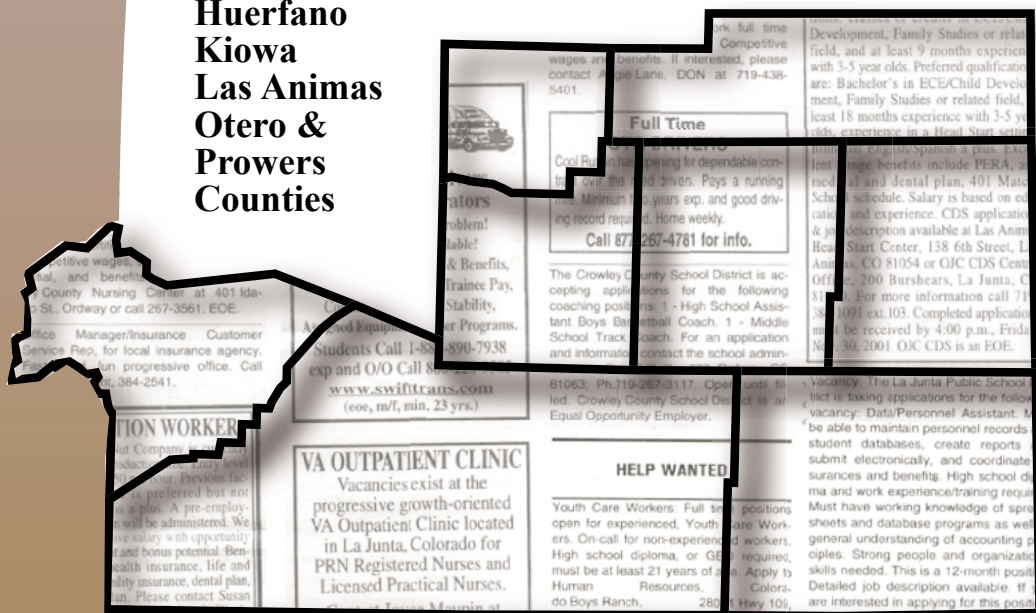


SE Southeast Region

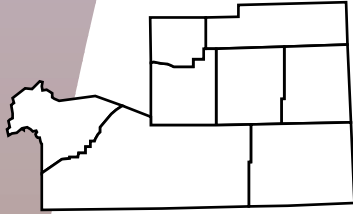
Job Vacancy Survey December 2002

**Baca
Bent
Crowley
Huerfano
Kiowa
Las Animas
Otero &
Prowers
Counties**



**Workforce Research & Analysis
Labor Market Information
Colorado Department of Labor and Employment**





Southeast Region Job Vacancy Survey

*Conducted
September 18-25, 2002*

State of Colorado

Bill Owens, *Governor*

Colorado Department of Labor & Employment

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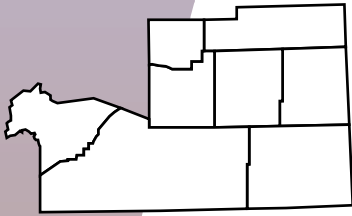
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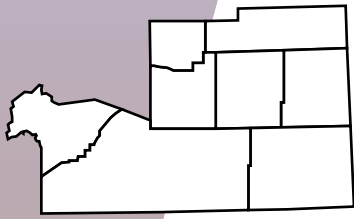
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The staff of Workforce Research and Analysis would like to extend sincerest gratitude to all area employers who participated in this study. The analysis provided in this document would not be possible without their help.

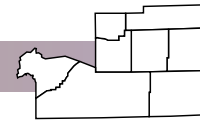


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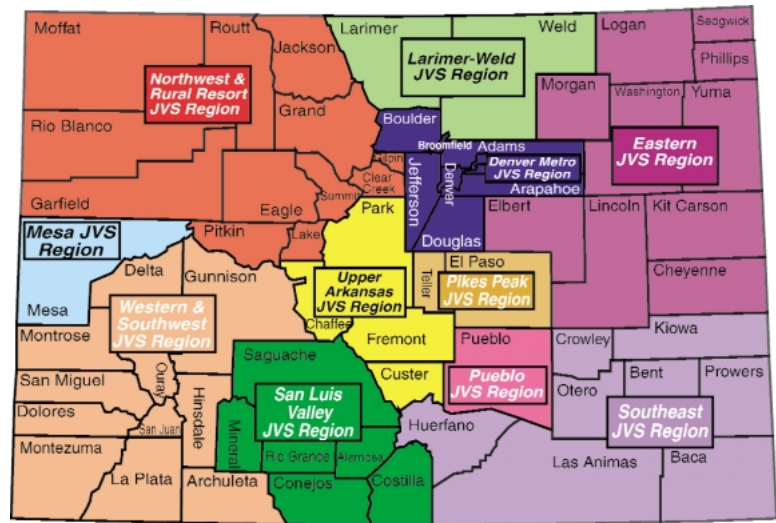
Introduction

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

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

The CDLE's survey unit collects original data by conducting phone interviews with a representative

Colorado Job Vacancy Survey Regions



sample of employers in a given region. The department's economists analyze the raw data, estimate the number of vacancies in the area and publish the report within weeks of the original data collection, providing a timely portrait of the employment situation.

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

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

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How to Use This Report

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

- ◆ Is there a labor shortage in the region?
- ◆ If so, what types of labor are in short supply?
- ◆ Is there a shortage of skills?
- ◆ What skills are necessary to fill current vacancies?

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, it might indicate 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.

◆ *Employee Training*—

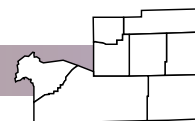
A firm may also choose to increase investment in training for their current employees instead of expanding recruitment efforts.

◆ *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 industry 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.

Public officials, educational institutions, and government agencies can use this survey information

to effectively apply resources to education, training, and job placement programs.

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 (www.coworkforce.com/lmi/oeo/oeo.htm). The projections highlight growing as well as declining occupations. 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 economic growth and development potential. 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 current labor demand stands today, as identified by the survey, and where the local market is trending using Labor Market Information's employment projections.

Caveats

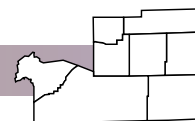
The Job Vacancy Survey statistics are indicators of the demand for workers in the region and should not be interpreted as actual values. The CDLE relies on information from surveyed companies to obtain a representative sample of institutions and the occupations that fuel them. Not all surveyed firms participate; however, the employers who do participate enable the production of statistically reliable results.

The study provides estimates of job openings for a point in time; they do not necessarily portray the distribution of job vacancies in the region. This report does not attempt to explain the cause of vacancies—whether these current vacancies are due to actual growth or to job turnover in an occupation. Readers should also keep in mind that the authors are not attempting to project the level of vacancies into the future. Be aware that events having occurred since the time period analyzed such as plant closings or the migration of people in and out of the area might

significantly affect the vacancy status of some occupations. Job openings are very dynamic – current openings are being filled, new positions are being created, and some roles are being phased out.

Occupational demand is subject to seasonal changes and 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, the CDLE may be able to identify patterns that more accurately reflect changing labor market conditions. 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.



Executive Summary

This Southeast Region Job Vacancy Survey was conducted from September 18th through 25th, 2002. Over the survey period a sample of Southeast Region private employers with at least five employees, as well as all large employers and Government agencies were contacted. Employers were asked if they were actively hiring at the time of the survey and a variety of questions about the positions that they were seeking to fill. The goal of the survey is to provide current information on the demand for workers so that employers, job seekers, economic developers,

educators and workforce centers can make informed decisions in the Southeast Region.

A total of 479 employers representing over one third of the region's total employment responded to the survey. Out of these, 83 are Government agencies, 23 are large employers and the remaining 373 are from the small to mid-sized category. The survey had a response rate of 88% and a cooperation rate of 99%. The major findings of the survey follow:

- ◆ An estimated 200 jobs were open for hire during the survey period in firms with at least five employees compared with 340 a year ago.
- ◆ Eight percent of the employers responding reported having at least one vacancy.
- ◆ Large employers account for 45% of the total estimated vacancies.
- ◆ Eighty-one percent of the openings are full-time.
- ◆ The overall average wage for all vacancies is \$11.30 per hour.
- ◆ Forty-six percent of the openings require education beyond high school.
- ◆ Vacancies requiring experience either related to or within the same field as the vacant position account for 45% of all reported openings.
- ◆ According to employer responses, 1/3 of the vacancies are not considered difficult to fill.
- ◆ Four out of five vacancies reported by employers include some form of medical insurance.
- ◆ None of the employers offered sign-on bonuses to fill vacancies.

Southeast Region

The Southeast Region Job Vacancy Survey represents employers in eight counties located on the plains southeast of the Rocky Mountain Front Range. The region borders Kansas, Oklahoma and New Mexico. It consists of Baca, Bent, Crowley, Huerfano, Kiowa, Las Animas, Otero and Prowers counties and covers over 16,000 square miles or 15% of the state. The U.S. Census Bureau estimates the population at nearly 75,000 people in 2001. The region employed 30,342 people from a labor pool of 31,675 resulting in a 4.2% unemployment rate in September 2002.

Figure 1:
Population by County

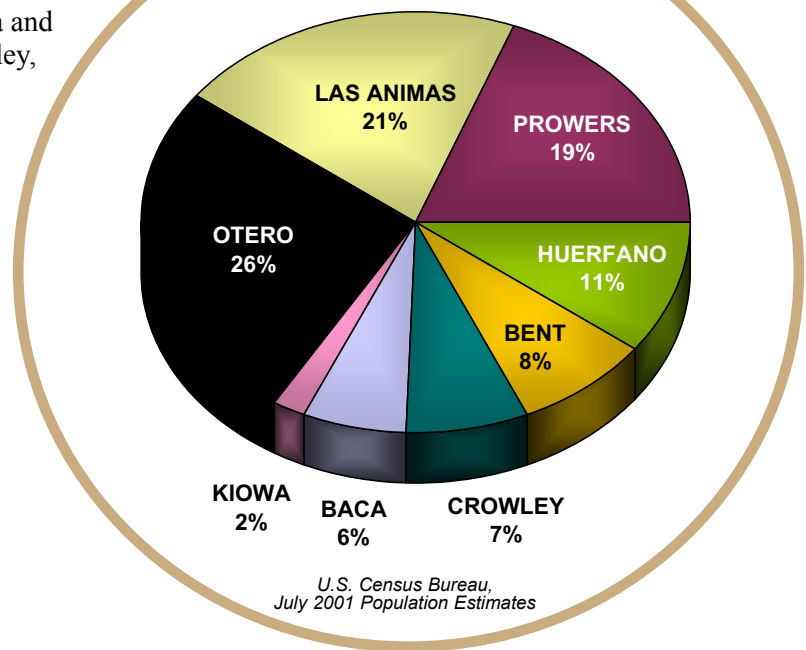
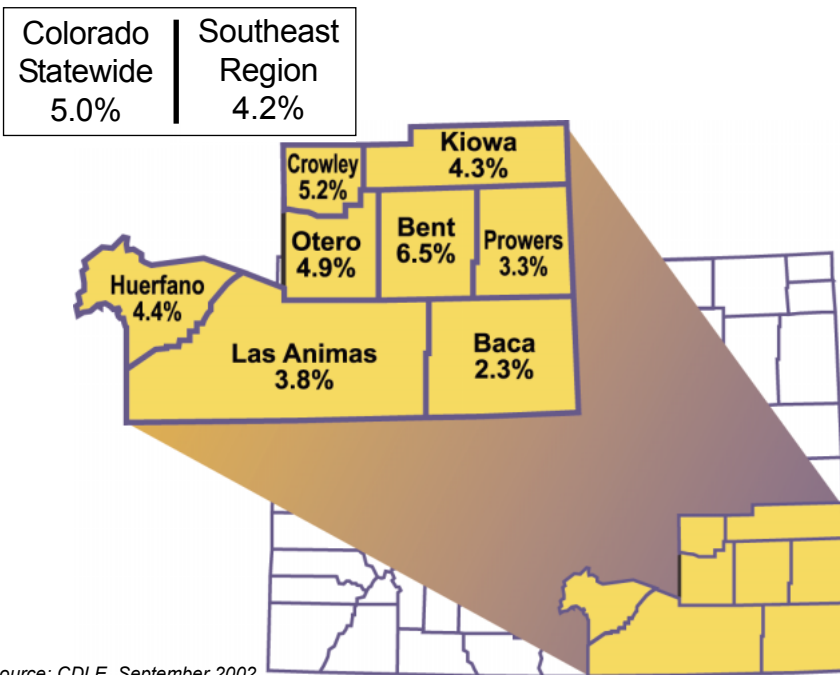
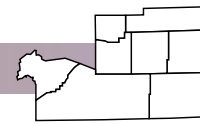


Figure 2: Unemployment Rates for September 2002
(Rates Not Seasonally Adjusted)



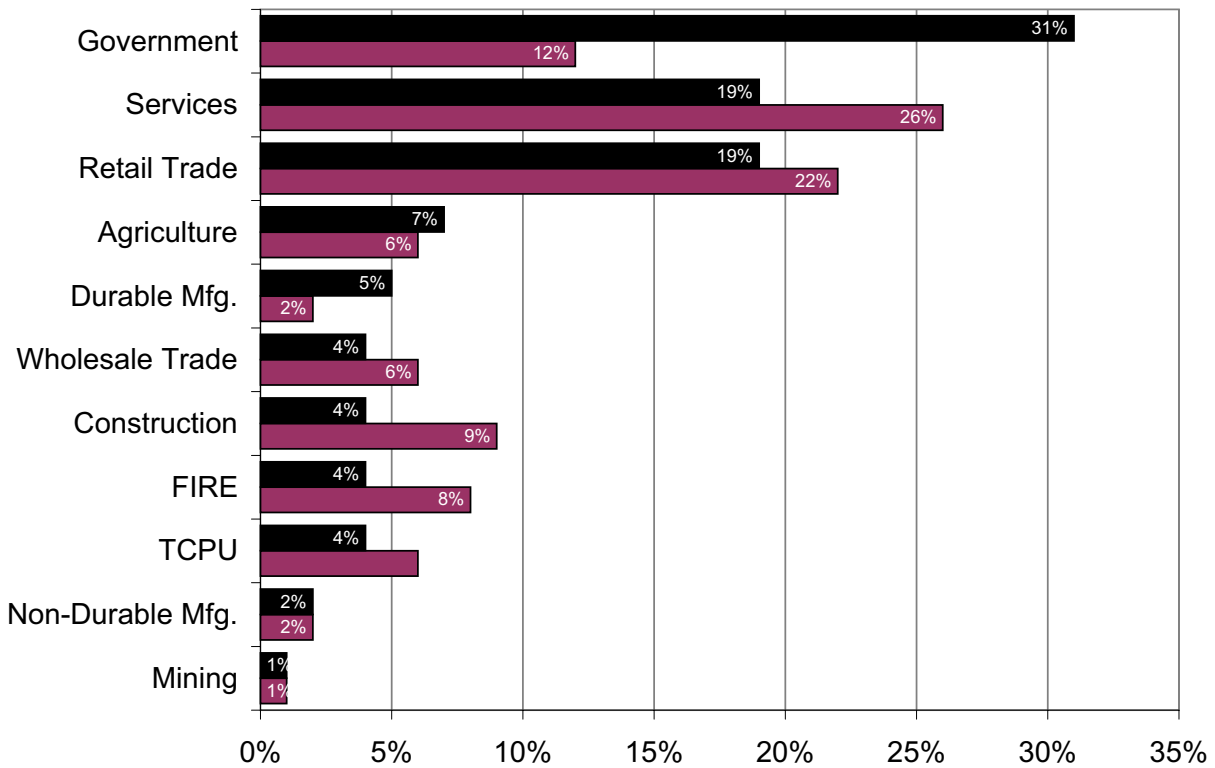


Like the rest of the state, employers in the Southeast Region are concentrated in the Services and Retail Trade industries. Employment, however, is largest in Government agencies. Relative to the rest of the state, Agriculture has a much larger presence in the Southeast Region.

It is important to note that the Bureau of Labor Statistics' Employment and Wages (ES-202) program collects information on firms whose employees are

covered by unemployment insurance. Nationally, this program captures 94% of total employment. Agriculture, however, is an industry in which much of the employment is not covered. Many agricultural employers are exempt from paying unemployment insurance tax, and therefore are not represented in the Employment and Wages calculations. Simply put, agricultural employment may represent a much larger part of the region's labor market than indicated in *Figure 3*.

Figure 3: Southeast Region Employers & Employees, 3rd Quarter, 2001



Agriculture includes Forestry and Fishing
 FIRE—Finance, Insurance, and Real Estate
 TCPU—Transportation, Communication and Public Utilities

■ Employers ■ Employment

Source: Colorado Employment and Wages (ES-202)

Both the labor force and employment in the region have grown by about 4% over the previous year compared to statewide labor force growth of 3% and statewide employment growth of 2%. Each county in the region experienced an increase over the year in both labor force and employment. Bent County is the only exception. It lost 80 jobs over the year. Most

counties enjoy unemployment rates at or below that of the state as a whole. Bent County has the highest unemployment rate at 6.5%, followed by Crowley County with 5.2%. All other Southeast Region counties have unemployment rates below the state's 5.0% and Baca, Las Animas, and Prowers counties all have unemployment rates below 4%.

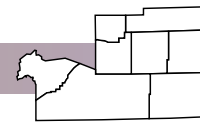
Figure 4: Employment & Labor Force Trends for the Southeast Region



Source: CDLE, Local Area Unemployment Statistics

Figure 4 also illustrates the seasonal employment trend in the region. Both employment levels and the labor force peak at the end of the summer and bottom out in early winter. The Job Vacancy Survey is

conducted annually, in or around peak employment times, and represents the demand for labor when employers are still in the process of actively recruiting for seasonal positions.



The Job Vacancy Survey Sample

This Southeast Region Job Vacancy Survey was conducted from September 18th through 25th, 2002. For the purpose of this report, employers with five or more employees are referred to as the sample universe. Firms with fewer than five employees make up 68% of all employers in the region, but only 16% of total employment. Employment in the sample universe accounts for 67% of total employment in the region.

The Job Vacancy Survey separates employers into either Government or private industry categories. Private firms are grouped by employment level into either large or small to mid-size categories. Attempts are made to contact each large private employer and Government agency in the region. Small to mid-size firms are further divided by industry and randomly sampled until a representative response is obtained for each industry group (see *Table 1*).

Government employment accounts for 29% of the sample universe. Private industry employers make up the remaining 71%. Private industry employers with at least 75 employees are referred to as large employers. They account for 37% of the private industry employment in the sample universe. Firms employing from five to 74 individuals are considered small to mid-size employers, and account for the remaining 63% of private industry employment.

Over the survey period a total of 479 employers, 55% of those in the sample universe, responded to the survey. Out of these, 83 are Government agencies, 23 are large employers and 373 are from the small to mid-sized category. Those employers contacted account for 65% percent of the total employment in the sample universe and 33% of the region's total.

This survey has a response rate of 88% and a 99% cooperation rate. The response rate measures how successful the survey is at gathering information from eligible employers. The cooperation rate measures how willing employers are to participate in the survey once they are contacted.

The survey is designed to create estimates of the total number of vacancies in the survey region based on establishment size and industry type. Statistical methods for estimating vacancies provide reliable information about the region as a whole without having to survey every employer in the region. In the Southeast Region Job Vacancy Survey, numbers of vacancies by establishment size and industry type are estimated, but other vacancy characteristics are based solely on information provided by employers.

Table 1: Industry Categories

Government	
Public Administration	
Private Industry	
Goods Producing Industries	Service Producing Industries
Agriculture, Forestry, and Fishing (except Agricultural Services)	Transportation, Communications, and Public Utilities
Mining	Wholesale Trade
Construction	Retail Trade
Manufacturing	Finance, Insurance, and Real Estate Services (including Agricultural Services)

Data Collection

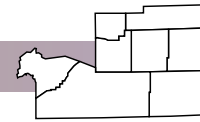
Data for the Job Vacancy Survey are collected using a Computer Assisted Telephone Interview (CATI) process. While this system of data collection has been in use in the public sector for several years, Colorado is the first state in the nation to pioneer the use of CATI data collection for the Job Vacancy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

Professional interviewers, trained in economic data collection processes, gather 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.

The survey is conducted so as to ensure the statistical integrity of this report. When necessary, employers are contacted a second time to clarify responses.



Vacancies: Industry, Size and Status

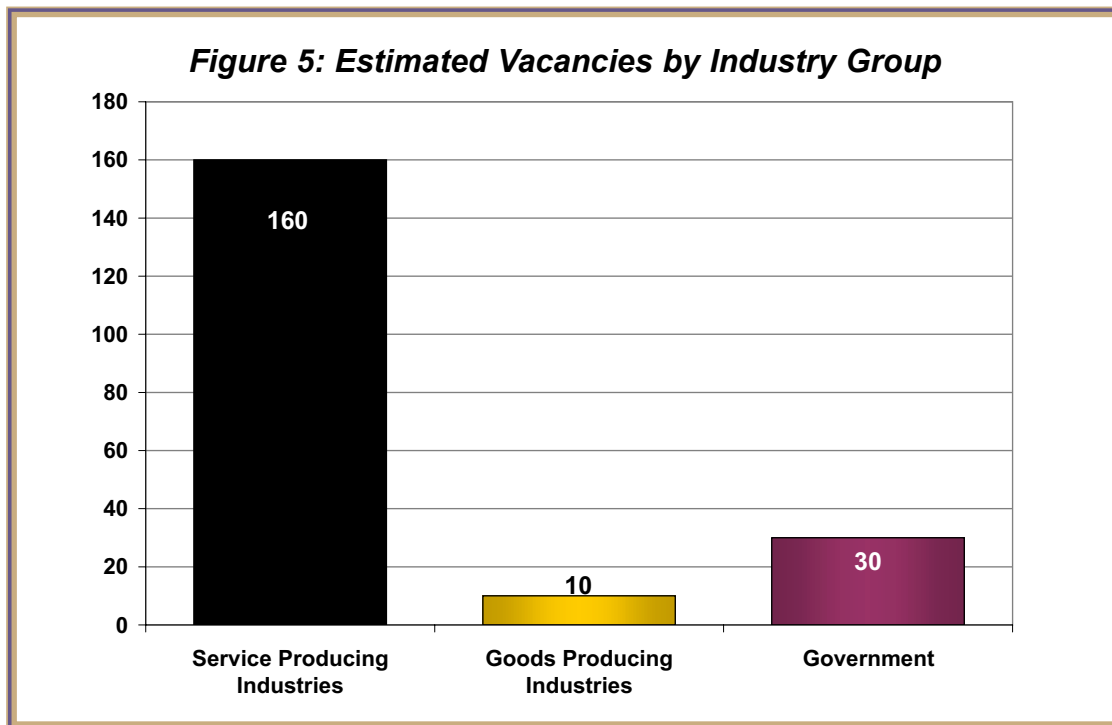
During the survey period, an estimated 200 vacancies were open for immediate hire in firms with at least five employees in the Southeast Region. These results are lower than those found in the summer 2001 Southeast Region Job Vacancy Survey when 340 vacancies were estimated.

This survey, conducted in late summer, is intended to provide a snapshot of the types of vacancy Southeast Region employers are recruiting for at a time when the labor supply is approaching its seasonal peak. Similar to past surveys, the large number of employers in the Services and Retail Trade industries influence the proportion of estimated vacancies in the Service Producing industries.

Of the 479 companies contacted, 8% reported having at least one vacancy, down from 17% in 2001. The

proportion of companies reporting at least one vacancy varies with 2% in Goods Producing industries, 8% in Service Producing industries and 11% in Government agencies.

Because so many of the estimated vacancies are in Service Producing industries, it is worth looking at these vacancies more closely. Large employers reported 54% of vacancies in the Service Producing industries. Sixty-three percent fall into the more specific Services industry (see *Table 1*). Half of the open positions reported by Service Producing employers are in the Healthcare Practitioners & Technical and Food Preparation & Related occupational groups. Full-time/permanent employment is offered for three-fourths of Service Producing industry vacancies, and none are temporary positions.



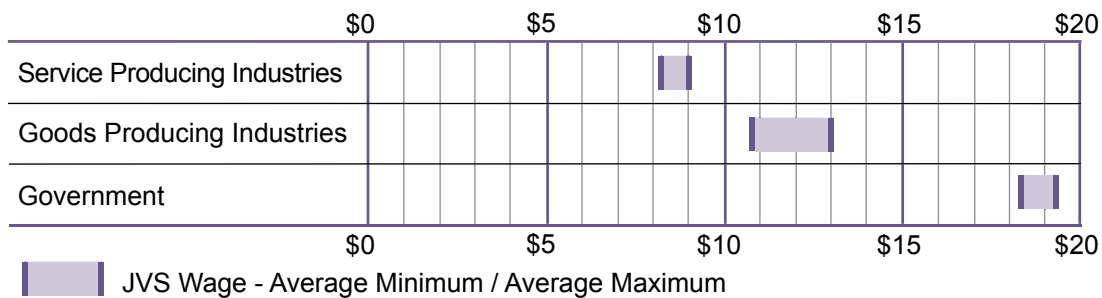
Since wages offered vary according to an individual applicant’s qualifications, employers were asked to provide the range of wages offered for the vacancies. The average wage is then calculated based on the mid-point of that range. If only one wage is reported, the minimum, maximum and mid-point are all assumed to be the same. The overall average wage offered for all vacancies in the region is \$11.30 per hour. The overall average minimum wage is \$10.80. The overall average maximum wage is \$11.80. These wages are reported by employers for vacant positions and are not representative of the wages paid to positions currently occupied.

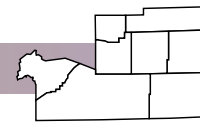
In this survey wages were reported for 75% of all vacancies. The type of occupation, the skills and

knowledge required to fill the vacancy, as well as the philosophy of the employer offering the position generally affect wages. Differences in these characteristics among vacancies found in this survey and others will influence the average wages reported.

The wages reported for vacancies in the Service Producing industries heavily influence the overall averages because of the large concentration of vacancies in the industry. The higher wages offered by Government agencies are probably related to the experience required to fill those vacancies: 83% require experience either related to or in the specific occupation.

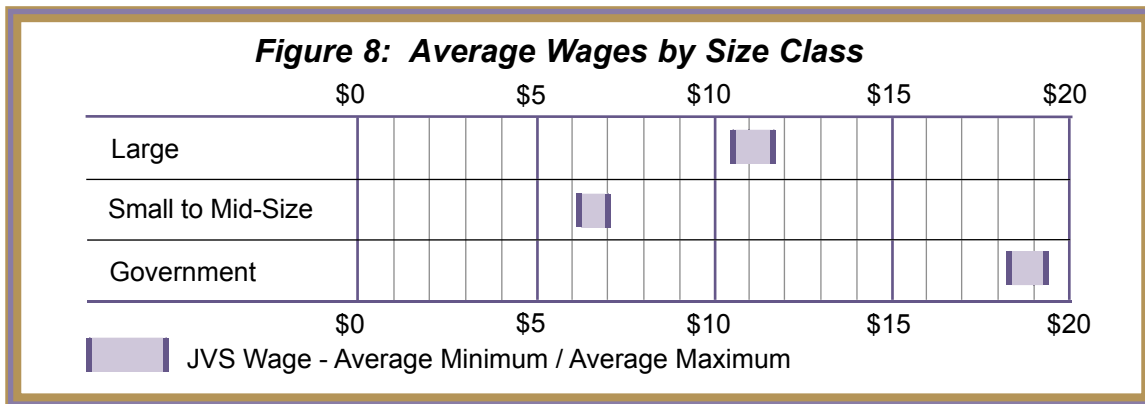
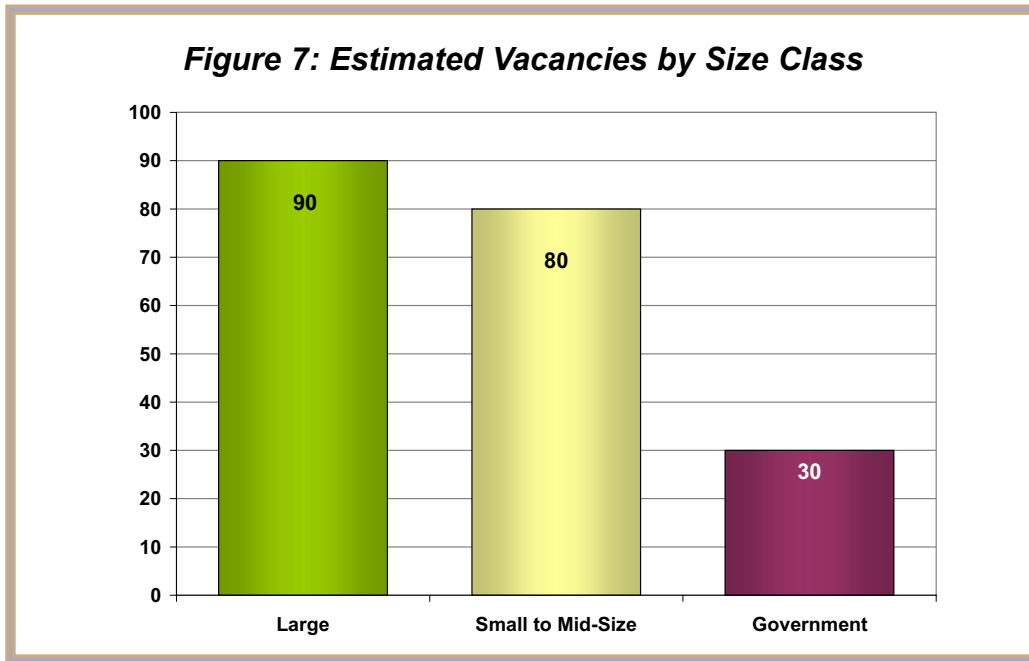
Figure 6: Average Wages by Industry Group





Large employers account for the largest proportion of estimated total vacancies by size class. This group also has the highest vacancy rate at 1.7%, and 39% of

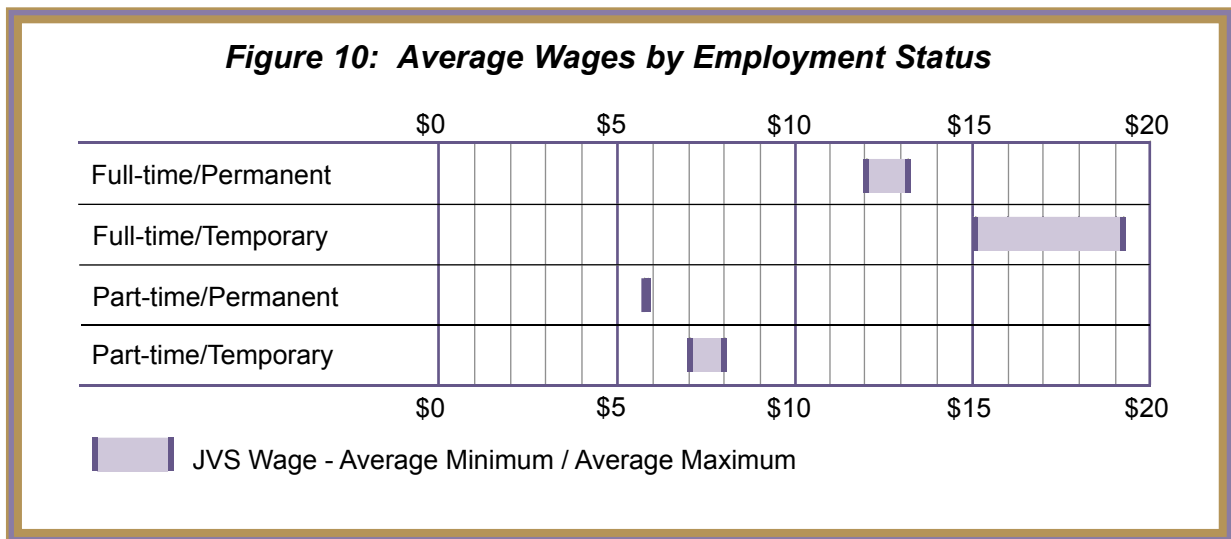
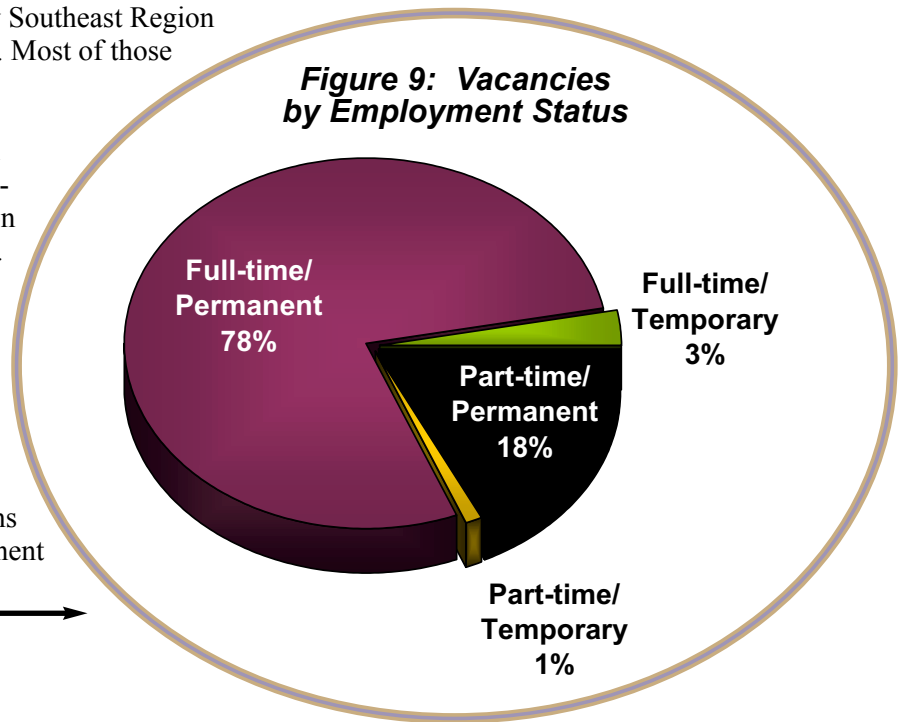
employers report at least one vacancy. Five percent of small to mid-size employers and 11% of Government agencies report having at least one vacancy.

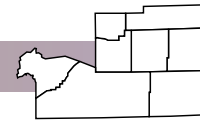


Like wages reported for vacancies in the Service Producing industries, those reported by large employers have the greatest effect on the overall averages because of the sheer size of the category. The lower

wages offered by small to mid-size employers may be partially explained by the types of jobs reported in that category: 65% are either Food Preparation and Serving Related or Sales and Related occupations.

The majority of vacancies reported by Southeast Region employers offer permanent employment. Most of those are full-time positions in the Office and Administrative Support or Healthcare Practitioners and Technical occupational groups. The majority of part-time/permanent positions are in the Food Preparation and Serving Related occupational group. All temporary positions are offered by Government agencies for positions in occupational groups like the Community and Social Services; Education, Training, and Library; Arts, Design, Entertainment, Sports, and Media; and Installation, Maintenance, and Repair. Full-time/temporary positions offer higher wages than full-time/permanent positions in this survey.





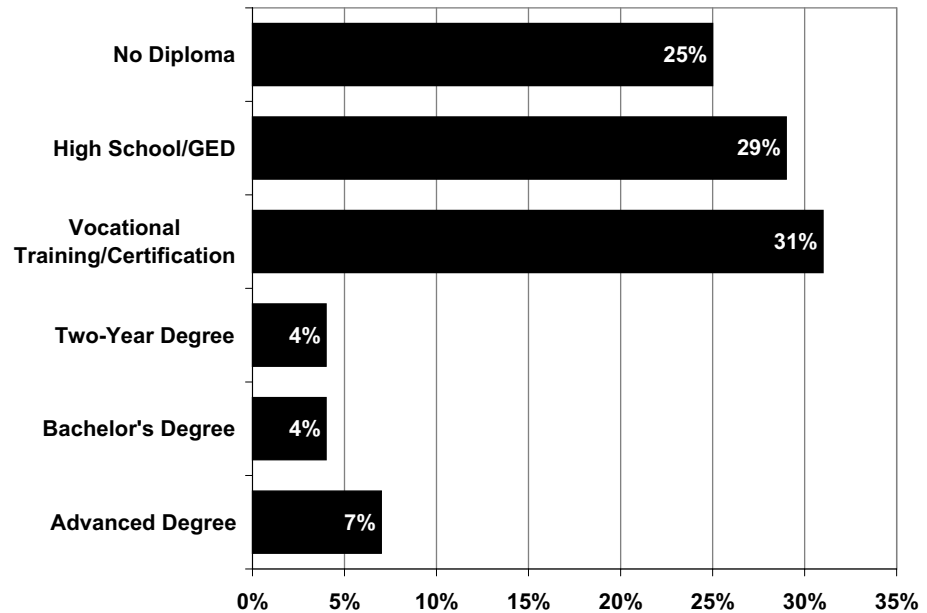
Vacancies: Education and Experience Requirements

During periods of high unemployment, one might assume that there are plenty of qualified candidates but not enough job openings to support them. The reality is that even in times of recession there are many employers who cannot find qualified candidates to fill their open positions. A region's overall labor force is actually made up of a number of smaller labor groups defined by specialized skills, experience, and education. It is important, therefore, that job seekers have information regarding what types of education and experience are in highest demand. Employers can use this information to better understand their competition when recruiting for vacancies with different education and experience requirements.

The majority of vacancies reported in the Southeast Region require lower levels of education, however, 46% of vacancies require postsecondary education. Service Producing employers offer 86% of vacancies requiring an advanced degree and all of those requiring a bachelor's degree. Vacancies requiring a two-year

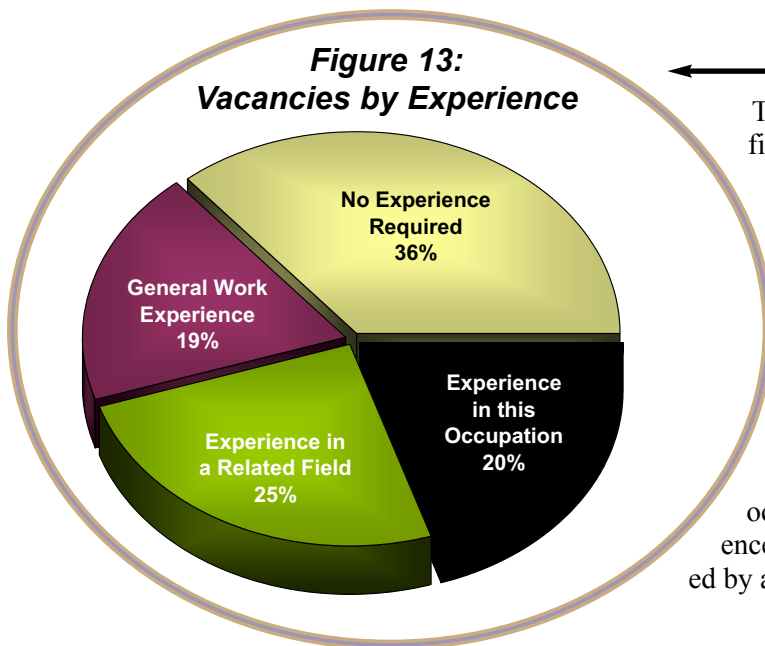
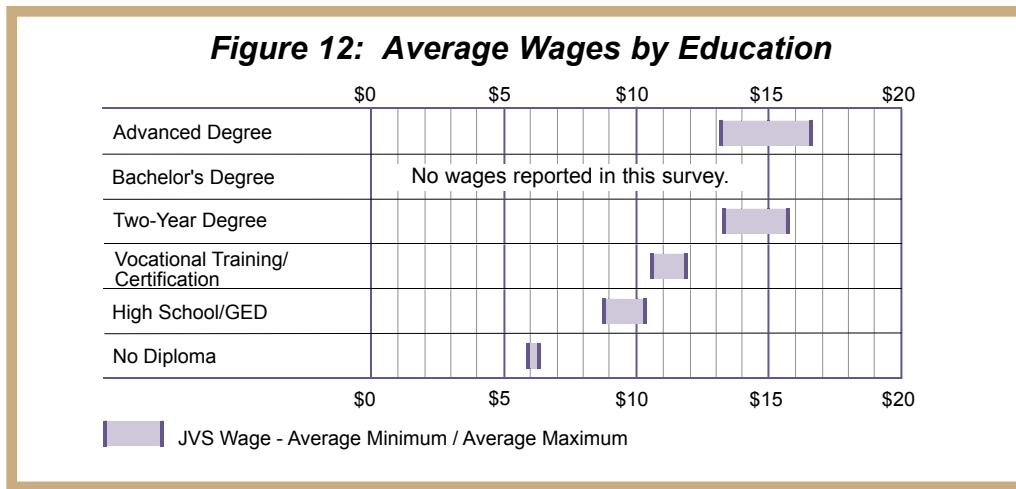
degree are evenly split between Government agencies and Service Producing employers. These positions fall into Education, Training, and Library; and Healthcare Practitioners and Technical occupational groups. Ninety-one percent of all vacancies requiring either an advanced or a bachelor's degree and over half of those requiring vocational training or certification are for Healthcare Practitioners and Technical positions. Sixty percent of vacancies offered by Goods Producing employers require a high school/GED level of education or no diploma.

Figure 11: Vacancies by Education

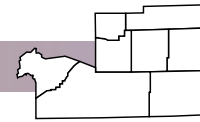


The wages offered to fill vacancies tend to increase along with the levels of both education and experience. As noted above, vacancies requiring the highest levels of education are concentrated in healthcare related occupations and tend to pay higher wages. The

average wage offered for jobs requiring an advanced degree is more than \$3.00 an hour above the overall average of \$11.30. Vacancies requiring no diploma offered an average wage of less than half the overall average.

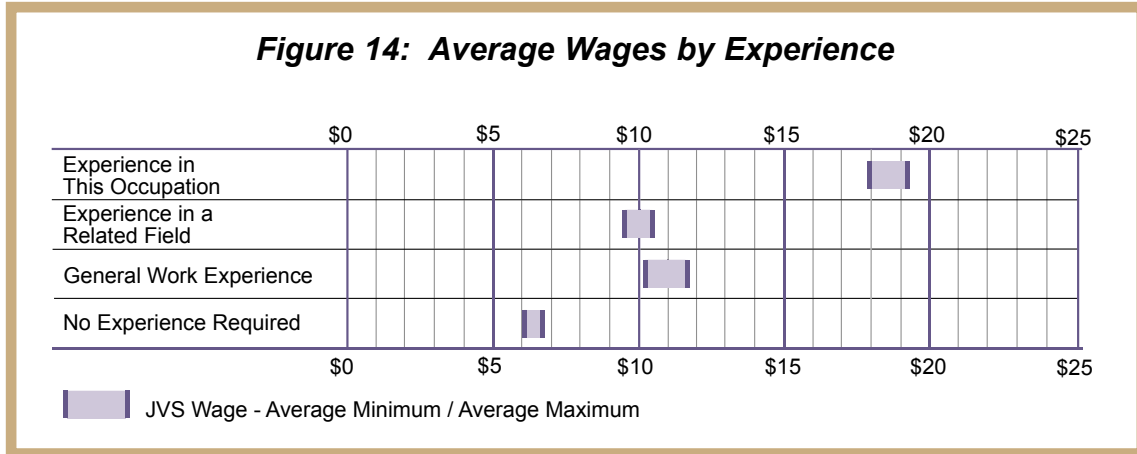


The levels of experience required to fill vacancies in the Southeast Region vary greatly. The majority of openings requiring experience in the same occupation as the vacancy are offered by Government agencies. Service Producing agencies offer the highest concentration of jobs in the other categories. Nearly half of the openings requiring specific experience are for Office and Administrative Support occupations. None of the other experience categories are so clearly represented by a dominant occupational group.



Vacancies requiring experience in a particular occupation offer the highest wages in this survey; on

average, more than twice that of those requiring no experience.



Most vacancies requiring no education also require no experience, however, this is also true of most jobs requiring advanced or bachelor's degrees. Vacancies requiring both an advanced degree and occupational specific experience offered an average wage of

\$14.90 per hour. This wage is 32% above the overall average wage of \$11.30 and \$9.00 an hour above vacancies requiring no education and no experience. Wages offered for vacancies requiring no education and no experience barely exceed the minimum wage.

Table 2: Experience Requirements by Educational Level

	No Experience	General Work Experience	Experience in a Related Field	Experience in This Occupation
No Diploma	71%	22%	7%	0%
High School Diploma/GED	26%	29%	29%	16%
Vocational Training/Certification	21%	18%	46%	15%
Two-Year Degree	0%	25%	50%	25%
Bachelor's Degree	75%	0%	0%	25%
Advanced Degree	86%	0%	0%	14%

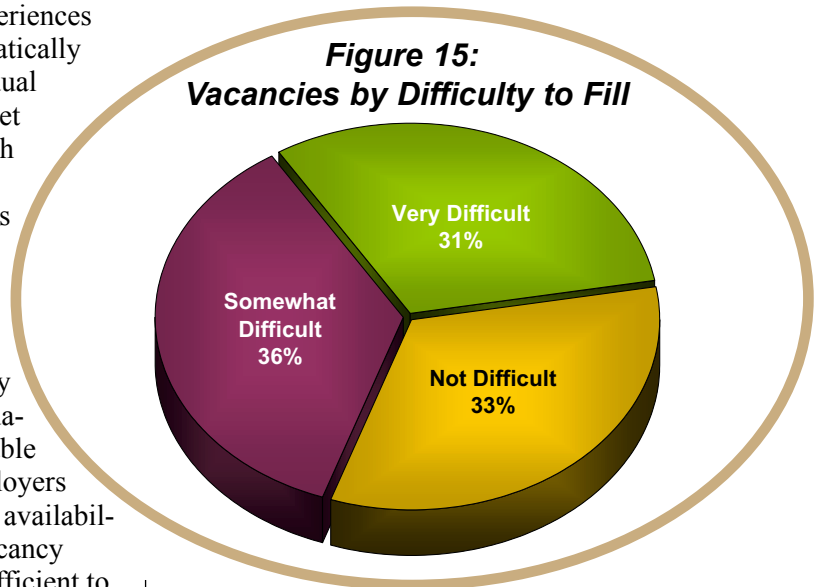
Note: Percentages based on each educational category.

Vacancies: Difficulty to Fill

The level of difficulty an employer experiences when filling a vacancy can vary dramatically depending on the nature of the individual vacancy as well as the prevailing labor market conditions. For example, a large hospital with close ties to the local university may have much less trouble recruiting registered nurses than a small doctor’s office in rural Colorado. Vacancies requiring post-secondary education may also be affected by recruitment timing; openings for a position requiring a bachelor’s degree will most likely be easier to fill immediately following graduation. The composition of the currently available labor pool will also affect the difficulty employers experience when trying to fill vacancies; the availability of candidates suited to fill a particular vacancy requiring a specific skill set is not always sufficient to meet all of a region’s demand.

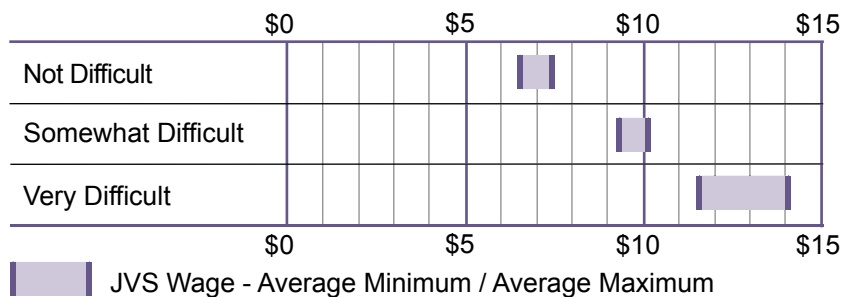
In addition to asking employers about their perceived difficulty in filling a vacant position, the Job Vacancy Survey also measures the amount of time for which the position has been actively recruited at the time of the survey. This additional information allows readers to make a better judgment of the difficulty employers are experiencing than if the survey relied wholly on employers’ opinions.

Figure 15:
Vacancies by Difficulty to Fill



Employers expressed some difficulty in filling two-thirds of the vacancies offered in the Southeast Region. Vacancies that are considered most difficult to fill are concentrated in the Healthcare Practitioners & Technical occupations. One-third of vacancies considered not difficult to fill are Food Preparation & Serving Related occupations.

Figure 16: Average Wages by Difficulty to Fill



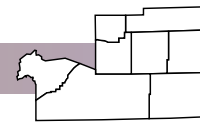
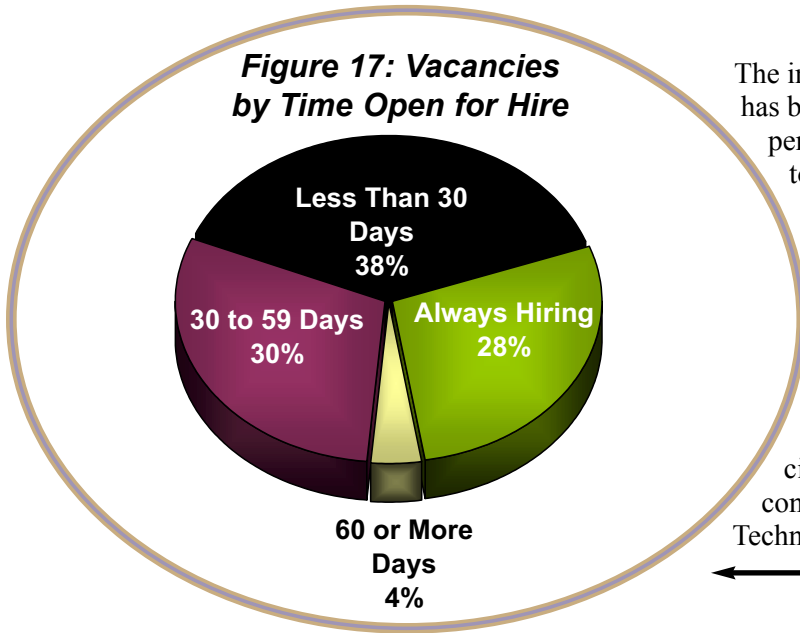


Figure 17: Vacancies by Time Open for Hire

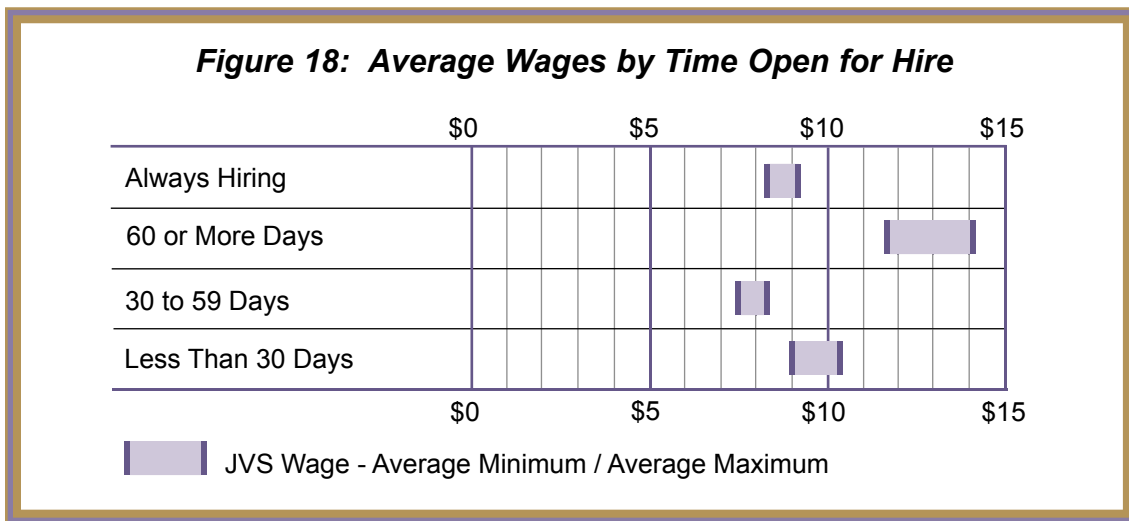


The information regarding length of time a vacancy has been available seems to support employers' perceptions regarding how difficult positions are to fill. All vacancies considered not difficult to fill are either open for less than 30 days or always open, while 75% of positions open for more than two months are considered very difficult to fill.

One-third of positions reported as always hiring are Food Preparation and Serving Related occupations. Over half of the vacancies listed open from one to two months are concentrated in Healthcare Practitioners and Technical occupations.



Figure 18: Average Wages by Time Open for Hire



Jobs open for more than two months stand out as offering higher wages. These vacancies are evenly split between Community and Social Services; Healthcare

Practitioners and Technical; Sales and Related; and Installation, Maintenance, and Repair occupations. Most are reported by Service Producing employers.

Vacancies: Additional Compensation

Medical Insurance

Employers frequently offer compensation related benefits to recruit qualified candidates. Some of these perks are paid time off, transportation or parking vouchers, subsidized childcare, and deferred compensation savings plans. One important benefit offered is medical insurance through an employer group plan. The employer may or may not contribute to insurance premiums related to the plan.

In this survey, 80% of vacancies included a medical insurance plan. Ninety-nine percent of those also offered to pay at least part of the insurance premium. Service Producing employers report the majority of vacancies not offering a medical insurance plan. On the other hand, Government agencies also reported the most jobs offering to pay the entire medical insurance premium.

Figure 19: Employer's Contribution to Medical Insurance

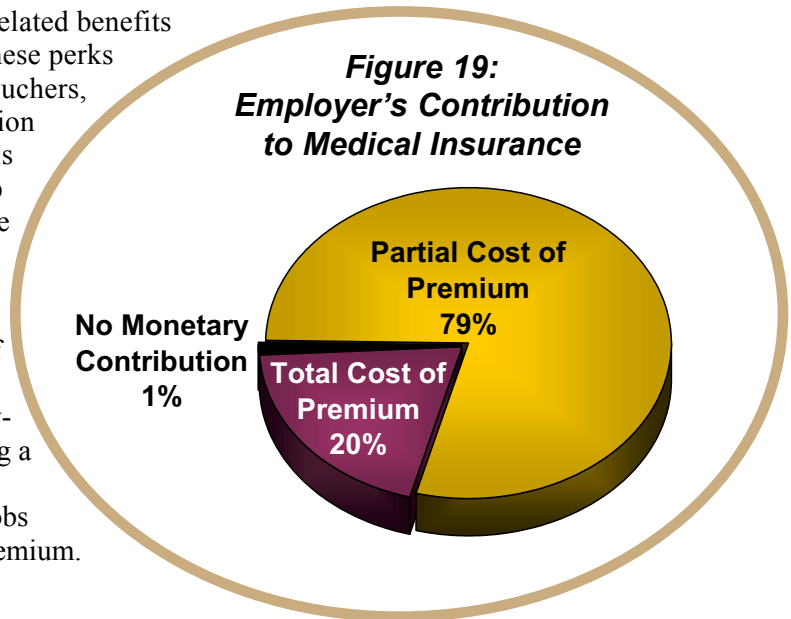
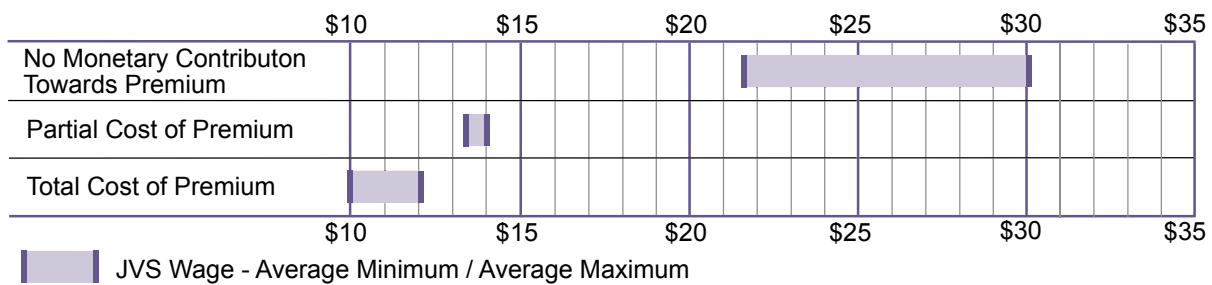
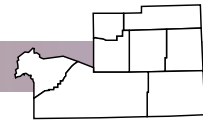


Figure 20: Average Wages by Medical Insurance



Vacancies offering medical insurance, but not contributing to the premium offer the highest wages; they are all Education, Training, and Library positions offered by Government agencies. The majority of vacancies for which employers offer to contribute a

portion of the insurance premium are Healthcare Practitioners and Technical occupations. Vacancies offered by employers willing to pay the entire premium come from a variety of occupation groups.



Sign-On Bonus

Another recruitment tool that gained some popularity during the tight-labor-market conditions of the

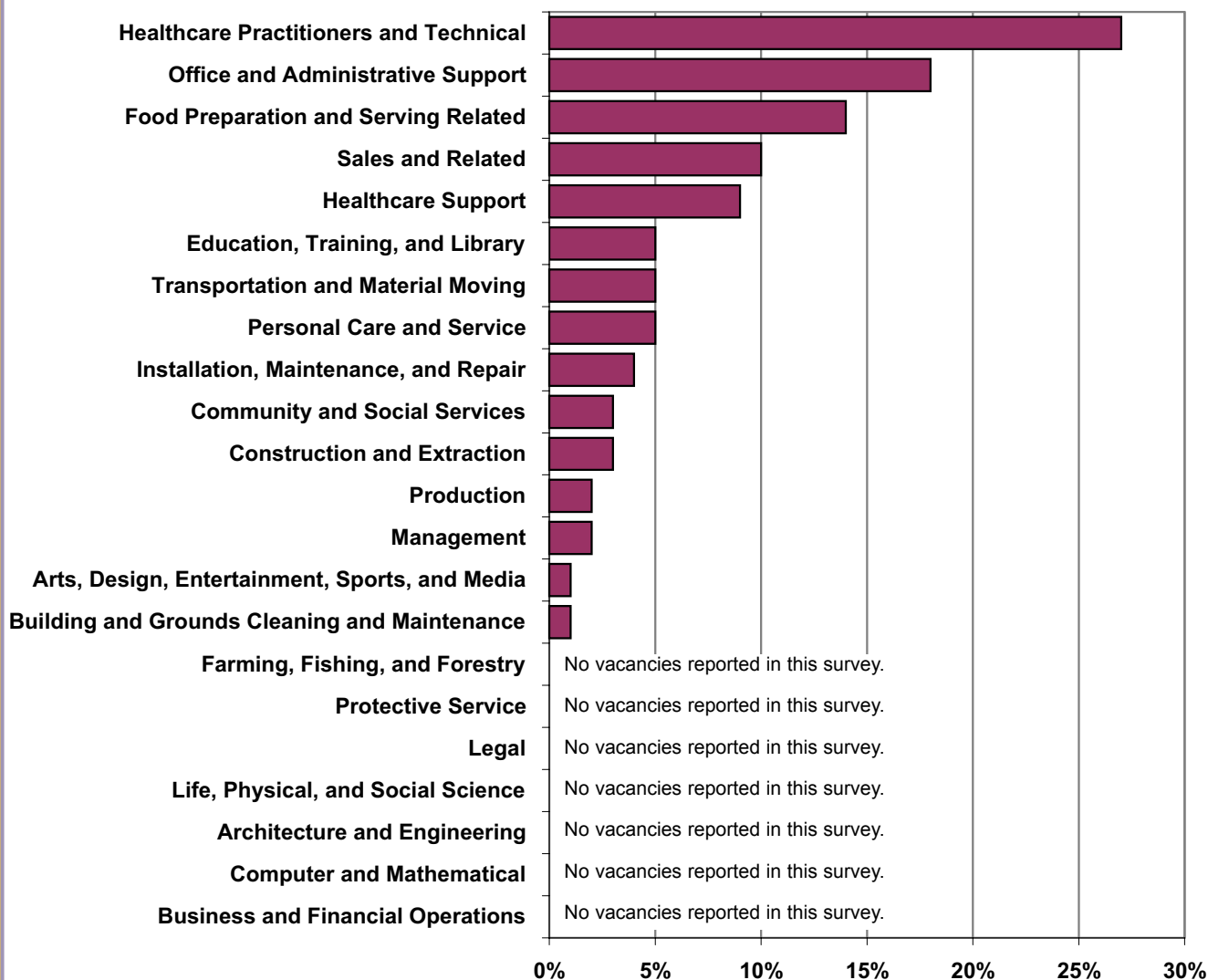
late 1990s was the sign-on bonus. In this survey, none of the reported vacancies offer a sign-on bonus.

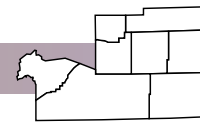
Occupations

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 categories such as industry and size provides a useful overview of the

job market, but when it comes down to filling a particular opening, the more detailed the information the better. Reporting vacancies at the individual occupation level is the most detailed information the survey can provide without breaking confidentiality with those employers who participated in the survey.

Figure 21: Vacancies by Major Occupational Groups





In order to help make comparisons between the results of this survey and other sources of employment statistics easier, all jobs reported are assigned an occupation code based on the 2000 Standard Occupational Classification Manual published by the Executive Office of the President, Office of Management and Budget. The SOC system contains 821 detailed occupation titles that fall into 23 major occupation groups. Vacancies found in this survey were coded into 15 of the 23 major occupation groups.

Survey results show that the major occupation groups with the most vacancies are not necessarily the groups offering the highest wages. This indicates that vacancy characteristics other than the level of unfulfilled employer demand must influence wages. The groups offering the highest wages in this survey typically require higher levels of education and experience: Office and Administrative Support; Healthcare Practitioners and Technical; and Education Training and Library occupations command the highest wage ranges.

Figure 22: Average Wages by Major Occupational Groups

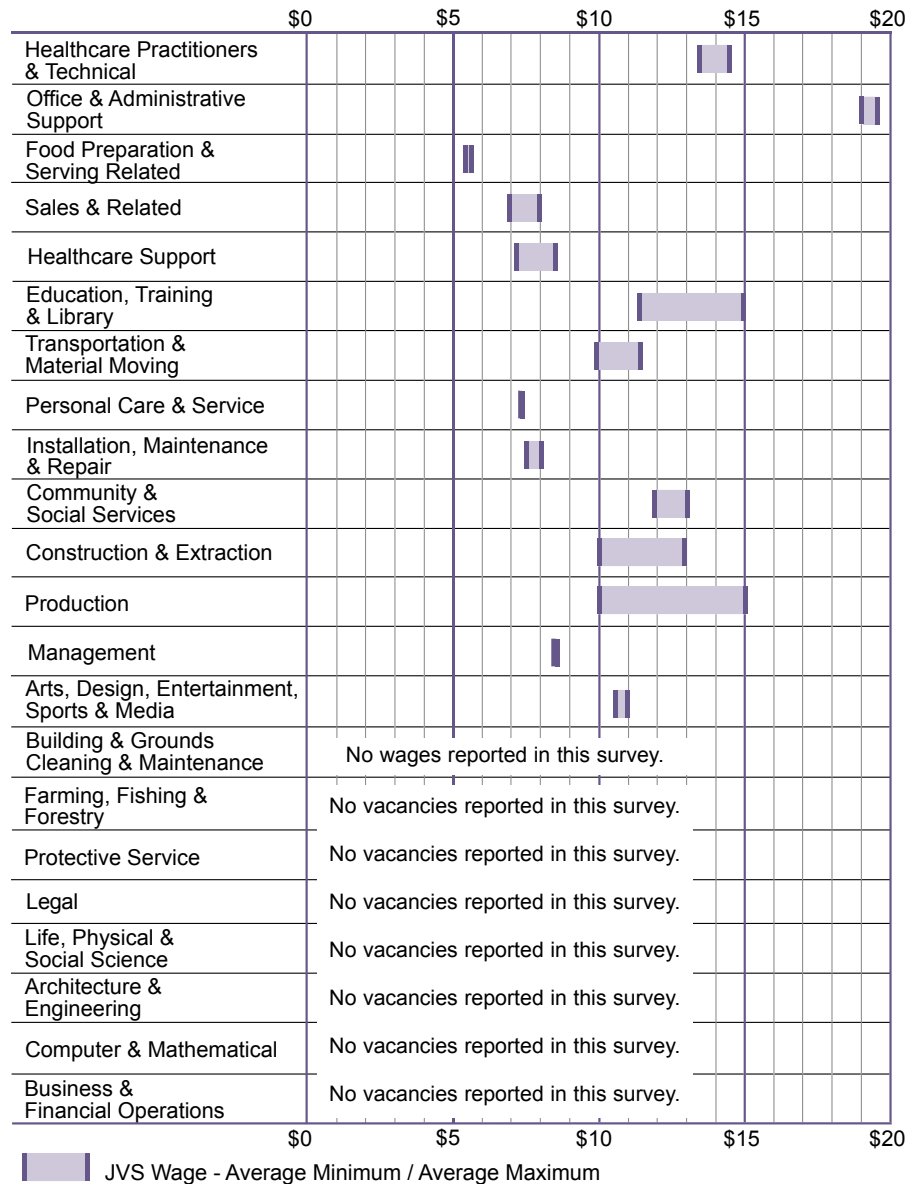


Table 3 contains a list of all of the detailed SOC job titles that were assigned to vacancies reported in this survey. Because a census of large employers and Government agencies is conducted, the list contains titles for nearly all of the vacancies available at the time of the survey for those employers. Just over half of all small to mid-size employers were contacted for the random sample, so the list also includes occupations reported by those employers. Given the large size of the random sample collected, the list of occupations should be fairly comprehensive; however, it is not exhaustive. Most likely, if a different random sample had been drawn there would be some differences in the job titles reported, but there would also be many of the same.

Vacancy Rank

Vacancies are ranked based on the total number reported for each occupation. The top 25% are ranked as high demand because they are the most frequently occurring vacancies. The bottom 25% are ranked as low demand and the medium demand vacancies include everything in-between.

Average JVS Wage

The average wages found in the survey are also reported for each occupation. The reported averages

are based on information provided by employers and do not reflect information not gathered in the survey or wages paid to currently filled positions. Wage information in this survey was provided for 75% of reported vacancies.

Occupational Employment Statistics (OES) Wage Data

Occupational Employment Statistics (OES) wage data are also 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 Southeast Region when available and statewide otherwise. Data were collected in 1999 and 2000 and aged to 2001 using the Employment Cost Index (ECI). A complete description of the OES survey and the ECI is available on the Internet at: <http://www.bls.gov/>.

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

Table 3: Job Vacancy Survey Occupations with OES Wages

				Occupational Employment Statistics Wage Data (2001)							
				Average Wages			Percentile Distribution				
SOC Code	SOC Occupational Title	‡ Vacancy Rank	Average JVS Wage	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
11-0000	Management		\$8.50	\$14.40	\$24.92	\$30.18	\$12.96	\$16.53	\$22.82	\$31.39	\$39.77
11-9199	Managers, All Other	M	\$8.50	\$12.61	\$22.55	\$27.51	\$12.15	\$13.76	\$17.19	\$31.42	\$35.55
21-0000	Community and Social Services		\$12.50	\$9.28	\$15.39	\$18.45	\$8.03	\$10.82	\$14.07	\$19.15	\$23.48
21-1021	Child, Family, and School Social Workers	L	\$14.90	\$11.94	\$16.31	\$18.50	\$11.53	\$12.96	\$15.67	\$19.30	\$22.43
21-1093	Social and Human Service Assistants	M	\$11.20	\$8.19	\$11.70	\$13.45	\$6.77	\$9.43	\$11.28	\$14.29	\$16.89
25-0000	Education, Training, and Library		\$13.10	\$9.80	\$17.79	\$21.78	\$8.17	\$11.97	\$16.20	\$22.17	\$29.64
25-9041	Teacher Assistants	H	\$13.10	\$14,078	\$19,898	\$22,808	\$13,071	\$15,504	\$20,080	\$22,672	\$26,644
27-0000	Arts, Design, Entertainment, Sports, and Media		\$10.70	\$6.66	\$10.57	\$12.51	\$6.10	\$7.20	\$8.96	\$12.25	\$17.30
27-3091	Interpreters and Translators	L	\$10.70	\$10.06	\$10.71	\$11.04	\$9.33	\$9.82	\$10.63	\$11.50	\$12.93
29-0000	Healthcare Practitioners and Technical		\$14.00	\$11.09	\$25.54	\$32.78	\$9.84	\$12.88	\$18.51	\$28.01	\$72.66
29-1062	Family and General Practitioners	H	†	\$60.52	\$63.23	\$64.58	\$57.65	\$60.05	\$62.65	\$67.65	\$70.65
* 29-1066	Psychiatrists	L	†	\$48.43	\$62.63	\$69.72	\$43.07	\$56.84	\$69.58	†	†
29-1111	Registered Nurses	H	\$18.30	\$17.02	\$23.15	\$26.20	\$15.74	\$18.17	\$21.56	\$27.67	\$33.68
29-2041	Emergency Medical Technicians and Paramedics	L	\$10.30	\$8.20	\$9.59	\$10.29	\$6.36	\$9.45	\$10.17	\$10.90	\$11.33
29-2061	Licensed Practical and Licensed Vocational Nurses	H	\$12.90	\$9.79	\$12.48	\$13.82	\$9.36	\$10.63	\$12.41	\$14.00	\$16.29
31-0000	Healthcare Support		\$7.90	\$6.17	\$8.46	\$9.60	\$5.98	\$6.65	\$7.92	\$9.70	\$11.87
31-1011	Home Health Aides	M	\$7.80	\$6.15	\$6.85	\$7.20	\$5.72	\$6.06	\$6.62	\$7.22	\$9.44
31-1012	Nursing Aides, Orderlies, and Attendants	H	\$7.10	\$6.17	\$8.14	\$9.11	\$5.97	\$6.63	\$7.77	\$9.08	\$11.08
* 31-9094	Medical Transcriptionists	L	\$11.90	\$9.98	\$13.31	\$14.98	\$9.09	\$11.22	\$13.03	\$15.38	\$17.45
35-0000	Food Preparation and Serving-Related		\$5.50	\$6.08	\$8.90	\$10.31	\$5.82	\$6.48	\$7.72	\$9.43	\$11.04
* 35-2011	Cooks, Fast Food	M	\$6.10	\$6.11	\$8.43	\$9.58	\$5.89	\$6.57	\$8.14	\$10.21	\$11.93

* OES wages reported for Colorado statewide

† No wage data available

‡ Vacancies are ranked based on the total number reported for each occupation.

H The top 25% are ranked as high demand because they are the most frequently occurring vacancies.

M The medium demand vacancies include everything in-between low and high demand.

L The bottom 25% are ranked as low demand.

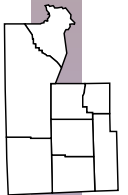


Table 3: Job Vacancy Survey Occupations with OES Wages — Page 2

				Occupational Employment Statistics Wage Data (2001)							
				Average Wages			Percentile Distribution				
SOC Code	SOC Occupational Title	‡ Vacancy Rank	Average JVS Wage	Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
35-2014	Cooks, Restaurant	M	\$6.00	\$6.18	\$7.49	\$8.15	\$5.89	\$6.69	\$7.57	\$8.28	\$8.71
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	M	\$5.20	†	†	†	†	†	†	†	†
35-3031	Waiters and Waitresses	L	\$5.20	\$6.06	\$9.45	\$11.13	\$5.82	\$6.49	\$8.29	\$9.98	\$10.81
35-3041	Food Servers, Nonrestaurant	H	\$5.40	\$6.17	\$6.97	\$7.38	\$5.81	\$6.26	\$6.99	\$8.00	\$8.68
37-0000	Building and Grounds Cleaning and Maintenance		†	\$6.07	\$8.21	\$9.28	\$5.77	\$6.34	\$7.57	\$9.76	\$11.56
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	L	†	\$6.08	\$8.01	\$8.99	\$5.75	\$6.29	\$7.41	\$9.72	\$11.13
39-0000	Personal Care and Service		\$7.30	\$7.36	\$8.64	\$9.27	\$7.03	\$7.45	\$8.16	\$8.91	\$10.98
39-9021	Personal and Home Care Aides	H	\$7.30	\$7.69	\$7.96	\$8.10	\$7.14	\$7.44	\$7.95	\$8.46	\$8.76
41-0000	Sales and Related		\$7.40	\$6.02	\$10.09	\$12.13	\$5.76	\$6.36	\$7.73	\$13.47	\$17.98
41-2011	Cashiers	H	\$6.40	\$6.02	\$9.38	\$11.05	\$5.72	\$6.25	\$7.33	\$14.40	\$16.61
41-2031	Retail Salespersons	M	\$11.40	\$6.04	\$8.50	\$9.73	\$5.74	\$6.27	\$7.17	\$8.57	\$15.87
* 41-3021	Insurance Sales Agents	L	†	\$16.57	\$27.31	\$32.66	\$13.99	\$19.75	\$25.60	\$32.46	\$38.12
43-0000	Office and Administrative Support		\$19.30	\$6.95	\$10.53	\$12.31	\$6.35	\$7.63	\$9.70	\$12.72	\$16.58
* 43-3011	Bill and Account Collectors	L	\$10.40	\$9.81	\$13.83	\$15.83	\$9.24	\$10.93	\$13.19	\$16.96	\$20.30
* 43-3071	Tellers	L	\$8.00	\$8.79	\$10.61	\$11.53	\$8.09	\$9.24	\$10.43	\$12.03	\$13.64
* 43-4061	Eligibility Interviewers, Government Programs	H	\$25.80	\$11.60	\$14.83	\$16.44	\$11.04	\$12.15	\$13.68	\$16.86	\$20.46
43-4171	Receptionists and Information Clerks	M	\$9.10	\$6.88	\$8.65	\$9.54	\$6.26	\$7.36	\$8.43	\$9.80	\$10.91
43-5081	Stock Clerks and Order Fillers	L	\$8.80	\$6.71	\$9.25	\$10.52	\$6.21	\$7.20	\$8.10	\$9.10	\$16.13
43-6013	Medical Secretaries	L	†	\$7.50	\$8.31	\$8.72	\$7.11	\$7.53	\$8.24	\$9.03	\$10.30
43-9061	Office Clerks, General	M	\$8.90	\$6.49	\$9.22	\$10.58	\$6.04	\$6.99	\$8.71	\$10.95	\$13.59

* OES wages reported for Colorado statewide

† No wage data available

‡ Vacancies are ranked based on the total number reported for each occupation.

H The top 25% are ranked as high demand because they are the most frequently occurring vacancies.

M The medium demand vacancies include everything in-between low and high demand.

L The bottom 25% are ranked as low demand.

Table 3: Job Vacancy Survey Occupations with OES Wages — Page 3

Occupational Employment Statistics Wage Data (2001)

SOC Code	SOC Occupational Title	‡ Vacancy Rank	Average JVS Wage	Average Wages			Percentile Distribution				
				Entry-Level	Overall	Experienced	10th	25th	50th	75th	90th
47-0000	Construction and Extraction		\$11.50	\$9.15	\$12.89	\$14.76	\$8.66	\$10.26	\$12.26	\$14.24	\$17.91
47-2141	Painters, Construction and Maintenance	L	\$11.00	\$8.11	\$9.95	\$10.87	\$7.62	\$8.53	\$9.88	\$11.19	\$12.90
* 47-5071	Roustabouts, Oil and Gas	L	\$9.80	\$9.77	\$13.22	\$14.94	\$9.27	\$10.70	\$12.81	\$15.34	\$18.22
* 47-5099	Extraction Workers, All Other	L	\$13.60	\$12.51	\$17.90	\$20.60	\$11.96	\$12.98	\$15.10	\$23.71	\$26.94
49-0000	Installation, Maintenance, and Repair		\$7.80	\$7.67	\$10.94	\$12.57	\$7.35	\$8.13	\$9.54	\$11.91	\$17.64
* 49-3021	Automotive Body and Related Repairers	L	\$7.50	\$12.22	\$20.83	\$25.13	\$10.35	\$14.60	\$19.57	\$25.42	\$34.24
49-3023	Automotive Service Technicians and Mechanics	L	\$8.60	\$8.46	\$13.26	\$15.65	\$7.72	\$9.28	\$11.19	\$16.79	\$22.21
49-9042	Maintenance and Repair Workers, General	M	\$7.50	\$7.66	\$10.06	\$11.27	\$7.39	\$8.30	\$9.68	\$11.25	\$13.95
51-0000	Production		\$12.50	\$7.08	\$11.33	\$13.45	\$6.48	\$7.73	\$9.36	\$12.56	\$21.62
51-4121	Welders, Cutters, Solderers, and Brazers	L	\$12.50	\$7.91	\$9.80	\$10.73	\$7.63	\$8.61	\$9.83	\$10.92	\$12.08
* 51-9083	Ophthalmic Laboratory Technicians	L	†	\$8.37	\$10.88	\$12.15	\$7.74	\$8.90	\$10.26	\$12.28	\$15.85
53-0000	Transportation and Material Moving		\$10.60	\$6.32	\$9.78	\$11.51	\$6.03	\$6.88	\$9.41	\$11.61	\$14.75
53-3031	Driver/Sales Workers	L	†	\$8.64	\$13.64	\$16.14	\$7.19	\$9.69	\$12.19	\$18.40	\$20.75
53-3032	Truck Drivers, Heavy and Tractor-Trailer	M	\$12.00	\$8.78	\$11.70	\$13.15	\$7.94	\$9.53	\$10.72	\$14.06	\$17.02
53-7061	Cleaners of Vehicles and Equipment	L	\$6.50	\$6.14	\$6.65	\$6.90	\$5.67	\$5.97	\$6.47	\$6.96	\$9.16

* OES wages reported for Colorado statewide

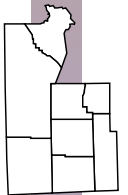
† No wage data available

‡ Vacancies are ranked based on the total number reported for each occupation.

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M The medium demand vacancies include everything in-between low and high demand.

L The bottom 25% are ranked as low demand.



Methodology

Many challenges exist in collecting and analyzing the data for the Job Vacancy Survey. Because methods selected to carry out a survey impact the final results, great effort is put into

making this survey statistically viable and, most importantly, accurate. Methods used in this survey will continue to be reviewed and, where statistical viability and accuracy can be improved, modified.

Computer Assisted Telephone Interview

The CDLE's professional survey unit developed the Computer Assisted Telephone Interview (CATI) to maximize accuracy and usefulness, while minimizing length and survey bias. In accordance

with recognized survey research standards, the following selection of questions are taken directly from the phone interview script.

In General

1. *How many employees do you have working within the region?*
2. *Do you have any job vacancies for which your firm is actively recruiting?*
3. *How many job vacancies is your firm recruiting to fill?*

For Each Vacancy

1. *What is the job title?*
2. *Briefly, what are the job duties?*
3. *Which of the following best describes this vacancy?*
 - ♦ Full-time/Permanent
 - ♦ Full-time/Temporary
 - ♦ Part-time/Permanent
 - ♦ Part-time/Temporary
4. *What is the maximum wage offered for this vacancy?*
5. *What is the minimum wage offered for this vacancy?*
6. *Is a sign-on bonus offered? If yes, how much?*

7. *Is medical insurance offered?*

8. *If yes, does your firm pay the total cost of the premium, partial cost of the premium or do you make no contribution at all to the premium?*

9. *Which of the following best describes the education level required to fill this vacancy?*

- ♦ No diploma required
- ♦ High school or GED diploma
- ♦ Two-year degree
- ♦ Bachelor's degree
- ♦ Advanced degree

10. *What best describes the type of experience required to qualify for this vacancy?*

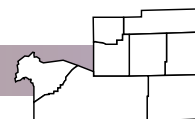
- ♦ No experience is required
- ♦ General work experience
- ♦ Experience in a related field
- ♦ Experience in this occupation

11. *How long has this vacancy been open?*

- ♦ Less than 30 days
- ♦ 30 to 59 days
- ♦ 60 or more days
- ♦ Always hiring for this position

12. *How difficult is this vacancy to fill?*

- ♦ Not difficult
- ♦ Somewhat difficult
- ♦ Very difficult



Survey Sample Methodology

This survey is designed to estimate the number of vacancies in the region and to provide detailed vacancy characteristics. Employers with at least five employees are placed into either Government or private industry categories. Firms with fewer than five employees make up a very large portion of all employers in the region, but a small proportion of total employment. The possibility of employing statistical methods to estimate vacancies for this group is currently being explored.

Private firms are grouped by employment level into either large or small to mid-size categories. Attempts are made to contact each large private employer and Government agency in the region. Small to mid-size firms are further divided by major industry and randomly sampled until a representative response is obtained for each category.

The original list of private industry firms used for the survey, along with their contact information, staff size and industry classification is obtained from the America's Labor Market Information System (ALMIS) database. Government contact information is provided by the Colorado Department of Labor and Employment's ES-202 employer database.

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.

Occupational Coding

The job title and duties reported by employers are used to code vacancies in accordance with the latest release of the Standard Occupational Classification system. For more information on this occupational classification system, please refer to the *Definitions* section.

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 wage are adjusted to that amount. Currently, the federal minimum wage is \$5.15 per hour.

Definitions

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

The arithmetic average (also called the mean) for a group of items is defined as the sum of the values of the items divided by the number of items.

Average Minimum and Average Maximum Wage

When surveyed employers report wages offered for current vacancies, both a minimum and a maximum wage are recorded. All minimum wages are averaged to determine the reported average minimum wage. The same is true for the reported average maximum wage.

Employer

A person or establishment that pays one or more people a wage or salary.

Employment

Includes people who did any work for pay or profit in the reference period, worked 15 hours or more without pay in a family business or farm, or were temporarily absent from their jobs.

Full-time and Part-time Employment

To be classified as full-time employment, a position must require a minimum of 35 hours of work per week. Part-time employment refers to cases where a position requires less than 35 hours of work a week.

Industry Classification

Employers are grouped into industries on the basis of their principal product or activity in accordance with the *1987 Standard Industrial Classification Manual*.

Job Seekers

People 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. The definition does not include positions that are anticipated, but not yet created.

Job Vacancy Rate

The number of openings in a specific industry or category expressed as a share of the total employment in that same industry.

Labor Force

Consists of all employed or unemployed civilians who are eligible to work, plus members of the Armed Forces stationed in the United States.

Level of Education

Refers to completed education programs—high school diplomas, associate, professional, vocational, bachelor's, and graduate degrees all are examples of completed programs.

Medical Insurance Premium

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

Permanent and Temporary Employment

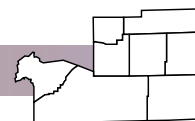
A vacancy is classified as permanent if it will be filled for more than six months. Temporary employment refers to those positions that will be filled for six months or less.

Sign-on Bonus

An additional financial incentive offered by a firm to a 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.

SOC

The Standard Occupational Classification is a system for classifying all occupations in the economy, including private, public, and military occupations. This classification system replaces all occupational



classification systems previously used by federal statistical agencies. It will be used by all federal statistical agencies and programs collecting occupational data, providing a means to compare occupational data across agencies. It is designed to cover all occupations in which work is performed for pay or profit, reflecting the current occupational structure in the United States.

Survey Sample Universe

All private industry and Government employers with five or more employees in the region. Government entities are drawn from ES-202 while private companies come from the ALMIS database.

Unemployment

Includes people 16 years of age and over who had no employment during the reference period, were

available for work (except for temporary illness), and have made specific efforts to find employment. People who did not look for work because they were on temporary layoff or waiting to start new jobs within the next 30 days are also counted among the unemployed.

Unemployment Rate

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

Wage

The monetary return per hour of work. The definition does not include benefits (*e.g.*, insurance, retirement program, or stock plans).