22.76	\$28.21	\$34.86	\$50.33
41-9031	Fire fighters	\$19.09	\$25.04	\$28.01	\$16.97	\$21.60	\$25.58	\$29.72	\$33.12
25-1066	First-line supervisors/managers of fire fighting and prevention workers	\$29.91	\$33.42	\$35.17	\$28.54	\$30.19	\$32.91	\$36.00	\$41.94
51-5011	First-line supervisors/managers of helpers, laborers, and material movers, hand	\$14.86	\$20.65	\$23.54	\$13.86	\$16.68	\$20.01	\$24.16	\$29.32
51-6031	First-line supervisors/managers of non-retail sales workers	\$21.86	\$36.59	\$43.96	\$19.82	\$25.51	\$35.49	\$44.67	\$55.27
49-2091	First-line supervisors/managers of personal service workers	\$11.12	\$17.35	\$20.47	\$10.13	\$12.60	\$15.82	\$22.37	\$26.69

* annual wage data

† insufficient wage data

continued

Table 2: Occupations with Fewer than 10 Estimated Vacancies
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		Occupational Employment Statistics Wage Data (2004)							
		Average Wages			Percentile Distribution				
SOC Code	SOC Occupational Title	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
25-1021	First-line supervisors/managers of transportation and material-moving machine and vehicle operators	\$15.07	\$22.89	\$26.80	\$13.26	\$17.01	\$22.09	\$26.89	\$33.26
19-1023	First-line supervisors/managers, protective service workers, all other	\$15.25	\$23.56	\$27.71	\$14.46	\$15.63	\$18.25	\$30.92	\$40.07
13-1022	Food scientists and technologists	\$18.56	\$30.38	\$36.29	\$16.04	\$21.62	\$29.19	\$38.03	\$45.88
25-1122	Food service managers	\$17.81	\$27.32	\$32.08	\$16.90	\$18.91	\$23.51	\$34.99	\$44.13
*21-2099	Foreign language and literature teachers, postsecondary	\$31,790	\$49,190	\$57,890	\$29,290	\$35,390	\$44,590	\$56,960	\$80,410
17-2151	Forensic science technicians	\$19.21	\$23.90	\$26.25	\$18.33	\$20.84	\$23.97	\$26.87	\$30.66
27-2012	Furnace, kiln, oven, drier, and kettle operators and tenders	\$11.24	\$15.07	\$16.99	\$10.42	\$12.21	\$14.63	\$17.85	†
51-9192	Gaming change persons and booth cashiers	\$9.27	\$11.55	\$12.69	\$8.87	\$9.95	\$11.73	\$13.19	†
*27-4011	Geography teachers, postsecondary	\$43,540	\$64,840	\$75,490	\$40,280	\$47,670	\$60,040	\$82,300	†
25-1067	Glaziers	\$14.18	\$19.30	\$21.86	\$13.76	\$16.30	\$19.55	\$22.85	\$26.32
25-2012	Graduate Teaching Assistants	†	†	†	†	†	†	†	†
43-9011	Health Educators	\$9.56	\$17.87	\$22.03	\$9.17	\$10.31	\$14.38	\$24.80	\$32.08
*17-2131	Health specialties teachers, postsecondary	\$38,980	\$89,830	\$115,260	\$30,240	\$50,270	\$78,170	\$118,510	†
19-2021	Health technologists and technicians, all other	\$11.95	\$16.58	\$18.89	\$11.56	\$13.00	\$15.92	\$19.72	\$22.34
51-4193	Helpers, construction trades, all other	\$8.67	\$10.71	\$11.74	\$7.93	\$9.29	\$10.56	\$12.17	†
49-3022	Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	\$10.17	\$12.96	\$14.36	\$8.29	\$11.89	\$13.22	\$14.57	\$17.11
53-7032	Helpers--Installation, Maintenance, and Repair Workers	\$8.43	\$11.12	\$12.46	\$7.77	\$9.08	\$10.28	\$12.57	\$16.06
53-1021	Helpers--painters, paperhangers, plasterers, and stucco masons	\$9.52	\$11.51	\$12.50	\$9.01	\$10.17	\$11.68	\$13.08	\$14.01
21-1091	Helpers--production workers	\$7.40	\$11.06	\$12.89	\$6.94	\$8.23	\$10.05	\$13.27	\$17.90
*11-3071	History teachers, postsecondary	\$32,300	\$58,300	\$71,300	\$26,730	\$38,830	\$53,930	\$72,830	\$97,680
43-3051	Home Economics Teachers, Postsecondary	†	†	†	†	†	†	†	†

* annual wage data

† insufficient wage data

continued

Table 2: Occupations with Fewer than 10 Estimated Vacancies
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Occupational Employment Statistics Wage Data (2004)

SOC Code	SOC Occupational Title	Average Wages			Percentile Distribution				
		Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
47-5012	Human resources assistants, except payroll and timekeeping	\$14.10	\$17.40	\$19.05	\$13.11	\$14.92	\$17.08	\$19.91	\$22.21
11-3061	Human Resources Managers	†	†	†	†	†	†	†	†
25-1071	Human Resources, Training, and Labor Relations	†	†	†	†	†	†	†	†
29-2051	Human resources, training, and labor relations specialists, all other	\$16.72	\$26.59	\$31.53	\$15.12	\$19.91	\$25.73	\$32.54	\$40.28
13-1032	Hydrologists	\$25.45	\$36.24	\$41.63	\$23.01	\$28.17	\$34.98	\$43.29	\$52.98
39-6011	Industrial engineering technicians	\$16.35	\$25.31	\$29.78	\$14.19	\$18.25	\$21.87	\$31.44	\$41.89
29-2099	Industrial machinery mechanics	\$16.51	\$21.22	\$23.57	\$15.24	\$17.98	\$21.20	\$24.88	\$27.48
51-4111	Industrial production managers	\$26.01	\$38.62	\$44.93	\$23.64	\$29.03	\$34.77	\$46.38	\$60.21
53-3099	Inspectors, testers, sorters, samplers, and weighers	\$10.41	\$17.00	\$20.29	\$9.34	\$11.90	\$15.87	\$21.58	\$26.78
47-3019	Insulation workers, floor, ceiling, and wall	\$8.72	\$13.18	\$15.42	\$8.02	\$9.50	\$12.40	\$15.81	†
43-4071	Insurance appraisers, auto damage	\$22.56	\$25.02	\$26.25	\$20.27	\$23.58	\$25.57	\$27.59	\$28.95
17-1021	Insurance sales agents	\$12.99	\$29.56	\$37.84	\$10.25	\$15.83	\$23.69	\$40.26	\$52.39
37-2019	Interpreters and translators	\$17.72	\$25.33	\$29.14	\$16.02	\$20.21	\$26.58	\$31.36	\$33.87
51-9051	Interviewers, Except Eligibility and Loan	\$8.08	\$11.98	\$13.93	\$7.59	\$8.87	\$11.38	\$14.55	\$17.30
25-1072	Judges, magistrate judges, and magistrates	\$34.26	\$44.12	\$49.05	\$33.29	\$37.84	\$42.74	\$51.60	\$59.30
*29-1071	Kindergarten teachers, except special education	\$31,960	\$44,850	\$51,300	\$30,670	\$34,490	\$43,510	\$54,880	\$64,470
19-3091	Lathe and turning machine tool setters, operators, and tenders, metal and plastic	\$12.01	\$16.38	\$18.57	\$11.63	\$12.98	\$16.29	\$19.51	\$21.87
*15-1011	Law teachers, postsecondary	\$48,510	\$100,600	\$126,640	\$37,720	\$60,390	\$95,200	\$135,090	†
43-9051	Legal support workers, all other	\$15.46	\$20.86	\$23.55	\$14.64	\$16.46	\$19.63	\$24.29	\$29.86
31-2021	Librarians	\$19.31	\$25.86	\$29.14	\$18.05	\$21.35	\$25.85	\$30.89	\$34.15
43-4111	Library assistants, clerical	\$7.59	\$10.63	\$12.15	\$7.29	\$8.35	\$10.58	\$12.72	\$14.14
33-1021	Library technicians	\$11.11	\$14.34	\$15.95	\$10.18	\$11.75	\$13.60	\$16.72	\$20.07
27-2099	Loan counselors	\$15.25	\$21.98	\$25.35	\$13.89	\$17.03	\$20.76	\$25.25	\$32.33

* annual wage data

† insufficient wage data

Table 2: Occupations with Fewer than 10 Estimated Vacancies
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		Occupational Employment Statistics Wage Data (2004)							
		Average Wages			Percentile Distribution				
SOC Code	SOC Occupational Title	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
25-1052	Locksmiths and safe repairers	\$11.46	\$16.13	\$18.46	\$10.82	\$12.52	\$15.51	\$19.48	\$22.08
49-2021	Mail clerks and mail machine operators, except postal service	\$9.15	\$13.15	\$15.15	\$8.43	\$10.73	\$13.19	\$15.92	\$18.53
19-2032	Maintenance workers, machinery	\$10.65	\$16.55	\$19.50	\$9.73	\$12.16	\$16.15	\$20.28	\$24.51
21-1029	Materials engineers	\$23.97	\$35.65	\$41.50	\$21.73	\$27.33	\$34.88	\$42.97	\$51.85
27-1029	Materials scientists	\$29.96	\$42.97	\$49.47	\$28.06	\$33.23	\$44.25	\$52.40	\$60.69
*17-3021	Mathematical science teachers, postsecondary	\$26,290	\$52,870	\$66,150	\$24,730	\$27,860	\$44,680	\$69,310	\$90,600
29-9091	Meat, poultry, and fish cutters and trimmers	\$10.43	\$14.56	\$16.63	\$9.58	\$11.59	\$13.64	\$18.62	\$21.22
25-3099	Mechanical engineering technicians	\$14.09	\$22.67	\$26.95	\$10.82	\$16.79	\$23.63	\$26.88	\$33.24
39-6012	Media and communication equipment workers, all other	\$12.47	\$18.25	\$21.14	\$12.07	\$13.37	\$15.94	\$19.90	\$30.37
17-2081	Medical and public health social workers	\$13.59	\$20.15	\$23.43	\$12.10	\$15.42	\$20.11	\$24.47	\$28.71
43-3061	Medical appliance technicians	\$8.68	\$14.21	\$16.98	\$6.97	\$10.97	\$14.13	\$17.14	†
13-1061	Medical equipment repairers	\$15.07	\$20.45	\$23.15	\$13.37	\$17.42	\$20.70	\$24.45	\$26.77
31-9094	Medical scientists, except epidemiologists	\$16.80	\$31.68	\$39.12	\$15.25	\$18.57	\$28.81	\$38.66	\$50.66
53-1031	Medical transcriptionists	\$13.29	\$17.00	\$18.86	\$12.22	\$14.55	\$16.47	\$19.44	\$23.76
29-2041	Meeting and convention planners	\$14.88	\$21.31	\$24.52	\$14.23	\$16.30	\$20.13	\$25.89	\$31.57
17-3025	Mental health and substance abuse social workers	\$10.20	\$16.75	\$20.03	\$9.36	\$11.16	\$14.99	\$20.40	\$26.11
29-1021	Meter readers, utilities	\$10.10	\$14.91	\$17.31	\$9.40	\$11.13	\$14.68	\$18.79	\$21.41
47-2121	Mining and geological engineers, including mining safety engineers	\$23.19	\$40.58	\$49.27	\$21.96	\$25.54	\$38.95	\$50.30	\$57.59
49-2098	Molders, shapers, and casters, except metal and plastic	\$9.55	\$12.99	\$14.72	\$9.13	\$10.17	\$12.80	\$15.72	\$17.45
47-3014	Motor vehicle operators, all other	\$7.69	\$13.19	\$15.95	\$6.51	\$8.99	\$12.37	\$18.36	\$20.55
43-9031	Multiple machine tool setters, operators, and tenders, metal and plastic	\$11.03	\$13.38	\$14.56	\$10.58	\$11.53	\$12.82	\$15.36	\$17.55
49-9091	Music directors and composers	\$6.93	\$17.22	\$22.37	\$6.56	\$7.57	\$16.69	\$22.42	†
*17-3012	Nursing instructors and teachers, postsecondary	\$39,260	\$54,920	\$62,750	\$37,800	\$43,020	\$53,300	\$65,570	†

* annual wage data

† insufficient wage data

Table 2: Occupations with Fewer than 10 Estimated Vacancies
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		Occupational Employment Statistics Wage Data (2004)							
		Average Wages			Percentile Distribution				
SOC Code	SOC Occupational Title	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
33-3041	Order clerks	\$9.72	\$14.30	\$16.58	\$8.81	\$10.85	\$13.60	\$17.48	\$21.11
43-4011	Order Clerks	\$9.61	\$14.09	\$16.34	\$8.76	\$10.75	\$13.33	\$17.25	\$20.75
25-3021	Orthotists and Prosthetists	†	†	†	†	†	†	†	†
49-2093	Outdoor Power Equipment and Other Small Engine Mechanics	\$8.75	\$13.09	\$15.26	\$7.97	\$9.36	\$11.35	\$15.95	\$21.80
29-1129	Painters, construction and maintenance	\$10.56	\$14.68	\$16.73	\$9.43	\$11.91	\$14.80	\$16.98	\$20.12
17-3026	Painters, transportation equipment	\$17.96	\$28.78	\$34.20	\$12.65	\$23.52	\$27.69	\$38.93	\$42.70
13-1121	Paperhangers	\$18.28	\$20.28	\$21.29	\$17.08	\$18.53	\$20.25	\$21.97	\$24.97
17-3029	Parking enforcement workers	\$12.84	\$16.67	\$18.59	\$11.83	\$14.12	\$16.86	\$19.69	†
51-9041	Payroll and timekeeping clerks	\$13.30	\$17.09	\$18.99	\$12.22	\$14.66	\$16.92	\$19.89	\$22.56
11-3040	Pediatricians, general	\$45.67	\$67.21	\$77.99	\$43.49	\$50.03	\$59.71	†	†
49-3053	Personal care and service workers, all other	\$7.61	\$10.62	\$12.12	\$6.67	\$8.72	\$11.07	\$12.60	\$13.53
17-2171	Pest control workers	\$8.87	\$16.80	\$20.76	\$7.96	\$9.86	\$14.73	\$23.70	\$26.61
11-9051	Petroleum engineers	\$29.68	\$44.66	\$52.15	\$25.57	\$35.67	\$45.84	\$54.60	\$65.06
51-8099	Pharmacy aides	\$9.79	\$12.13	\$13.31	\$9.20	\$9.91	\$11.29	\$14.67	\$16.36
*25-1112	Philosophy and religion teachers, postsecondary	\$23,020	\$48,480	\$61,210	\$20,930	\$25,780	\$44,190	\$63,160	\$88,370
47-3011	Physical Therapist Aides	\$7.97	\$10.95	\$12.44	\$7.53	\$8.54	\$11.20	\$12.98	\$14.32
21-1019	Physical therapist assistants	\$13.23	\$16.27	\$17.79	\$12.15	\$14.30	\$16.20	\$18.56	\$20.77
13-2071	Physician assistants	\$20.47	\$29.56	\$34.10	\$18.05	\$23.48	\$30.96	\$34.77	\$40.50
51-4034	Physicists	\$22.10	\$39.33	\$47.95	\$19.09	\$25.88	\$39.20	\$50.92	†
*25-1124	Physics teachers, postsecondary	\$43,250	\$71,760	\$86,010	\$38,700	\$51,090	\$67,900	\$91,010	\$111,960
43-4151	Pipelayers	\$10.57	\$13.80	\$15.41	\$9.79	\$11.15	\$13.26	\$15.99	\$18.66
51-8031	Plant and system operators, all other	\$14.55	\$20.62	\$23.66	\$12.96	\$16.39	\$21.69	\$24.95	\$26.89
51-8012	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	\$9.19	\$12.18	\$13.68	\$8.47	\$9.83	\$11.82	\$13.92	\$16.70

* annual wage data

† insufficient wage data

Table 2: Occupations with Fewer than 10 Estimated Vacancies
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		Occupational Employment Statistics Wage Data (2004)							
		Average Wages			Percentile Distribution				
SOC Code	SOC Occupational Title	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
43-5053	Police, fire, and ambulance dispatchers	\$14.23	\$17.89	\$19.72	\$13.85	\$15.37	\$17.71	\$20.54	\$23.06
*27-3041	Political science teachers, postsecondary	\$41,580	\$68,390	\$81,790	\$37,340	\$48,250	\$63,630	\$85,540	\$107,590
25-1191	Postal service mail sorters, processors, and processing machine operators	\$17.00	\$18.60	\$19.40	\$15.90	\$17.76	\$19.09	\$20.42	\$21.22
49-9043	Power distributors and dispatchers	\$22.24	\$31.43	\$36.03	\$20.52	\$26.23	\$32.12	\$38.05	\$43.59
33-2011	Printing machine operators	\$12.40	\$18.31	\$21.27	\$10.93	\$14.20	\$17.39	\$22.58	\$26.93
19-1031	Procurement clerks	\$12.52	\$16.67	\$18.75	\$11.61	\$13.85	\$16.64	\$19.57	\$21.57
11-9151	Producers and directors	\$17.32	\$30.52	\$37.11	\$13.39	\$21.39	\$25.92	\$35.32	\$50.86
19-3039	Protective service workers, all other	\$12.26	\$16.42	\$18.50	\$10.54	\$13.80	\$15.44	\$17.44	\$22.73
29-1125	Psychiatric technicians	\$12.22	\$14.78	\$16.07	\$11.71	\$12.92	\$14.70	\$16.51	\$18.57
43-4199	Psychiatrists	\$54.63	\$81.50	\$94.93	\$52.80	\$64.61	†	†	†
39-6021	Psychologists, all other	\$11.50	\$25.28	\$32.17	\$10.40	\$12.43	\$25.98	\$37.64	\$42.99
*17-2199	Psychology teachers, postsecondary	\$30,430	\$56,160	\$69,020	\$26,170	\$35,000	\$50,840	\$68,390	\$93,910
33-9099	Purchasing agents, except wholesale, retail, and farm products	\$17.91	\$25.55	\$29.37	\$16.59	\$20.16	\$24.52	\$30.04	\$37.23
47-4011	Purchasing managers	\$26.89	\$40.28	\$46.98	\$23.74	\$30.79	\$37.86	\$48.85	\$59.27
19-4031	Radiation therapists	\$21.56	\$28.68	\$32.24	\$19.30	\$24.22	\$29.05	\$34.05	\$38.82
29-1121	Radio and television announcers	\$9.11	\$21.35	\$27.46	\$7.65	\$10.93	\$16.38	\$24.68	\$42.50
25-1063	Radio mechanics	\$12.06	\$19.84	\$23.73	\$9.44	\$17.08	\$22.18	\$24.95	\$26.58
*39-9099	Recreation and fitness studies teachers, postsecondary	\$20,820	\$31,000	\$36,090	\$19,420	\$22,230	\$26,680	\$37,810	†
25-1125	Recreational therapists	\$13.23	\$18.77	\$21.53	\$11.78	\$15.50	\$19.34	\$22.22	\$25.53
27-1027	Rehabilitation counselors	\$10.27	\$15.07	\$17.47	\$9.32	\$11.27	\$13.35	\$17.01	\$24.36
11-3051	Religious Workers, All Other	†	†	†	†	†	†	†	†
29-1124	Reporters and correspondents	\$11.55	\$31.87	\$42.03	\$9.92	\$13.64	\$25.86	\$34.81	†
25-2032	Reservation and transportation ticket agents and travel clerks	\$10.69	\$15.30	\$17.61	\$9.90	\$11.39	\$13.64	\$19.47	\$23.15

* annual wage data

† insufficient wage data

Table 2: Occupations with Fewer than 10 Estimated Vacancies
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		Occupational Employment Statistics Wage Data (2004)							
		Average Wages			Percentile Distribution				
SOC Code	SOC Occupational Title	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
13-2081	Rotary drill operators, oil and gas	\$14.45	\$20.27	\$23.18	\$12.45	\$16.69	\$20.99	\$24.42	†
43-4061	Sales engineers	\$25.67	\$41.12	\$48.85	\$22.84	\$29.30	\$34.49	\$44.54	†
25-1064	Security and fire alarm systems installers	\$15.84	\$19.45	\$21.25	\$15.00	\$16.23	\$18.71	\$21.58	\$25.49
25-1192	Self-enrichment education teachers	\$9.81	\$15.33	\$18.09	\$9.04	\$10.98	\$14.17	\$18.92	\$21.65
51-5023	Semiconductor Processors	†	†	†	†	†	†	†	†
33-3011	Septic tank servicers and sewer pipe cleaners	\$11.94	\$18.29	\$21.47	\$10.01	\$14.33	\$17.90	\$20.86	†
19-2012	Set and exhibit designers	\$14.79	\$20.05	\$22.67	\$14.18	\$15.35	\$17.21	\$24.18	\$32.74
31-2022	Sewing machine operators	\$7.91	\$10.32	\$11.52	\$7.48	\$8.47	\$9.89	\$11.75	\$13.84
51-9082	Skin care specialists	\$7.11	\$11.66	\$13.94	\$6.84	\$7.89	\$10.35	\$12.79	\$19.32
31-9095	Social and community service managers	\$16.77	\$25.76	\$30.25	\$15.60	\$17.97	\$23.08	\$29.05	\$39.96
25-1194	Social Work Teachers, Postsecondary	†	†	†	†	†	†	†	†
47-2141	Social workers, all other	\$12.64	\$17.62	\$20.11	\$12.00	\$13.74	\$16.47	\$20.80	\$26.14
*51-9121	Sociology teachers, postsecondary	\$35,820	\$58,380	\$69,660	\$31,830	\$41,650	\$53,220	\$68,700	\$95,320
13-1070	Sound engineering technicians	\$13.43	\$20.45	\$23.96	\$12.45	\$15.13	\$19.31	\$24.82	\$32.59
*27-3043	Special education teachers, middle school	\$34,100	\$47,180	\$53,710	\$31,720	\$36,440	\$47,000	\$57,060	\$66,490
25-1062	Substance abuse and behavioral disorder counselors	\$11.57	\$15.52	\$17.50	\$10.94	\$11.98	\$13.58	\$16.53	\$27.58
21-2011	Surveying and mapping technicians	\$14.91	\$19.95	\$22.47	\$13.61	\$16.72	\$19.90	\$22.34	\$27.10
47-2142	Tailors, dressmakers, and custom sewers	\$9.74	\$13.37	\$15.19	\$9.40	\$11.11	\$12.84	\$14.34	\$20.41
25-1111	Tax examiners, collectors, and revenue agents	\$17.90	\$27.65	\$32.53	\$16.32	\$20.02	\$25.42	\$35.95	\$42.49
*39-1021	Teachers and instructors, all other	\$28,840	\$41,870	\$48,380	\$26,440	\$32,030	\$39,490	\$52,160	\$63,260
43-4161	Telecommunications equipment installers and repairers, except line installers	\$22.09	\$24.60	\$25.85	\$20.48	\$22.91	\$24.86	\$26.82	\$28.40
17-3031	Therapists, all other	\$13.82	\$20.08	\$23.21	\$12.65	\$14.81	\$17.61	\$22.15	\$32.94
51-3021	Tile and marble setters	\$12.51	\$20.83	\$25.00	\$9.56	\$16.81	\$21.61	\$25.44	\$27.97
27-4032	Tool and die makers	\$16.81	\$21.46	\$23.78	\$15.52	\$18.42	\$21.53	\$25.16	\$27.47

* annual wage data

† insufficient wage data

Table 2: Occupations with Fewer than 10 Estimated Vacancies
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		Occupational Employment Statistics Wage Data (2004)							
		Average Wages			Percentile Distribution				
SOC Code	SOC Occupational Title	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
49-9098	Tour guides and escorts	\$7.32	\$9.82	\$11.06	\$6.93	\$7.92	\$9.52	\$11.21	†
25-1051	Transportation, storage, and distribution managers	\$23.16	\$34.34	\$39.93	\$21.56	\$25.90	\$32.38	\$41.12	\$51.33
*41-1012	Umpires, referees, and other sports officials	\$12,050	\$18,760	\$22,120	\$11,480	\$12,590	\$15,230	\$23,950	\$34,170
25-2042	Urban and regional planners	\$18.09	\$26.90	\$31.31	\$16.34	\$20.34	\$26.27	\$32.85	\$39.67
49-2022	Veterinary Assistants and Laboratory Animal Caretakers	†	†	†	†	†	†	†	†
51-2031	Vocational education teachers, postsecondary	\$14.32	\$24.13	\$29.03	\$13.30	\$15.87	\$20.61	\$33.69	\$41.83
*21-1023	Vocational education teachers, secondary school	\$38,550	\$52,350	\$59,250	\$36,550	\$43,020	\$52,070	\$61,500	\$70,920
19-4092	Water and liquid waste treatment plant and system operators	\$19.45	\$23.34	\$25.29	\$18.04	\$21.86	\$24.32	\$26.40	\$27.66
23-2091	Welding, soldering, and brazing machine setters, operators, and tenders	\$13.03	\$16.17	\$17.74	\$12.16	\$13.73	\$15.93	\$18.08	\$21.01
29-1061	Wholesale and retail buyers, except farm products	\$13.05	\$21.46	\$25.67	\$11.99	\$14.45	\$18.50	\$25.88	\$34.88
29-1065	Woodworking machine setters, operators, and tenders, except sawing	\$10.25	\$14.83	\$17.12	\$9.53	\$11.11	\$14.86	\$17.59	\$20.62
49-3041	Writers and authors	\$15.52	\$24.35	\$28.77	\$14.60	\$17.81	\$23.86	\$29.39	\$35.60
27-3091	Zoologists and wildlife biologists	\$24.28	\$26.74	\$27.97	\$23.20	\$24.32	\$26.19	\$28.06	\$34.54

* annual wage data
† insufficient wage data

The Other Services sector includes repairs and maintenance; personal laundry services; membership associations and organizations; and private households. Employers in this sector are small to mid-size firms that make up about 9% of the region's employers and 3.4% of the employment. In this survey, estimated vacancies for Other Services are more than two times those estimated a year ago, making it the third sector adding the most vacancies between the two spring surveys. Yet, the sector still accounts for only 4% of all estimated vacancies.

The average wage paid, \$13.20, is in the mid range but is significantly lower than the \$16.10 overall average wage for the region. The conservative average wage offered for vacancies in this sector is highly affected by the diversity of occupations for which employers are hiring. Twenty-one percent of the sector vacancies are for Production jobs that pay \$13.60 on average. Food Preparation and Serving Related occupations paying an average wage of only \$7.40 make up another 20% of the vacancies. Office and Administrative Support and Installation,

Maintenance, and Repair occupations follow with 13% and 11% of the sector's vacancies and with average wages of \$12.90 and \$16.20, respectively.

Permanent openings account for 80% of the vacancies reported within the sector, while temporary positions account for 20%. Two-thirds of the vacancies in the sector have been open for a period less than 30 days. A majority of these are considered not difficult to fill.

Eighty-six percent of the reported vacancies within the sector require a High School/GED diploma or less. Many of the vacancies, 16%, require Vocational Training/Certification with the majority of these being Hairdressers, Hairstylists, and Cosmetologists. A Bachelor's Degree is required only for 2% of the vacancies. Employers in this sector, however, appear to put heavier weight towards experience than educational requirements with 56% percent of the vacancies requiring experience in a related field or experience in the specific occupation. Only 8% of the vacancies require no previous work experience.

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.

Caveats

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

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

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

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

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

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

Methodology

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

of a job vacancy rate and the total job vacancies within a region by industry and size of firm. Additional data related to these vacancies is informative of the occupations for which they are reported, but is not indicative of overall vacancy characteristics in the regional universe.

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

Survey Design

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

The survey estimates vacancies based on the ratio of vacancies to employment size in each stratification. It attempts to determine how many positions in a region are filled and unfilled. A filled position is an employee and an unfilled position is a job vacancy. Because positions are not independent of one another or evenly dispersed, we collect this information in naturally occurring clusters, i.e. firms. Firms are asked how many employees they have and how many positions they are actively recruiting for. In each size and industry stratification a ratio of vacancies to employment is calculated based on the sampled firms. That ratio is then applied to the total number of employees in that stratification 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 32% of the employment in the region is found in large and government employers that make up only 2% of the total number of firms. Conducting a census of these entities allows us to cover a large portion of the region's employment while contacting relatively few entities.

Survey Sample

The Denver Metropolitan Region spring survey was conducted from April 5th through May 25th, 2005. For the purpose of this report, private and government employers with five or more employees are referred to as the sample frame. Firms with fewer than five employees make up a very large portion of all employers in the region, but provide only a small proportion of the total employment. Employment in the sample frame accounts for 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 250 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 14% of the employment in the sample frame, while private industry employers make up the remaining 86%. Large firms account for 21% of private industry employment in the sample frame. Firms employing from five to 249 individuals are considered small to mid-size employers, and account for the remaining 79% of private industry employment.

The margin of error for the overall vacancy estimate is plus or minus 1.86% or about 435 vacancies at a 0.95 certainty level. In other words, in 95 out of 100 samples, the actual number of vacancies in the region will be between 22,865 and 23,735 in the survey period. Labor Market Information is confident that the estimates in this survey are accurate and that the survey was conducted according to recognized survey research standards.

The survey response rate is 94%. This measures the quality of the survey database, or the success experienced in contacting eligible employers. The cooperation rate is 99% and measures the success in obtaining data once an employer is contacted.

JVS Sectors

The new North American Industry Classification System increases the number of major groups to 20 from the Standard Industrial Classification System. The new coding system better reflects today's service based economy and allows comparison of industries in the United States, Mexico and Canada. Stratification of employers in the Denver Metro Region survey is based on these 20 NAICS sectors.

For more information on the North American Industry Classification System see Page 48.

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

Data Collection

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

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

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

Occupational Coding

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

Data Editing

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

Wage Conversion

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

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

North American Industry Classification System (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: Berman and U.S. Department of Commerce, 2002

²ECPC 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.

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

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

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

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

Comparison of NAICS and SIC Major Industry Groups	
SIC Standard Industrial Classification	NAICS North American Industry Classification System
Agriculture, Forestry & Fishing	Agriculture, Forestry, Fishing & Hunting
Mining	Mining
Construction	Construction
Manufacturing	Manufacturing
Transportation, Communications & Public Utilities	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

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.



Adams County One Stop Career Center

12200 Pecos St.
Westminster, CO 80234
Phone: 303-453-8600
Fax: 303-453-8655

Arapahoe/Douglas WORKS!

Arapahoe CentrePoint Plaza
14980 E. Alameda Dr.
Aurora, CO 80012
Phone: 303-636-1160
Fax: 303-636-1250

Aurora WFC

3508 Peoria St., #D
Aurora, CO 80010
Phone: 303-363-9380
Fax: 303-363-9381

Bear Valley WFC

3100 S. Sheridan Blvd.
Denver, CO 80227
Phone: 303-922-2450
Fax: 303-922-2618

Brighton WFC

1931 E. Bridge St.
Brighton, CO 80601
Phone: 303-659-4250
Fax: 303-659-9178

Broomfield WFC

6650 W. 120th Ave.
Broomfield, CO 80020
Phone: 303-464-5855
Fax: 303-465-0117

Denver International Airport WFC

Please call for office hours.
8500 Pena Blvd.
6th Level, Main Terminal, West
Denver, CO 80249
Phone: 303-342-2520
Fax: 303-342-2522

Denver Office of Economic Development, Division of Workforce Development

1391 N. Speer Blvd., #500
Denver, CO 80204

Job Seekers:

Phone: 720-865-5619
Fax: 720-865-5685

Employer Services Job Unit:

Phone: 720-913-1648
Fax: 720-913-1652

Denver Youth WFC

1391 N. Speer Blvd., #710
Denver, CO 80204-2554
Phone: 720-865-5700
Fax: 720-865-5681

Douglas County WFC

(Tues. by appt.)
101 Third St.
Castle Rock, CO 80104
Phone: 303-688-4825
Fax: 303-688-0292

Front Range

Community College WFC
3645 W. 112th Ave., Rm. B-1315
Westminster, CO 80031
Phone: 303-404-5163
Fax: 303-438-9524

Littleton WFC

1610 W. Littleton Blvd., Suite 100
Littleton, CO 80120
Phone: 303-734-5200
Fax: 303-734-5229

Lone Tree WFC

Park Meadows Center
9350 Heritage Hills Circle
Lone Tree, CO 80124
Phone: 303-784-7868
Fax: 303-799-0223

Longmont WFC

1500 Kansas Ave., Suite 4D
Longmont, CO 80501
Phone: 303-651-1510
Fax: 303-651-0288

Quigg Newton WFC

4440 Navajo St.
Denver, CO 80211
Phone: 303-458-4891
Fax: 303-433-3567

Stapleton Plaza WFC

3401 Quebec, Suite 7700
Denver, CO 80207
Phone: 720-865-0060
Fax: 720-865-0091

Thornton WFC

550 Thornton Pkwy, #200.
Thornton, CO 80229
Phone: 303-452-2304
Fax: 303-452-7072

Lakewood WFC

730 Simms, Suite 300
Golden, CO 80401
Phone: 303-271-4700
Fax: 303-271-4708

Westside WFC

1200 Federal Blvd.
Denver, CO 80204
Phone: 720-944-1615
Fax: 720-944-4131

Boulder County WFC

2905 Center Green Ct., Suite B
Boulder, CO 80301
Phone: 303-301-2900
Fax: 303-939-0054

