STATE OF THE WORKFORCE REPORT

REGION 1 WORKFORCE INVESTMENT BOARD

May, 2002

Prepared for:

REGION 1 WORKFORCE INVESTMENT BOARD
WORK4WV-REGION 1, INC.
201 Grey Flats Road
Beckley, WV 25801

Prepared by:

CENTER FOR BUSINESS AND ECONOMIC RESEARCH
Lewis College of Business
Marshall University
One John Marshall Way
Huntington, WV 25755-2300

Project Staff

Geok H. Simpson, Ph.D.
Research Economist

Jeanie Budrus, M.A.
Project Consultant

Michael Hicks, Ph.D.
Director of Research

Project Assistants

Jim Atkinson
Information Systems Technician

Kent Sowards
Research Associate

Brie Salmons
Information Systems Specialist

Student Assistants

Amy Edmonds
Alissa Sikula
Hui Hui Wang

Section I:

Business Survey Analysis

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Section I: Business Survey Analysis — *Table of Contents*

SUMMARY OF DATA FINDINGS

- The business survey analysis is comprised of extensive interviews from 176 business / agency leaders who represent 217 businesses in the Region 1 Area.
- Businesses participating in the survey employed 27,763 employees; business size varied from two to 1,800 employees. Over half of the firms surveyed had less than 100 workers.
- Present employment in Region 1 appears to be higher than typical employment: Employment in firms with fewer than 50 employees or between 200-300 employees is presently higher than usual. Employment in both the private and public sectors is presently higher that usual, with a greater increase in the public sector over typical employment.
- Representatives of firms in the arts and entertainment industry report having the most new hires. The majority of firms typically hire 20 or less new employees annually.
- Newspaper advertisements, walk-ins, referrals, and promoting from within are the top recruiting methods respondents use to hire new employees. Respondents reported the same order in usefulness of recruiting method.
- Respondents were asked to individually rank each of 19 job skills according to their importance with regard to their organization. Though the importance of various work skills changes emphasis among the industries, basic reading, basic math, listening, customer relations, teamwork, and observation appear to maintain an importance across the board.
- It appears that employers foresee a future emphasis on intermediate and advanced reading, intermediate and advanced math, basic writing and location of information. Technical skills having to do with computers appear to carry great importance with Internet usage and programming / Web showing the greatest projected increase (21% and 20% respectively).
- Businesses reported that they turn away several job applicants on an annual basis. Sixteen respondents reported turning away over 100 applicants.
- The five top reasons for turning away job applicants are: no positions available, poor recommendation from previous employers, lack of appropriate previous work experience, attitude/demeanor, and wages and benefits expectations.
- The top three reasons for releasing employees include lack of dependability, poor job performance, and resignations.
- Employers believed there is a qualified applicant pool from which to hire (91% yes).
- Most of the firms that were surveyed hire high school graduates. Eighty-seven percent of the firms hiring high school graduates believed they were well prepared for work.
- Employee turnover was the most prevalent reason for new hires. One hundred twenty-three firms said they would be hiring additional employees over the next five years.
- Twenty-two percent of the respondents reported a need for education and training of current employees. Nineteen percent said they have a need for career progression training. Management was the most prevalent career progression training need.
- Nineteen percent of the respondents provide some type of tuition assistance or incentives to employees for additional education.
- The vocational / technical schools, community colleges, and Workforce Investment Board were the most popular selections for partnerships with other employee training programs.
- Job Services is the most widely known and utilized agency among the survey respondents to assist with employee training needs.
- On-the-job training is the most favored type of training program for new hires as well as the most desirable location for employee training.
- The most prevalent training factors among area employers is the specialization of the training followed by cost and quality.
- Respondents showed relatively little interest in assistance with assessing job skills or assistance in identifying job competencies.

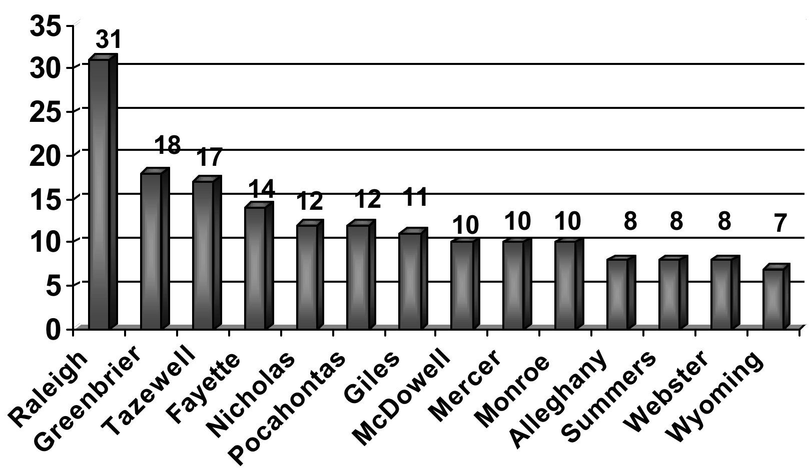
METHODOLOGY:

As part of a major effort to create a pool of qualified employees and to design better training programs for meeting the needs of businesses in Region 1, the Center for Business and Economic Research (CBER) at Marshall University's Lewis College of Business has extensively interviewed 176 business principals who represent 217 businesses in the Region 1 area. Region 1 consists of the West Virginia counties of McDowell, Wyoming, Raleigh, Fayette, Nicholas, Webster, Pocahontas, Greenbrier, Summers, Mercer, and Monroe; and the Virginia counties of Giles, Tazewell, and Allegheny.

Information collected from the 217 businesses taking part in this effort has been presented in a question-by-question format that reveals overall responses as well as responses from the private and public sectors. Though the breakdown of the data by sector does provide a look at the trends of these particular respondents, care should be taken not to draw final conclusions regarding differences between the public and private sectors. The private sector is well represented by the survey responses; more data would be needed to accurately represent the public sector. As a whole, however, the data well represents the employment climate in the region.

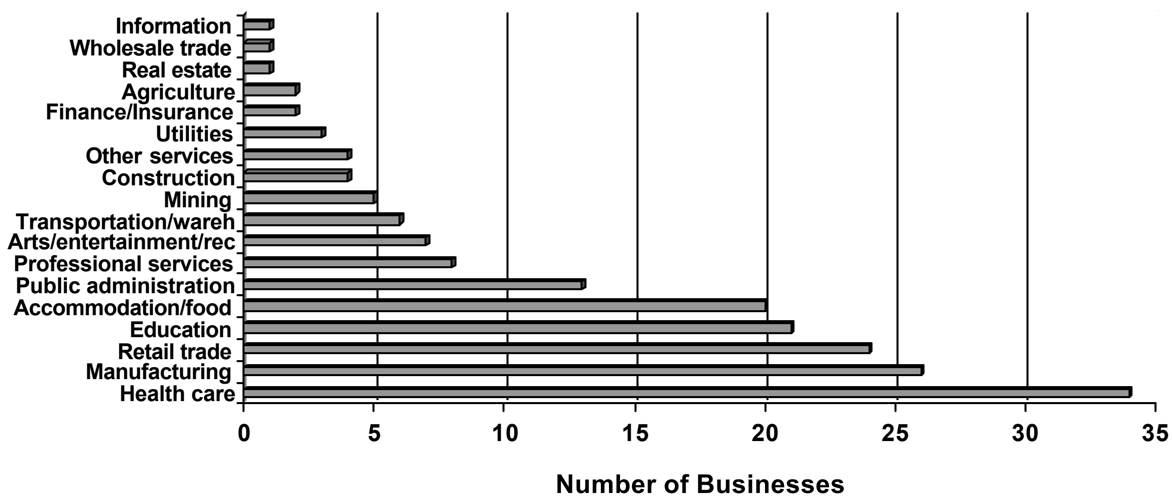
An extensive survey instrument was developed cooperatively between staff of the CBER and representatives from the Region 1 Workforce Investment Board. The final instrument was comprised of 43 questions, many of which involved multiple responses. Survey specialists from the CBER conducted the business surveys over the telephone during January and February 2002. Surveying time was approximately 20-30 minutes per interview. Survey responses from each of the counties are represented in Exhibit 1.

Exhibit 1: Number of businesses responses by county.



Responses were also classified by business / industry type according to the NAICS number under which each business operates. There are a total of 20 NAICS options. Each industry represented by the surveying effort is illustrated in Exhibit 2.

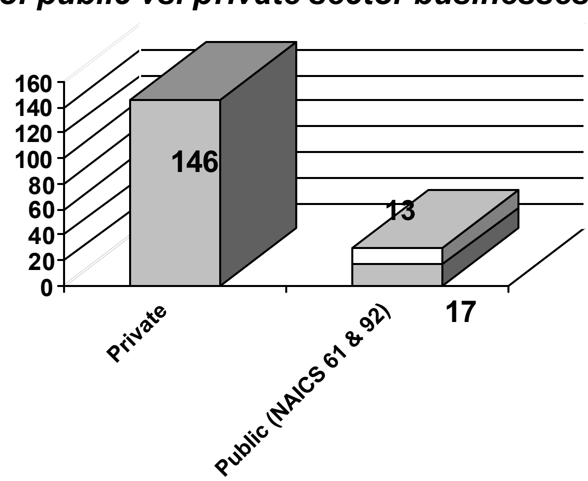
Exhibit 2: Number of businesses representing various industries.



Every attempt was made to obtain a completed survey from businesses in each of the counties with 50 or more employees. Even with such diligence, no surveys were obtained from the management of companies and enterprises sector (NAICS 55), nor the administration and support of waste management and remediation services sector (NAICS 56).

The public sector accounted for 30 responses while the private sector was represented by 146 responses. The public sector encompasses all respondents indicating they were classified as an NAICS 92 (public administration / government) business (13). Also included in the public sector are responses from NAICS 61 (educational services) (17), which indicated they were a public school. This has been illustrated in Exhibit 3.

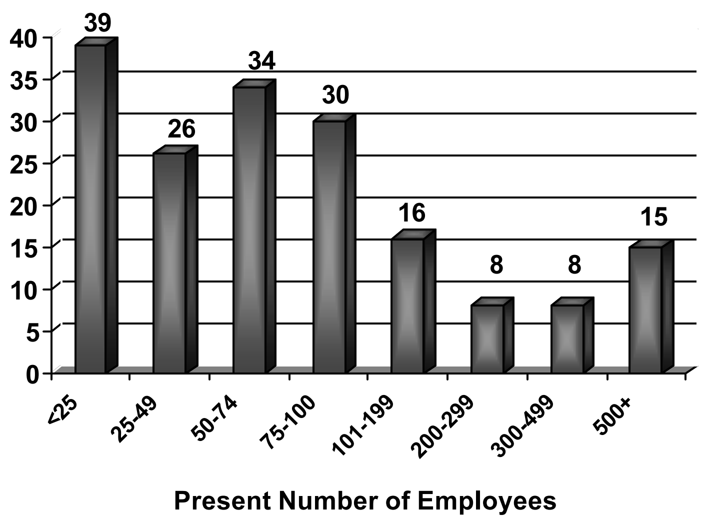
Exhibit 3: Number of public vs. private sector businesses.



EMPLOYEES:

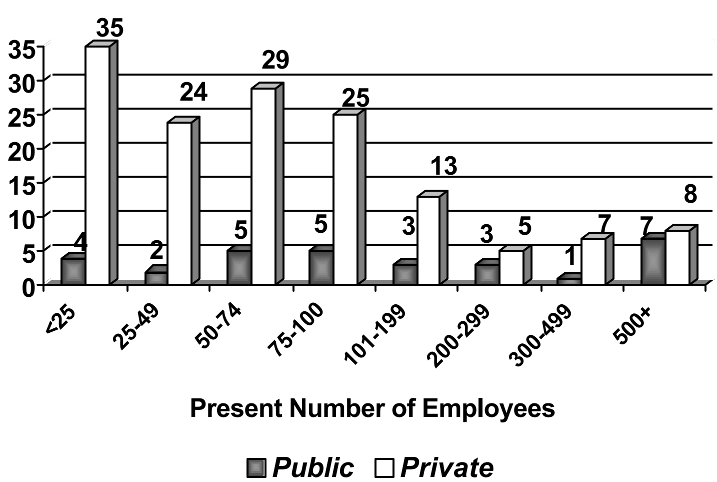
Nearly 75% of the businesses responding to the survey had less than 100 employees, which is reflective of the business climate in this region. Businesses participating in the Extensive Survey employed a total of 27,763 employees. Business sizes varied from employing two employees to employing 1,800 employees. A breakdown of business size based on number of present employees can be found in Exhibit 4.

Exhibit 4: Number of businesses interviewed based on total present employees.



A comparison of business size based upon the present number of private sector employees vs. public sector employees has been illustrated in Exhibit 5. Proportionately, it appears individual public sector businesses employ more workers.

Exhibit 5: A comparison of public vs. private business size based on number of employees.



The corresponding number of employees per industry has been depicted in Exhibit 6 below. Though some of the industry categories were represented by only a few businesses, the corresponding number of employees was higher than in some of the industries represented by a larger number of businesses. Exhibit 7 illustrates this comparison. It should be noted that some businesses indicated belonging to multiple industries; therefore, totaling the number of employees by industry exceeds the total number of employees represented by the overall surveying effort.

Exhibit 6: Number of employees represented per industry.

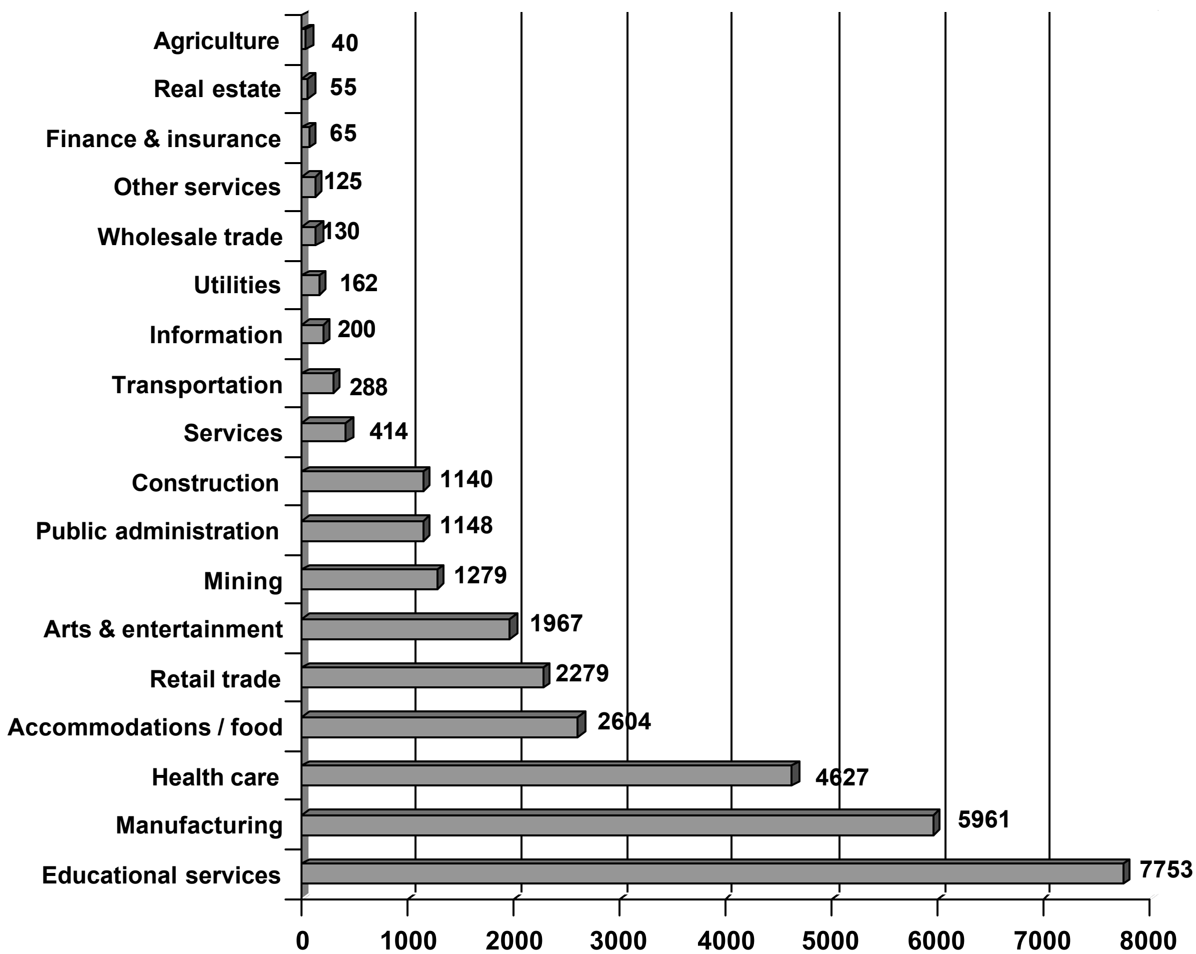
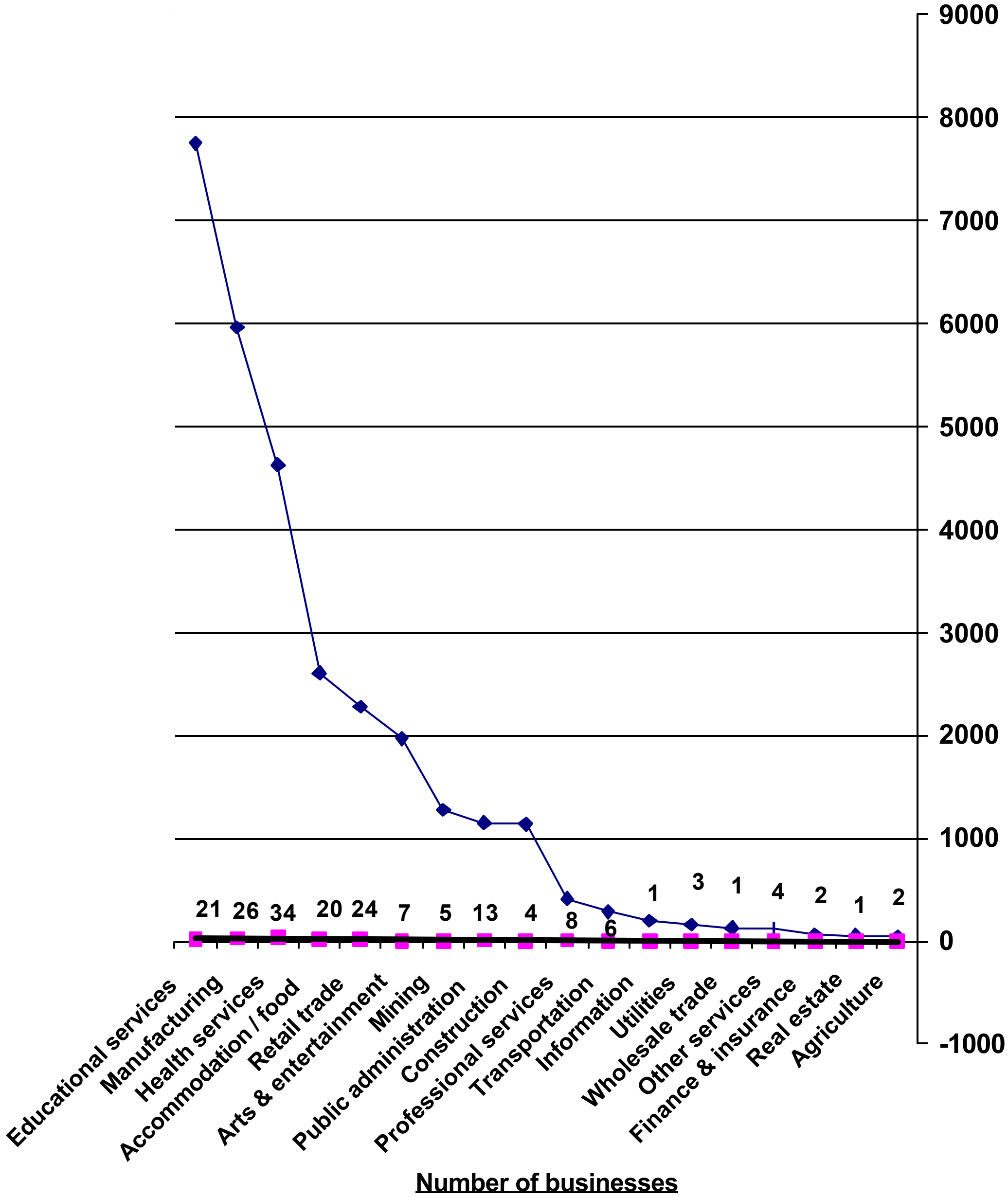


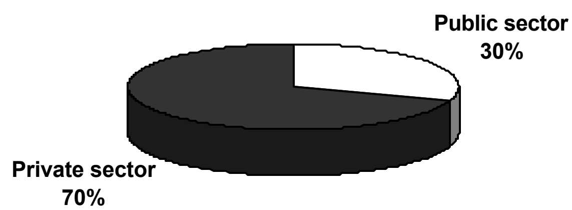
Exhibit 7: A comparison of the number of businesses per industry vs. number of employees



NOTE: Numbers along the bottom of the above chart represent number of businesses. The data illustrates that businesses in some of the industries employ a proportionately higher number of employees than are employed by businesses in other industries. As examples, businesses in the educational services industry appear to employ more employees per business than businesses in the accommodation/food industry. Arts & entertainment related businesses employ more employees per business than businesses in the transportation industry. Though a relatively high number (24) of retail trade-related businesses responded to the survey, which represented one of the highest number (2,279) employees, 21 responses came from the educational services industry, which represented 7,753 employees.

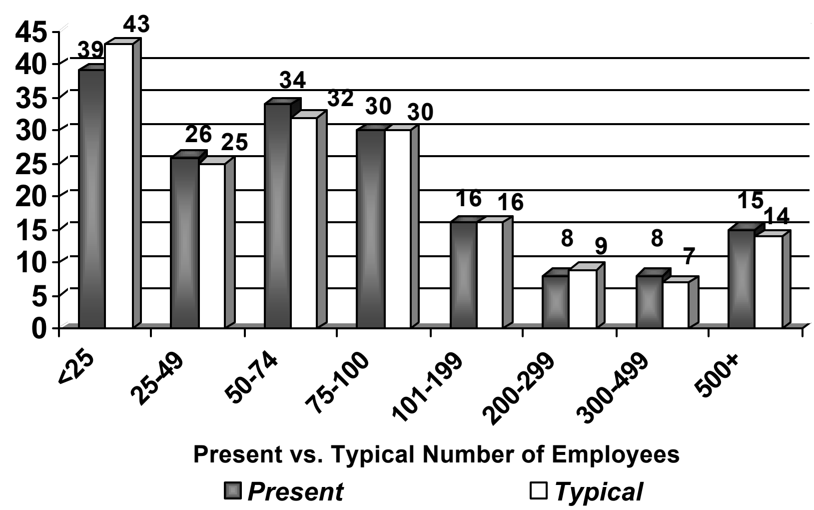
Further examination of the survey responses reveals that surveys from the public sector represent 8,334 individuals while the surveys from the private sector represented 19,429 employees. This breakdown has been illustrated in Exhibit 8.

Exhibit 8: Number of employees – public sector vs. private sector.



Employers that were interviewed said that they typically employ a total of 26,610 employees. When comparing this data with the present number of individuals currently employed by these firms (27,763), overall employment numbers appear to be higher – with present employment higher than typical annual employment. See Exhibit 9.

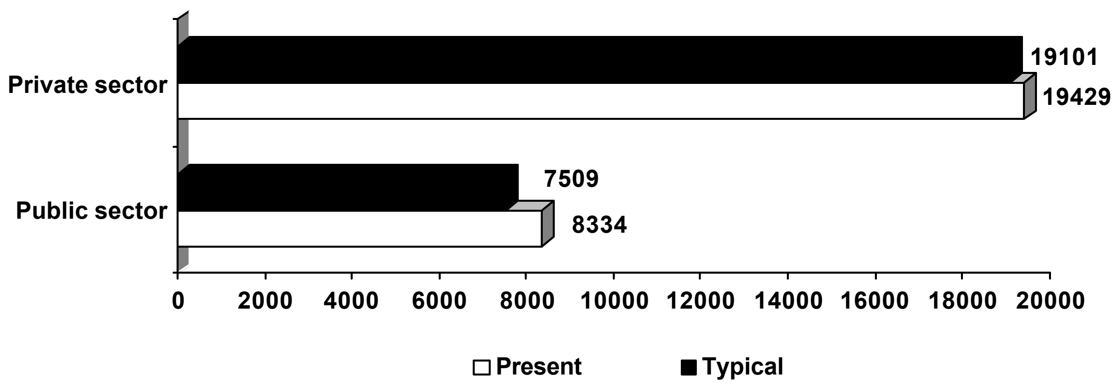
Exhibit 9: Overall typical employment vs. present employment among survey respondents.



It should be noted that employment in businesses that tend to employ fewer workers (<25) is presently lower while businesses that typically employ more workers (300+) are presently increasing their number of employees.

Typical employment vs. present employment in the public vs. private sectors is illustrated in Exhibit 10. Exhibit 10 shows that although there has been an increase in present employment over typical employment in both sectors, there has been a greater increase between typical employment and present employment in the public sector over the past year (10% public vs. 2% private).

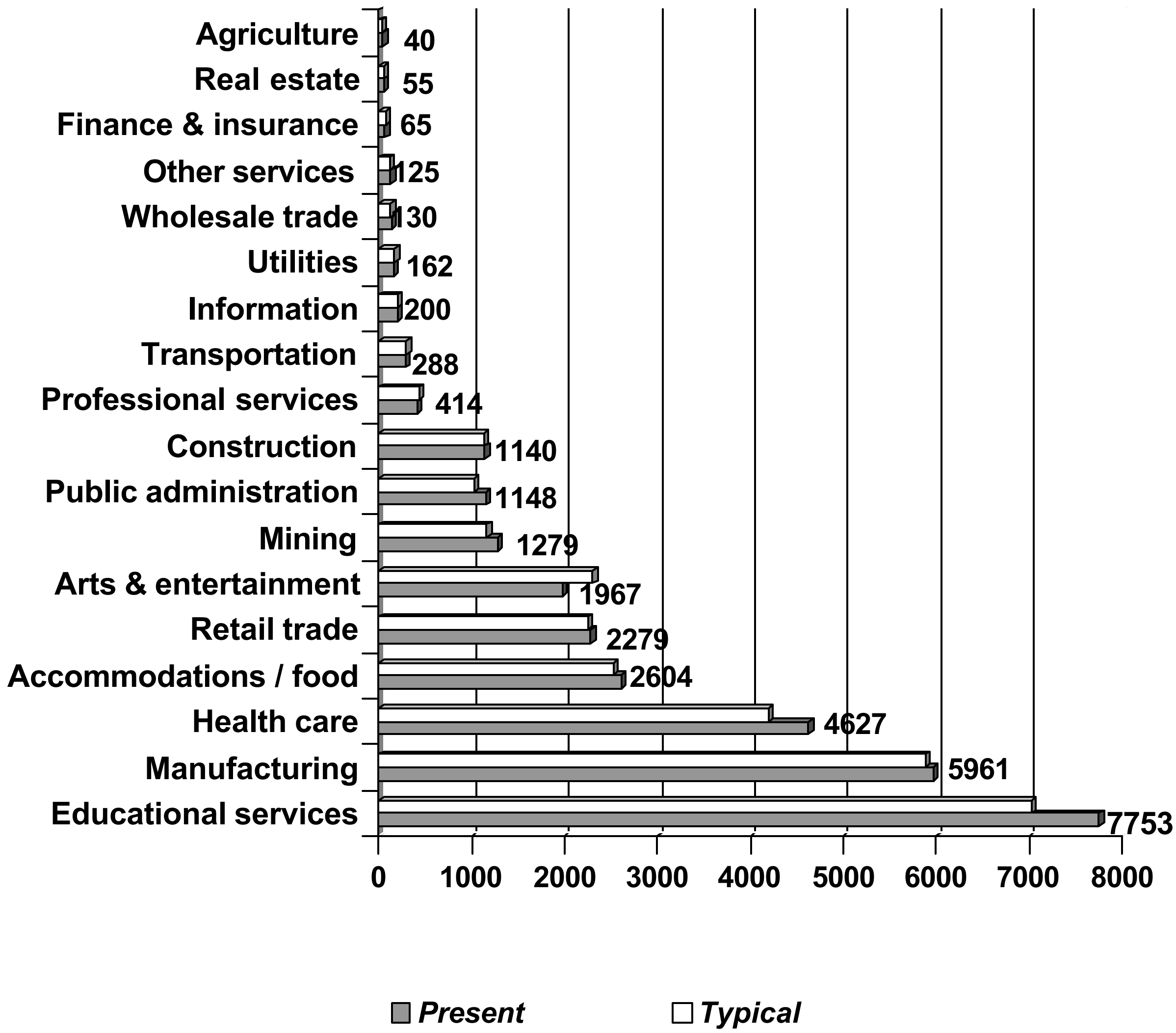
Exhibit 10: Present number of employees vs. typical number of employees in the public vs. private sectors.



Typical employment vs. present employment per industry is shown in Exhibit 11. It should be noted that surveys from some of the businesses in industries containing the larger number of employees did not provide a typical number of employees; therefore, the present vs. typical number of employee result may be skewed.

Industries containing a smaller number of employees showed very little, if any, change in the typical number of employees vs. current employees. Arts and entertainment demonstrated the greatest shift from typical to present employment with a decrease from the typical 2299 employees to the present 1967 workers. Educational services had the largest increase showing a change from the typical 7028 workers to the present 7753 employees.

Exhibit 11: Present number of employees vs. typical number of employees by industry.



Note: the number by each industry bar represents the present number of employees as reported by the survey respondents.

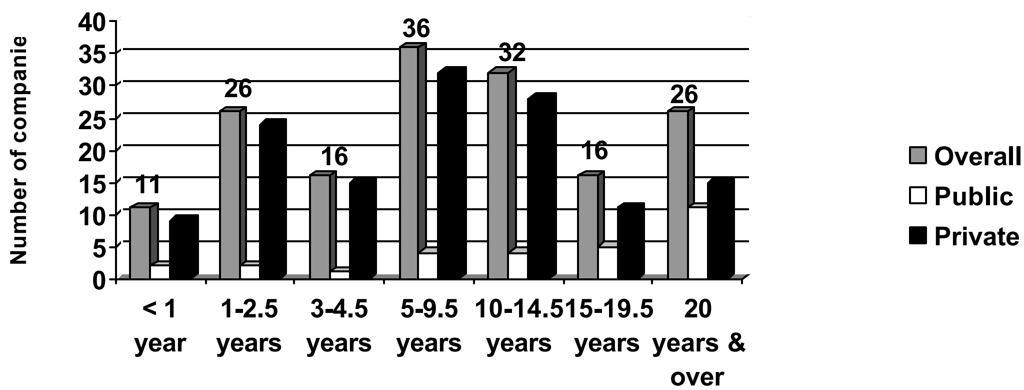
LENGTH OF EMPLOYMENT:

Respondents were asked to report the average length of time employees remained at their particular company. Overall, the majority of companies interviewed retained their employees between 5 and 15 years. Only 11 companies reported keeping employees for less than one year. Twenty-six respondents said that their employees average over 20 years with their company.

Companies in the private sector appear to have more employee turnover than found in the public sector. Eleven percent of the companies in the private sector reported employees are retained 20 years or longer while 38% of the companies in the public sector average retaining employees over 20 years. Similarly, over 32% of the private sector respondents said that their companies retain employees less than 5 years while only 17% of the public sector respondents said the average length of employment with their company is less than 5 years.

Overall responses in addition to the public vs. private sector responses are depicted in Exhibit 12.

Exhibit 12: Average length of time employees stay with the respondents' company by public & private sector.



NEW HIRES:

During their interview, company representatives told CBER survey specialists that they typically hire 5,651 new employees (collectively) per year. Twenty-two companies have no new annual hires, while 20 companies hire 50 or more employees over the course of a year. Typical new employees in the private sector account for nearly 94% (5,310) of the new hires reported by the respondents in Region 1. Eighteen of the private sector respondents said that they typically employ 50 or more new workers in a year. Public sector respondents reported hiring a total of 341 employees in a typical year with none of the reporting companies hiring more than 55 workers per year. Exhibit 13 illustrates.

Exhibit 13: New hires in a typical year.

Exhibit 14: Total new hires by industry.

Industry	New Hires	Percentage of Overall New Hires
Arts, entertainment, & recreation	1,796	32%
Health care services	973	17%
Accommodations & food service	957	17%
Manufacturing	630	11%
Retail trade	627	11%
Construction	378	7%
Mining	333	6%
Education	279	5%
Public administration	122	2%
Other services	65	1%
Information	55	1%
Professional, scientific & technical services	52	1%
Wholesale trade	35	1%
Real estate	22	<1%
Transportation & warehousing	22	<1%
Agriculture	9	<1%
Finance & insurance	7	<1%
Utilities	4	<1%
Sector		
Private	5,310	94%
Public	341	6%
TOTAL	5,651	100%

**Note: Industry total represents a duplication of some employees due to companies citing multiple industries as their classification.*

RECRUITMENT METHODS:

Newspaper advertisements, walk-ins, referrals, and promoting from within are the top recruiting methods responding employers use to hire new employees. Respondents were subsequently asked to rank the recruitment methods by their perceived usefulness -- from 1 (most helpful) to 5 (least helpful) -- in attracting new employees. Respondents thought that newspaper advertisements were the most useful recruiting method with 61 ranking this particular method with a 1 or 2. Walk-ins were the second-most useful recruitment method among 58 of the respondents.

Exhibit 15 demonstrates the perceived usefulness of the advertising method by the employers, while Exhibit 16 compares the popularity of various recruitment methods used by businesses to attract new employees.

Exhibit 15: Most often utilized recruitment methods.

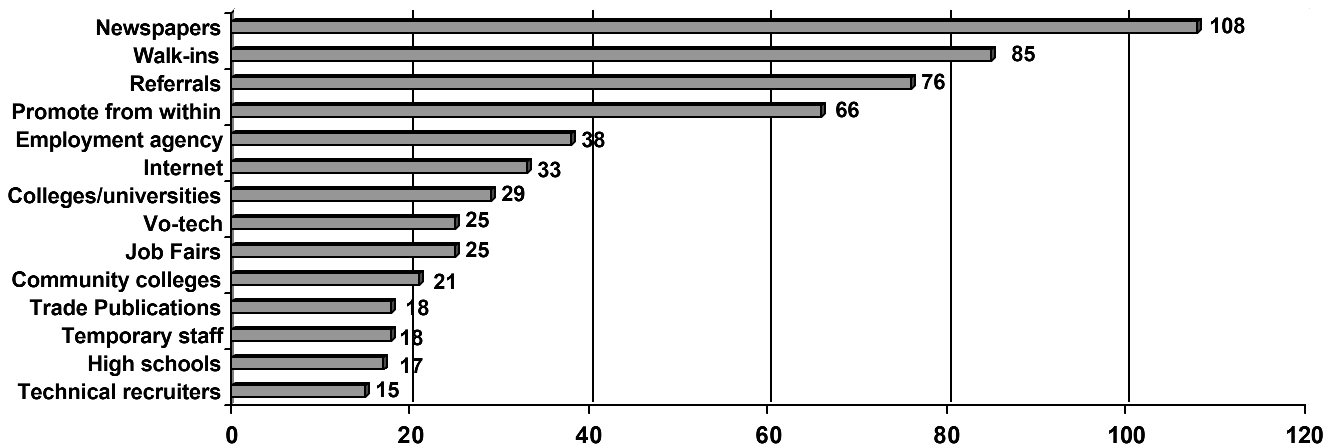


Exhibit 16: Most useful recruiting method for new employees.

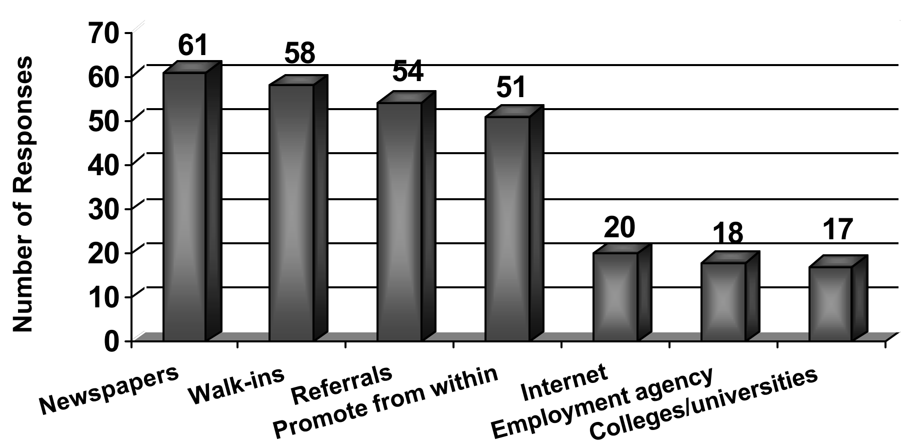


Exhibit 17 demonstrates the differences between popularity of recruiting methods between the public and private sectors. Although newspapers are a popular recruiting method among both sectors, it is the most popular in the public sector, whereas walk-ins and referrals are the most popular recruiting methods among the private sector employers.

Exhibit 17: Comparison of recruiting method popularity between the public and private sectors.

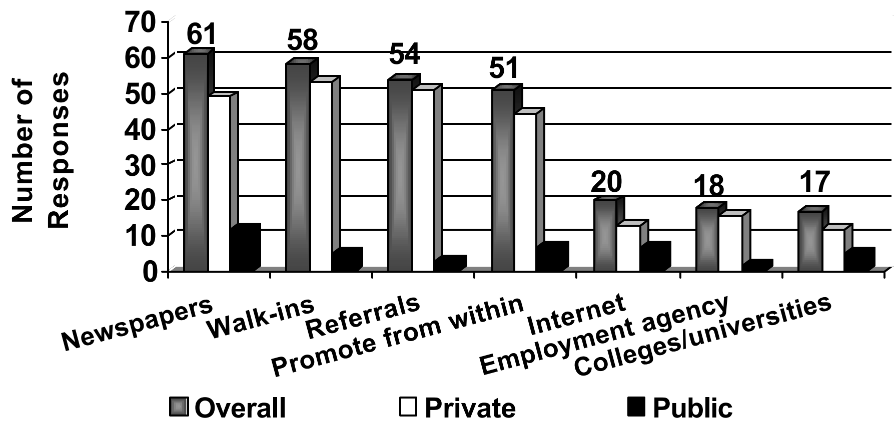


Exhibit 18 looks at employee recruiting methods and popularity of these methods by industry. The number in the boxes represents the number of businesses reporting using the particular recruitment method. Businesses were allowed to indicate more than one recruiting method. The shaded boxes indicate the top recruiting method most often reported by each industry.

Newspaper advertisements, walk-ins, and referrals were the most popular recruiting methods of choice reported by most of the industries. Employment agencies were the favored recruiting method by utilities companies, while transportation companies appear to favor promoting from within and walk-ins. Job fairs, high schools, vo-tech schools, community colleges, colleges and universities, temporary staff, technical recruiters, and trade publications were the least utilized.

It should be noted that recruiting methods by industry will not equal the total recruiting methods by sector due to some respondents belonging to more than one industry.

Exhibit 18: Employee recruiting methods by industry.

Industry	Recruitment Method														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Health care	29	15	6	5	10	8	10	8	20	6	11	6	5	18	3
Mining	3	3	0	0	2	1	0	2	2	1	2	0	0	2	0
Accommodation / food service	14	11	3	2	0	0	2	1	12	0	1	1	2	7	2
Retail trade	10	12	1	2	3	1	3	2	18	1	3	1	1	12	5
Professional services	7	5	1	0	1	1	4	4	2	1	2	1	2	2	0
Construction	3	1	0	0	1	0	0	1	1	0	0	0	0	2	1
Transportation	3	2	2	2	3	2	2	2	4	2	3	2	2	4	0
Educational services	11	2	4	0	0	1	3	6	4	1	3	0	2	4	4
Manufacturing	14	12	1	1	2	2	0	0	10	1	6	1	0	10	2
Agriculture	1	2	1	1	1	1	1	1	1	1	1	1	1	1	0
Public administration	8	3	3	3	2	4	4	4	6	3	3	1	2	5	4
Wholesale trade	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arts & entertainment	4	3	3	1	1	1	1	4	3	1	1	1	2	2	0
Finance & insurance	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0
Other services	1	2	0	0	0	0	0	0	1	0	1	0	0	1	1
Real estate	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0
Utilities	2	1	1	1	1	1	1	1	1	1	3	1	1	1	0
Information	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0
Sector															
Public	17	5	7	3	2	5	7	10	9	3	5	1	4	9	7
Private	91	71	18	14	23	16	22	23	76	15	33	14	14	57	15

Key:
1 = Newspaper
2 = Referrals
3 = Job fairs
4 = High schools
5 = Vo-tech
6 = Community colleges
7 = Colleges / universities
8 = Internet
9 = Walk-ins
10 = Temp staff
11 = Employment agency
12 = Technical recruiters
13 = Trade publications
14 = Promoting from within
15 = Other

EMPLOYEE JOB SKILLS:

Employee job skills vary in importance to Workforce Investment Area 1 employers. In order to find out where employers place job skill importance, survey respondents were asked to rank a series of job skills from 1 (most important) to 5 (least important) to indicate the importance of the particular skill in the hiring decisions.

The importance of each of the 19 job skills listed on the survey has been presented by industry. Each ranking contains two parts: the number of responses per business and the percentage of the total businesses in that industry which selected the particular ranking. The total represents the total number of responses per industry. Please note that not all survey respondents replied to each job skill. Also please note that the total number of responses per industry will not equal the total responses by sector due to some businesses belonging to more than one industry. Finally, percentages do not always add to 100% due to rounding.

Basic reading. Basic reading has been defined as uncomplicated passages, which use elementary vocabulary. This skill is a workforce development work key. Respondents ranked the importance of basic reading as it relates to being hired for a job with their company.

Exhibit 19: Importance of basic reading.

Basic Reading	Importance Ranking										
	Most important →								Least important		
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	21	88%	2	8%	0	0%	0	0%	1	4%	24
Health care	28	85%	2	6%	1	3%	2	6%	0	0%	33
Accommodations / food	19	95%	1	5%	0	0%	0	0%	0	0%	20
Manufacturing	24	92%	1	4%	1	4%	0	0%	0	0%	26
Mining	4	100%	0	0%	0	0%	0	0%	0	0%	4
Transportation	3	50%	0	0%	1	17%	0	0%	2	33%	6
Construction	3	75%	0	0%	1	25%	0	0%	0	0%	4
Public administration	8	67%	3	25%	0	0%	1	8%	0	0%	12
Other services	4	100%	0	0%	0	0%	0	0%	0	0%	4
Educational services	18	90%	0	0%	1	5%	0	0%	1	5%	20
Finance	2	100%	0	0%	0	0%	0	0%	0	0%	2
Wholesale trade	1	100%	0	0%	0	0%	0	0%	0	0%	1
Professional services	6	86%	1	14%	0	0%	0	0%	0	0%	7
Entertainment / arts	7	100%	0	0%	0	0%	0	0%	0	0%	7
Agriculture	1	50%	0	0%	0	0%	1	50%	0	0%	2
Utilities	3	100%	0	0%	0	0%	0	0%	0	0%	3
Real estate	1	100%	0	0%	0	0%	0	0%	0	0%	1
Information	0	0%	1	100%	0	0%	0	0%	0	0%	1
By Sector											
Public	22	79%	3	11%	1	3%	1	3%	1	3%	28
Private	127	89%	7	5%	3	2%	3	2%	3	2%	143

Basic reading appears be most important to the majority of the industries. With the exception of transportation and agriculture, basic reading skills was given the high score of a 1 or 2 by at least 75% of the responding businesses. It should be noted that 100% of the respondents in the mining, other services (except public administration), finance, wholesale trade, entertainment / arts, utilities, information, and real estate industries ranked basic reading as a number one importance.

Basic reading appears to also be important to both the public and private sectors, with 90% of the public sector respondents ranking basic reading skills as a 1 or 2 while 94% of the private sector respondents ranked basic reading skills as a top importance.

Intermediate reading. Intermediate reading is defined as complex passages excerpts from regulatory and legal documents, advanced vocabulary, jargon and technical terms. This skill is a workforce development work key. Employers were asked to indicate the importance of intermediate reading skills when choosing new employees.

Exhibit 20: Importance of intermediate reading.

Intermediate Reading	Importance Ranking										
	Most important →									Least important	
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	17	77%	2	9%	2	9%	1	5%	0	0%	22
Health care	24	77%	2	7%	4	13%	1	3%	0	0%	31
Accommodations / food	6	30%	5	25%	6	30%	2	10%	1	5%	20
Manufacturing	15	60%	2	8%	4	16%	1	4%	3	12%	25
Mining	3	75%	0	0%	0	0%	0	0%	1	25%	4
Transportation	1	17%	0	0%	2	33%	1	17%	2	33%	6
Construction	3	75%	0	0%	0	0%	0	0%	1	25%	4
Public administration	8	73%	2	18%	0	0%	1	9%	0	0%	11
Other services	2	50%	1	25%	0	0%	1	25%	0	0%	4
Educational services	17	85%	1	5%	0	0%	1	5%	1	5%	20
Finance	2	100%	0	0%	0	0%	0	0%	0	0%	2
Wholesale trade	1	100%	0	0%	0	0%	0	0%	0	0%	1
Professional services	5	71%	1	14%	1	14%	0	0%	0	0%	7
Entertainment / arts	5	71%	1	14%	1	14%	0	0%	0	0%	7
Agriculture	0	0%	0	0%	1	50%	1	50%	0	0%	2
Utilities	3	100%	0	0%	0	0%	0	0%	0	0%	3
Real estate	0	0%	0	0%	0	0%	0	0%	1	100%	1
Information	0	0%	1	100%	0	0%	0	0%	0	0%	1
By Sector											
Public	21	78%	3	11%	0	0%	2	7%	1	4%	27
Private	89	64%	15	11%	21	15%	7	5%	7	5%	139

The importance of intermediate reading requirements among employers begins to shift toward less essential amid many industries. Whereas basic reading skills were important to at least 75% of the businesses responding to the survey (ranking 1 or 2), the importance of intermediate reading skills requirements drop to as low as 17% in the transportation industry and to zero in the agriculture and real estate industries.

Intermediate reading skills remain extremely important (ranking 1 or 2) to businesses hiring in the other services, finance, wholesale trade, information, and utilities industries. One hundred percent of the respondents from each of these areas indicated that intermediate reading was a critical job skill required of new hires.

Public sector respondents maintained their ranking of intermediate reading skills similar to their ranking of basic reading skills with 89% of the businesses ranking this skill with a 1 or 2. Intermediate reading skills were less important than basic reading skills among private sector respondents with a drop from 94% (basic reading) to 75% (intermediate reading) in the importance rating.

Advanced reading. Advanced reading skills are defined as more complex reading, ascertaining meaning of uncommon jargon or technical terms from context of reading material, recognizing probably rationale behind policies and procedures. This skill is a workforce development work key. Employers were asked to indicate the importance of advanced reading skills for new employees that they hire. Responses can be found in Exhibit 21 below.

Exhibit 21: Importance of advanced reading.

Advanced Reading	Importance Ranking										
	Most important →								Least important		
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	1	5%	5	23%	9	41%	1	5%	6	27%	22
Health care	21	68%	1	3%	6	19%	1	3%	2	7%	31
Accommodations / food	0	0%	5	25%	5	25%	4	20%	6	30%	20
Manufacturing	4	16%	3	12%	6	24%	2	8%	10	40%	25
Mining	3	75%	0	0%	0	0%	0	0%	1	25%	4
Transportation	1	17%	0	0%	2	33%	0	0%	3	50%	6
Construction	1	33%	1	33%	0	0%	0	0%	1	33%	3
Public administration	4	36%	3	27%	2	18%	2	18%	0	0%	11
Other services	1	25%	1	25%	1	25%	1	25%	0	0%	4
Educational services	14	70%	2	10%	1	5%	1	5%	2	10%	20
Finance	2	100%	0	0%	0	0%	0	0%	0	0%	2
Wholesale trade	0	0%	1	100%	0	0%	0	0%	0	0%	1
Professional services	4	67%	1	17%	1	17%	0	0%	0	0%	6
Entertainment / arts	3	43%	1	14%	2	29%	0	0%	1	14%	7
Agriculture	0	0%	0	0%	0	0%	1	50%	1	50%	2
Utilities	1	33%	1	33%	0	0%	1	33%	0	0%	3
Real estate	0	0%	0	0%	0	0%	0	0%	1	100%	1
Information	0	0%	0	0%	1	100%	0	0%	0	0%	1
By Sector											
Public	15	56%	4	15%	3	11%	3	11%	2	7%	27
Private	44	32%	21	15%	33	24%	10	7%	29	21%	137

Advanced reading is most important to the finance and wholesale trade industries with 100% of the respondents indicating that advanced reading carried an importance factor of 1 or 2. The importance of advanced reading requirements is also prevalent in the professional services, educational services, and mining industries with at least 75% of the businesses from each indicating it as a desired job skill.

On the contrary, businesses in the real estate, information, and agriculture industries placed little importance on advanced reading skills.

Over 70% of the public sector respondents placed a high priority rating on advanced reading whereas less than 50% of the private sector respondents did the same.

Overall reading. Exhibit 22 summarizes the overall reading requirements from the businesses surveyed. The top two importance rankings (1 & 2) were selected from the basic, intermediate, and advance reading level requirements to demonstrate the importance of reading skill level when hiring new employees. As basic reading appears to be of great importance to the majority of businesses, which comprise the various industries listed below, reading requirements become less important among more industries as the reading difficulty increases. For example, in retail trade, 23 businesses emphasize the importance of basic reading, placing a 96% level of importance on the basic reading skill. When asked about intermediate reading, however, 19 businesses in the retail trade industry (86%) ranked this level of reading skill as a top importance. Advanced reading level requirements among the businesses in the retail trade industry dropped in importance to 28% of the respondents.

Exhibit 22: Overall reading requirements by industry and by sector.

Total Reading	RANKINGS											
	Basic Reading				Intermediate Reading				Advanced Reading			
	1		2		1		2		1		2	
By Industry	#	%	#	%	#	%	#	%	#	%	#	%
Retail trade	21	88%	2	8%	17	77%	2	9%	1	5%	5	23%
Health care	28	85%	2	6%	24	77%	2	7%	21	68%	1	3%
Accommodations / food	19	95%	5	5%	6	30%	5	25%	0	0%	5	25%
Manufacturing	24	92%	1	4%	15	60%	2	8%	4	16%	3	12%
Mining	4	100%	0	0%	3	75%	0	0%	3	75%	0	0%
Transportation	3	50%	0	0%	1	17%	0	0%	1	17%	0	0%
Construction	3	75%	0	0%	3	75%	0	0%	1	33%	1	33%
Public administration	8	67%	3	25%	8	73%	2	18%	4	36%	3	27%
Other services	4	100%	0	0%	2	50%	1	25%	1	25%	1	25%
Educational services	18	90%	0	0%	17	85%	1	5%	14	70%	2	10%
Finance	2	100%	0	0%	2	100%	0	0%	2	100%	0	0%
Wholesale trade	1	100%	0	0%	1	100%	0	0%	0	0%	1	100%
Professional services	6	86%	1	14%	5	71%	1	14%	4	67%	1	17%
Entertainment / arts	7	100%	0	0%	5	71%	1	14%	3	43%	1	14%
Agriculture	1	50%	0	0%	0	0%	0	0%	0	0%	0	0%
Utilities	3	100%	0	0%	3	100%	0	0%	1	33%	1	33%
Real estate	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%
Information	0	0%	1	100%	0	0	1	100%	0	0%	0	0%
By Sector												
Public	22	79%	3	11%	21	78%	3	11%	15	56%	4	15%
Private	127	89%	7	5%	89	64%	15	11%	44	32%	21	15%

With the exception of finance, and wholesale trade, for which a desire for reading remains constant throughout all three reading levels, industries steadily decline in the importance attached to the difficulty of their reading requirements essential for current new hires.

Public and private sector respondents also follow this trend; however, public sector respondents have a desire for more intermediate and advanced reading skills from their new hires than do the private sector respondents.

Basic math skills. Basic math skills entail simple addition, subtraction, multiplication, and division. Also included in simple math is the ability to make change. This skill is a workforce development work key. Employers were asked to share their requirements regarding basic math competency of potential employees as seen in Exhibit 23.

Exhibit 23: Importance of basic math skills.

Basic Math	Importance Ranking										
	Most important →								Least important		
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	20	83%	3	13%	0	0%	0	0%	1	4%	24
Health care	23	70%	5	15%	5	15%	0	0%	0	0%	33
Accommodations / food	17	85%	3	15%	0	0%	0	0%	0	0%	20
Manufacturing	24	92%	1	4%	1	4%	0	0%	0	0%	26
Mining	4	100%	0	0%	0	0%	0	0%	0	0%	4
Transportation	1	17%	0	0%	3	50%	0	0%	2	33%	6
Construction	3	75%	0	0%	1	25%	0	0%	0	0%	4
Public administration	8	73%	1	9%	1	9%	1	9%	0	0%	11
Other services	3	75%	0	0%	1	25%	0	0%	0	0%	4
Educational services	18	90%	0	0%	1	5%	0	0%	1	5%	20
Finance	2	100%	0	0%	0	0%	0	0%	0	0%	2
Wholesale trade	1	100%	0	0%	0	0%	0	0%	0	0%	1
Professional services	6	86%	1	14%	0	0%	0	0%	0	0%	7
Entertainment / arts	6	86%	0	0%	1	14%	0	0%	0	0%	7
Agriculture	1	50%	0	0%	0	0%	1	50%	0	0%	2
Utilities	3	100%	0	0%	0	0%	0	0%	0	0%	3
Real estate	1	100%	0	0%	0	0%	0	0%	0	0%	1
Information	0	0%	0	0%	1	100%	0	0%	0	0%	1
By Sector											
Public	22	82%	1	4%	2	7%	1	4%	1	4%	27
Private	115	80%	12	8%	12	8%	1	1%	3	2%	143

The importance of basic math requirements varies more among the industries than did basic reading skills. Industries placing the most importance (100% with combined ranking of 1 & 2 for highest importance) on basic math include accommodations/food, mining, finance, wholesale trade, professional services, utilities, and real estate.

Both the public and private sectors place an emphasis on basic math skills with 86% of the public sector respondents ranking the importance of this skill as a 1 or 2 and 88% of the private sector respondents doing the same.

Intermediate math skills. Intermediate math skills are defined as competency with fractions, decimals, and percentages. This skill is a workforce development work key. Employers were asked to indicate the importance of employees having intermediate math skills when hiring for new jobs. Exhibit 24 explains.

Exhibit 24: Importance of intermediate math skills.

Intermediate Math	Importance Ranking										
	Most important →									Least important	
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	12	55%	4	18%	5	23%	1	5%	0	0%	22
Health care	20	65%	3	10%	7	23%	1	3%	0	0%	31
Accommodations / food	10	50%	2	10%	4	20%	2	10%	2	10%	20
Manufacturing	14	56%	2	8%	5	20%	1	4%	3	12%	25
Mining	3	75%	0	0%	0	0%	0	0%	1	25%	4
Transportation	2	33%	0	0%	1	17%	1	17%	2	33%	6
Construction	2	50%	0	0%	1	25%	0	0%	1	25%	4
Public administration	9	82%	0	0%	1	9%	1	9%	0	0%	11
Other services	1	25%	1	25%	1	25%	1	25%	0	0%	4
Educational services	16	80%	1	5%	0	0%	2	10%	1	5%	20
Finance	2	100%	0	0%	0	0%	0	0%	0	0%	2
Wholesale trade	1	100%	0	0%	0	0%	0	0%	0	0%	1
Professional services	5	63%	1	13%	1	13%	1	13%	0	0%	8
Entertainment / arts	5	71%	0	0%	2	29%	0	0%	0	0%	7
Agriculture	1	50%	0	0%	0	0%	1	50%	0	0%	2
Utilities	3	100%	0	0%	0	0%	0	0%	0	0%	3
Real estate	0	0%	0	0%	0	0%	0	0%	1	100%	1
Information	0	0%	0	0%	1	100%	0	0%	0	0%	1
By Sector											
Public	21	78%	1	4%	1	4%	3	11%	1	4%	27
Private	83	59%	13	9%	28	20%	8	6%	8	6%	140

The importance of intermediate math requirements is prevalent among the finance, wholesale trade, and utilities industries in that 100% of the businesses responding to the survey assigned a skill ranking of a 1 or 2. Businesses representing the public administration and educational services industries also ranked intermediate math skills as important with cumulative 1 or 2 markings as 82% and 85%, respectively.

Of all of the industries, the transportation, agriculture, and real estate industries are least likely to seek employees with an intermediate math background, as 50% or more of the respondents from these industries ranked this skill as a 4 or 5.

Percentage-wise, the public secto r places more emphasis upon intermediate math skills with 82% of the respondents in this sector ranking the importance of these skills as a 1 or 2. Only 68% of the private sector respondents ranked intermediate math skills with the same emphasis.

Advanced math skills. Advanced math skills are defined as knowing how to convert numbers between systems of measurement, being able to manipulate geometry, and knowledge of calculus. This skill is a workforce development work key. Employers were asked to indicate the importance of advanced math skills in hiring decisions when selecting new employees. Exhibit 25 illustrates.

Exhibit 25: Importance of advanced math skills.

Advanced Math	Importance Ranking										
	Most important →									Least important	
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	0	0%	4	18%	10	46%	2	9%	6	27%	22
Health care	17	53%	4	13%	5	16%	3	9%	3	9%	32
Accommodations / food	0	0%	1	5%	8	40%	5	25%	6	30%	20
Manufacturing	10	40%	0	0%	3	12%	2	8%	10	40%	25
Mining	3	75%	0	0%	0	0%	0	0%	1	25%	4
Transportation	1	17%	0	0%	2	33%	0	0%	3	50%	6
Construction	2	50%	0	0%	1	25%	0	0%	1	25%	4
Public administration	4	40%	1	10%	4	40%	1	10%	0	0%	10
Other services	1	25%	1	25%	1	25%	1	25%	0	0%	4
Educational services	14	70%	2	10%	0	0%	1	5%	3	15%	20
Finance	2	100%	0	0%	0	0%	0	0%	0	0%	2
Wholesale trade	1	100%	0	0%	0	0%	0	0%	0	0%	1
Professional services	4	50%	1	13%	2	25%	1	13%	0	0%	8
Entertainment / arts	1	14%	1	14%	4	57%	0	0%	1	14%	7
Agriculture	0	0%	1	50%	0	0%	1	50%	0	0%	2
Utilities	2	67%	0	0%	1	33%	0	0%	0	0%	3
Real estate	0	0%	0	0%	0	0%	0	0%	1	100%	1
Information	0	0%	0	0%	1	100%	0	0%	0	0%	1
By Sector											
Public	15	58%	2	8%	4	15%	2	8%	3	12%	26
Private	45	32%	14	10%	38	27%	15	11%	29	21%	141

The importance of advanced math requirements is most prevalent in the finance and wholesale trade industries with 100% of the respondents ranking advanced math with high importance. Respondents from the mining and educational services industries also ranked advanced math as important -- 75% and 80%, respectively.

Accommodations/food, transportation, agriculture, and real estate each ranked advanced math as least importance with at minimum 50% of the respondents giving this particular skill a 4 or 5.

Sixty-six percent of the public sector respondents view advanced math skills as an important work skill where as only 42% of the private sector respondents share this same opinion.

Overall math requirements. Exhibit 26 summarizes the overall math requirements from the businesses surveyed. The top two importance rankings (1 & 2) were selected from the basic, intermediate, and advance math level requirements to demonstrate the importance of math skill level when hiring new employees. As basic math appears to be of great importance to the majority of businesses that comprise the various industries listed below, math requirements become less important among more industries as math difficulty increases. Exhibit 26 explains this in further detail.

Exhibit 26: Overall math requirements by industry and by sector.

Total Math	RANKINGS											
	Basic Math				Intermediate Math				Advanced Math			
	1		2		1		2		1		2	
By Industry	#	%	#	%	#	%	#	%	#	%	#	%
Retail trade	20	83%	3	13%	12	55%	4	18%	0	0%	4	18%
Health	23	70%	5	15%	20	65%	3	10%	17	53%	4	13%
Accommodations/ food	17	85%	3	15%	10	50%	2	10%	0	0%	1	5%
Manufacturing	24	92%	1	4%	14	56%	2	8%	10	40%	0	0%
Mining	4	100%	0	0%	3	75%	0	0%	3	75%	0	0%
Transportation	1	17%	0	0%	2	33%	0	0%	1	17%	0	0%
Construction	3	75%	0	0%	2	50%	0	0%	2	50%	0	0%
Public administration	8	73%	1	9%	9	82%	0	0%	4	40%	1	10%
Other services	3	75%	0	0%	1	25%	1	25%	1	25%	1	25%
Educational services	18	90%	0	0%	16	80%	1	5%	14	70%	2	10%
Finance	2	100%	0	0%	2	100%	0	0%	2	100%	0	0%
Wholesale trade	1	100%	0	0%	1	100%	0	0%	1	100%	0	0%
Professional services	6	86%	1	14%	5	63%	1	13%	4	50%	1	13%
Entertainment / arts	6	86%	0	0%	5	71%	0	0%	1	14%	1	14%
Agriculture	1	50%	0	0%	1	50%	0	0%	0	0%	1	50%
Utilities	3	100%	0	0%	3	100%	0	0%	2	67%	0	0%
Real estate	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%
Information	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
By Sector												
Public	22	82%	1	4%	21	78%	1	4%	15	58%	2	8%
Private	115	80%	12	8%	83	59%	13	9%	45	32%	14	10%

As math challenges increase, it appears that businesses' requirements for math skills among new employees gradually decreases. Basic math skills are important to a number of businesses, with 100% of 7 industries indicating that basic math skills are important. Intermediate math skills, however, remain at the 100% importance level among only three industries, and advanced math skills remain at the 100% importance level among only two industries: finance and wholesale trade.

A more pronounced drop of importance in math skill difficulty can be seen when looking at the interview data by sector. The public sector indicated an 86% importance when looking at basic math skills, 82% importance when looking at intermediate math skills and 66% when looking at advanced skills. When looking at the private sector, the drop in importance is more pronounced: 88%, 68%, 42%, respectively.

Basic writing skills. Basic writing skills are comprised of sentence structure and grammar; writing style, spelling, punctuation, and whether the writing is logical. This skill is a workforce development work key. Employers were asked to rank the importance they place upon writing skills when hiring new employees. Exhibit 27 explains.

Exhibit 27: Importance of basic writing skills.

Basic Writing	Importance Ranking										
	Most important →								Least important		
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	13	54%	4	17%	5	21%	1	4%	1	4%	24
Health care	23	72%	7	22%	1	3%	0	0%	1	3%	32
Accommodations / food	14	70%	0	0%	5	25%	1	5%	0	0%	20
Manufacturing	16	64%	2	8%	4	16%	1	4%	2	8%	25
Mining	4	100%	0	0%	0	0%	0	0%	0	0%	4
Transportation	2	33%	0	0%	2	33%	0	0%	2	33%	6
Construction	3	75%	0	0%	0	0%	1	25%	0	0%	4
Public administration	9	75%	1	8%	1	8%	1	8%	0	0%	12
Other services	3	75%	1	25%	0	0%	0	0%	0	0%	4
Education	17	85%	0	0%	2	10%	0	0%	1	5%	20
Finance	2	100%	0	0%	0	0%	0	0%	0	0%	2
Wholesale trade	1	100%	0	0%	0	0%	0	0%	0	0%	1
Professional services	7	100%	0	0%	0	0%	0	0%	0	0%	7
Entertainment / arts	6	86%	0	0%	1	14%	0	0%	0	0%	7
Agriculture	1	50%	0	0%	0	0%	1	50%	0	0%	2
Utilities	2	67%	1	33%	0	0%	0	0%	0	0%	3
Real estate	0	0%	0	0%	1	100%	0	0%	0	0%	1
Information	0	0%	1	100%	0	0%	0	0%	0	0%	1
By Sector											
Public	22	79%	1	4%	3	11%	1	4%	1	4%	28
Private	96	68%	15	11%	19	14%	5	4%	6	4%	141

The importance of basic writing skills is readily apparent among the mining, other services, finance, wholesale trade, professional services, information, and utilities industries – with 100% of the businesses in each of these industries ranking this skill importance as a 1 or 2 priority.

Both the public and private sector businesses gave basic writing skills a high importance rating – with 83% and 79% of the businesses in these sectors (respectively) ranking the importance of basic writing skills as a 1 or 2 priority.

Listening skills. Listening skills are defined as hearing information, writing it down, and communicating it to someone else. This skill is a workforce development work key. Respondents were asked to rank the importance of listening skills from 1 (most important) to 5 (least important) as a job skill for new hires. Exhibit 28 depicts their responses.

Exhibit 28: Importance of listening skills.

Listening Skills	**Importance Ranking**										
	Most important →								**Least important**		
	1		**2**		**3**		**4**		**5**		**Total**
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	20	83%	2	8%	1	4%	0	0%	1	4%	24
Health care	28	85%	2	6%	1	3%	1	3%	1	3%	33
Accommodations / food	20	100%	0	0%	0	0%	0	0%	0	0%	20
Manufacturing	24	92%	1	4%	1	4%	0	0%	0	0%	26
Mining	4	100%	0	0%	0	0%	0	0%	0	0%	4
Transportation	4	67%	0	0%	0	0%	0	0%	2	33%	6
Construction	3	75%	0	0%	0	0%	1	25%	0	0%	4
Public administration	9	75%	2	17%	0	0%	1	8%	0	0%	12
Other services	4	100%	0	0%	0	0%	0	0%	0	0%	4
Educational services	19	95%	0	0%	0	0%	0	0%	1	5%	20
Finance	2	100%	0	0%	0	0%	0	0%	0	0%	2
Wholesale trade	1	100%	0	0%	0	0%	0	0%	0	0%	1
Professional services	7	100%	0	0%	0	0%	0	0%	0	0%	7
Entertainment / arts	7	100%	0	0%	0	0%	0	0%	0	0%	7
Agriculture	2	100%	0	0%	0	0%	0	0%	0	0%	2
Utilities	3	100%	0	0%	0	0%	0	0%	0	0%	3
Real estate	1	100%	0	0%	0	0%	0	0%	0	0%	1
Information	0	0%	1	100%	0	0%	0	0%	0	0%	1
By Sector											
Public	24	86%	2	7%	0	0%	1	4%	1	4%	28
Private	129	90%	5	4%	3	2%	2	1%	4	3%	143

Though listening skills carried a high degree of importance among most of the survey respondents, 100% of the businesses in the accommodation/food, mining, other services, finance, wholesale trade, professional services, entertainment / arts, agriculture, utilities, information, and real estate industries ranked this skill with a 1 or 2 importance rating.

Listening skills were also considered important skills by sector. Ninety-three percent of the public sector respondents ranked listening skills with a 1 or 2 importance rating, while 94% of the private sector gave listening skills the same ranking.

Customer relations skills. Customer relations skills are defined as getting along with and accommodating customers. Respondents were asked to rank the importance of customer relations skills from 1 (most important) to 5 (least important) as a job skill for new hires. Exhibit 29 depicts their responses.

Exhibit 29: Importance of customer relations' skills.

Customer Relations Skills	Importance Ranking										
	Most important →								Least important		
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	23	96%	0	0%	0	0%	0	0%	1	4%	24
Health care	27	84%	2	6%	1	3%	1	3%	1	3%	32
Accommodations / food	20	100%	0	0%	0	0%	0	0%	0	0%	20
Manufacturing	14	56%	5	20%	4	16%	1	4%	1	4%	25
Mining	3	75%	0	0%	1	25%	0	0%	0	0%	4
Transportation	3	50%	1	17%	2	33%	0	0%	0	0%	6
Construction	2	50%	0	0%	2	50%	0	0%	0	0%	4
Public administration	9	75%	2	17%	0	0%	1	8%	0	0%	12
Other services	4	100%	0	0%	0	0%	0	0%	0	0%	4
Educational services	17	85%	2	10%	0	0%	0	0%	1	5%	20
Finance	2	100%	0	0%	0	0%	0	0%	0	0%	2
Wholesale trade	1	100%	0	0%	0	0%	0	0%	0	0%	1
Professional services	3	38%	1	13%	4	50%	0	0%	0	0%	8
Entertainment / arts	7	100%	0	0%	0	0%	0	0%	0	0%	7
Agriculture	0	0%	1	50%	0	0%	1	50%	0	0%	2
Utilities	3	100%	0	0%	0	0%	0	0%	0	0%	3
Real estate	1	100%	0	0%	0	0%	0	0%	0	0%	1
Information	1	100%	0	0%	0	0%	0	0%	0	0%	1
By Sector											
Public	22	79%	4	14%	0	0%	1	4%	1	4%	28
Private	114	80%	8	6%	14	10%	3	2%	3	2%	142

The importance of customer relations skills varied somewhat among the industries. One hundred percent of the businesses in the accommodations/food, other services, finance, wholesale trade, entertainment/arts, utilities, information, and real estate industries gave customer relations skills a 1 or 2 priority ranking.

Businesses in the agriculture industry were least concerned about customer relations skills.

Both public and private sector businesses placed a great deal of importance upon customer relations skills with 93% of the public sector responses and 86% of the private sector responses ranking customer relations skills as a 1 or 2 priority.

Teamwork skills. Teamwork is defined as choosing behaviors and/or actions that simultaneously support relationships within a team and lead toward the accomplishment of work tasks. Teamwork is a workforce development work key. Employers were asked if teamwork skills were important to their organization and to rank them accordingly. Exhibit 30 illustrates.

Exhibit 30: Importance of teamwork skills.

Teamwork Skills	Importance Ranking										
	Most important →								Least important		
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	20	83%	1	4%	1	4%	1	4%	1	4%	24
Health care	25	76%	5	15%	0	0%	1	3%	2	6%	33
Accommodations / food	19	95%	0	0%	1	5%	0	0%	0	0%	20
Manufacturing	20	77%	5	19%	0	0%	0	0%	1	4%	26
Mining	4	100%	0	0%	0	0%	0	0%	0	0%	4
Transportation	6	100%	0	0%	0	0%	0	0%	0	0%	6
Construction	3	75%	0	0%	0	0%	0	0%	1	25%	4
Public administration	10	83%	2	17%	0	0%	0	0%	0	0%	12
Other services	3	75%	0	0%	0	0%	1	25%	0	0%	4
Educational services	16	80%	2	10%	1	5%	0	0%	1	5%	20
Finance	2	100%	0	0%	0	0%	0	0%	0	0%	2
Wholesale trade	1	100%	0	0%	0	0%	0	0%	0	0%	1
Professional services	6	75%	1	13%	1	13%	0	0%	0	0%	8
Entertainment / arts	7	100%	0	0%	0	0%	0	0%	0	0%	7
Agriculture	2	100%	0	0%	0	0%	0	0%	0	0%	2
Utilities	3	100%	0	0%	0	0%	0	0%	0	0%	3
Real estate	1	100%	0	0%	0	0%	0	0%	0	0%	1
Information	1	100%	0	0%	0	0%	0	0%	0	0%	1
By Sector											
Public	21	75%	5	18%	1	4%	0	0%	1	4%	28
Private	122	85%	11	8%	3	2%	3	2%	5	4%	144

The importance of teamwork skills is evident among several industries in that 100% of the businesses signified the importance of teamwork with a 1 or 2 ranking. These industries include: mining, transportation, public administration, finance, wholesale trade, entertainment/arts, agriculture, utilities, information, and real estate. Other industries such as health care, accommodations/food, manufacturing, and educational services also placed an emphasis on teamwork with 90% or more of the businesses in these industries indicating that this work skill is of high importance.

By sector, teamwork skills carried an equal significance with 93% of both the public and private sector respondents ranking this skill with a 1 or 2 level of importance.

Observation skills. Observation skills are defined as paying attention to instructions and demonstrations, and noticing details. This skill is a workforce development work key. Employers were asked to indicate the importance of observation skills when considering a new hire.

Exhibit 31: Importance of observation skills.

Observation Skills	Importance Ranking										
	Most important →								Least important		
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	15	63%	7	29%	1	4%	0	0%	1	4%	24
Health care	24	73%	6	18%	1	3%	1	3%	1	3%	33
Accommodations / food	19	95%	1	5%	0	0%	0	0%	0	0%	20
Manufacturing	25	100%	0	0%	0	0%	0	0%	0	0%	25
Mining	4	100%	0	0%	0	0%	0	0%	0	0%	4
Transportation	6	100%	0	0%	0	0%	0	0%	0	0%	6
Construction	3	75%	0	0%	0	0%	0	0%	1	25%	4
Public administration	9	75%	3	25%	0	0%	0	0%	0	0%	12
Other services	4	100%	0	0%	0	0%	0	0%	0	0%	4
Educational services	16	80%	2	10%	1	5%	0	0%	1	5%	20
Finance	2	100%	0	0%	0	0%	0	0%	0	0%	2
Wholesale trade	1	100%	0	0%	0	0%	0	0%	0	0%	1
Professional services	7	88%	1	12%	0	0%	0	0%	0	0%	8
Entertainment / arts	6	86%	0	0%	1	14%	0	0%	0	0%	7
Agriculture	1	50%	0	0%	0	0%	1	50%	0	0%	2
Utilities	3	100%	0	0%	0	0%	0	0%	0	0%	3
Real estate	1	100%	0	0%	0	0%	0	0%	0	0%	1
Information	1	100%	0	0%	0	0%	0	0%	0	0%	1
By Sector											
Public	21	75%	5	18%	1	4%	0	0%	1	4%	28
Private	121	85%	14	10%	3	2%	2	1%	3	2%	143

The importance of observation skills to the responding businesses is most apparent in the accommodations/food, manufacturing, mining, transportation, public administration, other services, finance, wholesale trade, professional services, utilities, information, and real estate industries, with 100% of the businesses in each of these industries ranking this work skill with a 1 or a 2.

Only one business in the retail trade industry, one business in the health industry, one business in the construction industry, one business in the health care industry, and one business in the educational services industry ranked observation skills with a 5. This suggests that observation skills have a medium to high importance ranking among all industries.

Statistics by sector also accentuate the importance of observation skills with 93% of the respondents in the public sector and 95% of the respondents in the private sector ranking observation skills as a 1 or 2 level of importance.

Applied technology skills. Applied technology skills are defined as knowing basic principles of mechanics, electricity, fluid dynamics, and thermodynamics as applied to machines and equipment found in the workplace. This skill is a workforce development work key.

Businesses were asked to rank from most important to least important the need for applied technology skills among current new hires for their company. Exhibit 32 illustrates.

Exhibit 32: Importance of applied technology skills.

Applied Technology Skills	Importance Ranking										
	Most important → Least important										
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	0	0%	0	0%	6	29%	7	33%	8	38%	21
Health care	12	39%	3	10%	4	13%	3	10%	9	29%	31
Accommodations / food	1	5%	2	10%	3	15%	4	20%	10	50%	20
Manufacturing	21	91%	0	0%	1	4%	0	0%	1	4%	23
Mining	4	100%	0	0%	0	0%	0	0%	0	0%	4
Transportation	2	33%	1	17%	1	17%	2	33%	0	0%	6
Construction	3	75%	0	0%	0	0%	1	25%	0	0%	4
Public administration	3	27%	2	18%	2	18%	4	36%	0	0%	11
Other services	1	25%	0	0%	1	25%	1	25%	1	25%	4
Educational services	6	30%	5	25%	3	15%	2	10%	4	20%	20
Finance	0	0%	0	0%	1	50%	1	50%	0	0%	2
Wholesale trade	0	0%	0	0%	0	0%	1	100%	0	0%	1
Professional services	5	63%	0	0%	1	13%	1	13%	1	13%	8
Entertainment / arts	2	29%	1	14%	1	14%	1	14%	2	29%	7
Agriculture	1	50%	0	0%	0	0%	1	50%	0	0%	2
Utilities	3	100%	0	0%	0	0%	0	0%	0	0%	3
Real estate	0	0%	0	0%	0	0%	0	0%	1	100%	1
Information	0	0%	1	100%	0	0%	0	0%	0	0%	1
By Sector											
Public	7	26%	7	26%	4	15%	5	19%	4	15%	27
Private	53	39%	8	6%	19	14%	24	18%	33	24%	137

The importance of applied technology skills is prevalent among businesses in the mining, information, and utilities industries with 100% of the respondents representing these industries placing a 1 or 2 importance ranking on this job skill. Additionally, 91% of the businesses in the manufacturing industry placed a high importance emphasis on applied technology skills. Applied technology skills were least important to the respondents in the real estate and the wholesale trade industries with 100% ranking this skill as a 4 or 5.

Neither the public nor the private sector placed as much emphasis on applied technology skills as they did with other work skills: 52% of the public sector respondents and 45% of the private sector respondents gave this skill a rank of a 1 or 2.

Critical thinking skills. Employers were asked to rank the importance of critical thinking skills when they consider hiring new employees. Exhibit 33 illustrates the desire among the industries for this work skill.

Exhibit 33: Importance of critical thinking skills.

Critical Thinking Skills	Importance Ranking										
	Most important →								Least important		
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	2	9%	0	0%	12	52%	7	30%	2	9%	23
Health care	24	75%	5	16%	2	6%	0	0%	1	3%	32
Accommodations / food	2	10%	3	15%	6	30%	4	20%	5	25%	20
Manufacturing	15	58%	3	12%	7	27%	0	0%	1	4%	26
Mining	3	75%	1	25%	0	0%	0	0%	0	0%	4
Transportation	4	67%	0	0%	0	0%	0	0%	2	33%	6
Construction	2	50%	1	25%	0	0%	1	25%	0	0%	4
Public administration	6	50%	4	33%	1	8%	1	8%	0	0%	12
Other services	3	75%	0	0%	1	25%	0	0%	0	0%	4
Educational services	16	80%	0	0%	3	15%	1	5%	0	0%	20
Finance	2	100%	0	0%	0	0%	0	0%	0	0%	2
Wholesale trade	1	100%	0	0%	0	0%	0	0%	0	0%	1
Professional services	6	75%	2	25%	0	0%	0	0%	0	0%	8
Entertainment / arts	4	57%	1	14%	1	14%	0	0%	1	14%	7
Agriculture	1	50%	0	0%	0	0%	1	50%	0	0%	2
Utilities	2	67%	0	0%	1	33%	0	0%	0	0%	3
Real estate	0	0%	0	0%	0	0%	0	0%	1	100%	1
Information	0	0%	1	100%	0	0%	0	0%	0	0%	1
By Sector											
Public	18	64%	4	14%	4	14%	2	7%	0	0%	28
Private	73	51%	14	10%	29	20%	13	9%	13	9%	142

The importance of critical thinking skills ranked highest among businesses in the mining, finance, wholesale trade, information, and professional services industries with 100% of the respondents giving this work skill a 1 or 2 ranking. At least 90% of the businesses in the healthcare industry believed that critical thinking was a most important work skill.

By sector, critical thinking skills ranked lower than reading and math skills. Seventy-eight percent of the public sector respondents ranked critical thinking skills with a 1 or a 2 priority, while 61% of the private sector ranked these skills in the same way.

Locating information skills. Locating information is defined as using diagrams, floor plans, tables, forms, graphs, charts, and instrument gauges to make decisions and draw conclusions. Locating information is a workforce development work skill. Employers were asked to rank the importance of locating information skills when selecting new employees to work in their company.

Exhibit 34: Importance of locating information skills.

Locating Information Skills	Importance Ranking										
	Most important →								Least important		
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	3	13%	2	9%	7	30%	8	35%	3	13%	23
Health care	14	44%	1	3%	8	25%	5	16%	4	13%	32
Accommodations / food	1	5%	3	15%	8	40%	4	20%	4	20%	20
Manufacturing	9	36%	6	24%	8	32%	0	0%	2	8%	25
Mining	3	75%	1	25%	0	0%	0	0%	0	0%	4
Transportation	2	33%	0	0%	3	50%	1	17%	0	0%	6
Construction	1	25%	2	50%	0	0%	1	25%	0	0%	4
Public administration	5	46%	3	27%	0	0%	3	27%	0	0%	11
Other services	2	50%	1	25%	1	25%	0	0%	0	0%	4
Educational services	6	30%	6	30%	3	15%	5	25%	0	0%	20
Finance	2	100%	0	0%	0	0%	0	0%	0	0%	2
Wholesale trade	0	0%	0	0%	1	100%	0	0%	0	0%	1
Professional services	3	38%	3	38%	1	13%	0	0%	1	13%	8
Entertainment / arts	3	43%	0	0%	4	57%	0	0%	0	0%	7
Agriculture	0	0%	1	50%	0	0%	1	50%	0	0%	2
Utilities	1	33%	2	67%	0	0%	0	0%	0	0%	3
Real estate	0	0%	0	0%	0	0%	0	0%	1	100%	1
Information	0	0%	0	0%	1	100%	0	0%	0	0%	1
By Sector											
Public	10	37%	8	30%	2	7%	7	26%	0	0%	27
Private	42	30%	20	14%	43	31%	21	15%	15	11%	141

The respondents from the mining, finance, and utilities industries indicated that locating information was an important work skill associated with their particular industries by ranking this skills importance with a 1 or 2. At least 75 percent of the respondents from the construction and other services industries indicated that this particular work skill was a 1 or 2 importance priority.

Businesses from the retail trade, agriculture, and real estate industries placed the least importance on the locating information job skill.

Respondents from the private sector placed a lesser emphasis on this job skill than did the public sector in that only 44% of the private sector respondents ranked the locating information job skill with a 1 or 2 while 67% of the respondents from the public sector provided the same ranking. None of the respondents from the public sector ranked the locating information skill as a 5.

Data entry skills. Employers were asked to rank the importance they place on data entry skills when interviewing candidates applying for new jobs. Exhibit 35 explains.

Exhibit 35: Importance of data entry skills.

Data Entry Skills	Importance Ranking										
	Most important →								Least important		
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	4	18%	2	9%	10	46%	5	23%	1	5%	22
Health care	13	41%	9	28%	6	19%	2	6%	2	6%	32
Accommodations / food	4	20%	1	5%	7	35%	5	25%	3	15%	20
Manufacturing	8	32%	4	16%	9	36%	2	8%	2	8%	25
Mining	2	50%	1	25%	0	0%	0	0%	1	25%	4
Transportation	1	17%	0	0%	1	17%	1	17%	3	50%	6
Construction	1	25%	2	50%	0	0%	0	0%	1	25%	4
Public administration	7	58%	3	25%	1	8%	0	0%	1	8%	12
Other services	1	25%	1	25%	1	25%	1	25%	0	0%	4
Educational services	11	55%	2	10%	5	25%	0	0%	2	10%	20
Finance	2	100%	0	0%	0	0%	0	0%	0	0%	2
Wholesale trade	0	0%	1	100%	0	0%	0	0%	0	0%	1
Professional services	5	63%	2	25%	1	13%	0	0%	0	0%	8
Entertainment / arts	3	43%	1	14%	1	14%	0	0%	2	29%	7
Agriculture	0	0%	0	0%	1	50%	1	50%	0	0%	2
Utilities	2	67%	1	33%	0	0%	0	0%	0	0%	3
Real estate	0	0%	1	100%	0	0%	0	0%	0	0%	1
Information	1	100%	0	0%	0	0%	0	0%	0	0%	1
By Sector											
Public	15	54%	5	18%	5	18%	0	0%	3	11%	28
Private	48	34%	25	18%	37	26%	18	12%	12	9%	140

The importance of data entry skills is apparent among the finance industry, the wholesale trade industry, the utilities industry, the information industry, and the real estate industry with 100% of the respondents giving this work skill a 1 or 2 ranking. Seventy-five percent or more of the respondents from mining, construction, public administration, and professional services also said that it was important for successful new hires to have data entry skills.

Data entry skills were of least importance to respondents from the transportation and agriculture industries.

A greater percentage of public sector respondents (72%) ranked data entry skills as a higher importance (1 or 2 ranking) than did respondents (52%) from the private sector.

Computer technical / hardware skills. Computer technical / hardware skills have been defined as a computer technician type of work with installation and maintenance key to this position. Respondents were asked to rank the importance of computer technical / hardware skills when selecting new employees. Exhibit 36 illustrates their responses.

Exhibit 36: Importance of computer technical/hardware skills.

Computer Technical Hardware Skills	Importance Ranking										
	Most important →								Least important		
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	0	0%	0	0%	6	29%	4	19%	11	52%	21
Health care	4	13%	1	3%	5	17%	7	23%	13	43%	30
Accommodations / food	0	0%	0	0%	5	25%	5	25%	10	50%	20
Manufacturing	3	13%	4	17%	6	25%	1	4%	10	42%	24
Mining	1	25%	2	50%	0	0%	0	0%	1	25%	4
Transportation	0	0%	0	0%	2	33%	3	50%	1	17%	6
Construction	0	0%	1	25%	1	25%	1	25%	1	25%	4
Public administration	3	38%	1	13%	2	25%	2	25%	0	0%	8
Other services	0	0%	1	25%	1	25%	2	50%	0	0%	4
Educational services	2	11%	3	16%	7	37%	2	11%	5	26%	19
Finance	1	50%	0	0%	1	50%	0	0%	0	0%	2
Wholesale trade	0	0%	0	0%	0	0%	0	0%	1	100%	1
Professional services	3	38%	2	25%	3	38%	0	0%	0	0%	8
Entertainment / arts	1	14%	1	14%	2	29%	1	14%	2	29%	7
Agriculture	0	0%	0	0%	1	50%	1	50%	0	0%	2
Utilities	2	67%	0	0%	0	0%	0	0%	1	33%	3
Real estate	0	0%	0	0%	0	0%	0	0%	1	100%	1
Information	0	0%	1	100%	0	0%	0	0	0	0%	1
By Sector											
Public	4	17%	4	17%	7	30%	4	17%	4	17%	23
Private	14	10%	13	10%	35	26%	25	18%	50	37%	137

The respondent from the information industry placed the greatest importance of all of the industries on computer technical / hardware skills. Respondents from the mining, public administration, professional services, and utilities industries also placed emphasis on computer technical hardware skills as a desired skill for new employees.

Businesses surveyed in the accommodations/food, wholesale trade, and real estate industries all ranked computer technical / hardware skills as a “least important” work skill desired from their current new hires.

When looking at the data by sector, it appears that both sectors place lesser emphasis on this work skill than upon other work skills: 34% of the public sector ranked this work skill with a 1 or 2 priority, while only 20% of the private sector did the same.

Computer application skills. Computer application skills are defined as use of software – specifically, word processing and spreadsheets. Employers were asked to rank the importance of computer application skills when they consider hiring an individual. Exhibit 37 details their responses.

Exhibit 37: Importance of computer application skills.

Computer Application Skills	**Importance Ranking**										
	Most important →								**Least important**		
	1		**2**		**3**		**4**		**5**		**Total**
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	1	5%	4	20%	7	35%	4	20%	4	20%	20
Health care	13	48%	5	19%	3	11%	3	11%	3	11%	27
Accommodations / food	2	10%	3	15%	5	25%	4	20%	6	30%	20
Manufacturing	6	24%	5	20%	9	36%	0	0%	5	20%	25
Mining	1	25%	2	50%	0	0%	0	0%	1	25%	4
Transportation	0	0%	0	0%	2	33%	3	50%	1	17%	6
Construction	0	0%	1	25%	2	50%	0	0%	1	25%	4
Public administration	7	64%	3	27%	1	9%	0	0%	0	0%	11
Other services	0	0%	1	25%	2	50%	1	25%	0	0%	4
Educational services	13	68%	2	11%	2	11%	1	5%	1	5%	19
Finance	2	100%	0	0%	0	0%	0	0%	0	0%	2
Wholesale trade	0	0%	0	0%	0	0%	1	100%	0	0%	1
Professional services	5	63%	2	25%	1	13%	0	0%	0	0%	8
Entertainment / arts	4	57%	0	0%	3	43%	0	0%	0	0%	7
Agriculture	0	0%	0	0%	1	50%	1	50%	0	0%	2
Utilities	2	67%	0	0%	1	33%	0	0%	0	0%	3
Real estate	0	0%	0	0%	0	0%	0	0%	1	100%	1
Information	0	0%	1	100%	0	0%	0	0%	0	0%	1
By Sector											
Public	17	65%	5	19%	2	8%	1	4%	1	4%	26
Private	39	29%	24	18%	38	28%	17	12%	19	14%	137

The importance of computer application skills was most prevalent among respondents from the finance industry and the information industry with 100% of the businesses ranking this work skill as a 1 or 2. Respondents from the mining industry, public administration industry, education industry, and professional services industry also gave computer applications skills high marks.

Respondents from the real estate industry and the wholesale trade industry ranked computer application skills as a low priority skill for current new hires.

Public sector respondents ranked computer application skills as more important (84%) than did respondents from the private sector (47%).

Internet skills. Employers were asked to rank the importance of Internet skills when considering new hires. Exhibit 38 explains.

Exhibit 38: Importance of Internet skills.

Internet Skills	Importance Ranking										
	Most important →								Least important		
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	0	0%	2	10%	6	30%	5	25%	7	35%	20
Health care	9	30%	2	7%	6	20%	6	20%	7	23%	30
Accommodations / food	0	0%	0	0%	4	20%	3	15%	13	65%	20
Manufacturing	3	12%	3	12%	4	16%	2	8%	13	52%	25
Mining	1	25%	1	25%	0	0%	1	25%	1	25%	4
Transportation	0	0%	0	0%	2	33%	1	17%	3	50%	6
Construction	1	25%	1	25%	0	0%	0	0%	2	50%	4
Public administration	2	18%	6	55%	1	9%	0	0%	2	19%	11
Other services	0	0%	1	25%	2	50%	0	0%	1	25%	4
Educational services	10	50%	3	15%	2	10%	3	15%	2	10%	20
Finance	2	100%	0	0%	0	0%	0	0%	0	0%	2
Wholesale trade	0	0%	0	0%	0	0%	0	0%	1	100%	1
Professional services	4	57%	0	0%	3	43%	0	0%	0	0%	7
Entertainment / arts	2	29%	3	43%	2	29%	0	0%	0	0%	7
Agriculture	0	0%	0	0%	0	0%	1	50%	1	50%	2
Utilities	0	0%	1	33%	1	33%	1	33%	0	0%	3
Real estate	0	0%	0	0%	0	0%	0	0%	1	100%	1
Information	0	0%	0	0%	1	100%	0	0%	0	0%	1
By Sector											
Public	11	41%	8	30%	3	11%	2	7%	3	11%	27
Private	22	16%	14	10%	31	23%	21	15%	48	35%	136

The importance of Internet skills is most prevalent among businesses in finance, indicated by 100% of the respondents in this industry ranking Internet skills as a 1 or 2 priority. Over 50% of the businesses responding from the entertainment/arts, professional services, educational services, and public administration industries gave Internet skills a 1 or 2 priority score.

Wholesale trade, agriculture, and real estate respondents were least likely to emphasize Internet skills. One hundred percent of these respondents ranked this skill as a 4 or 5.

Similar to the ranking of computer application skills, public sector respondents ranked Internet skills as more important (71%) than did respondents from the private sector (26%).

Programming and web design. Employers were asked to rank the importance of programming and web design skills when considering new hires. Exhibit 39 explains.

Exhibit 39: Importance of programming / web design skills.

Programming/Web Design Skills	Importance Ranking										
	Most important →								Least important		
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	0	0%	0	0%	6	30%	4	20%	10	50%	20
Health care	1	3%	1	3%	6	20%	8	27%	14	47%	30
Accommodations / food	0	0%	0	0%	2	10%	3	15%	15	75%	20
Manufacturing	1	4%	1	4%	2	8%	4	16%	17	68%	25
Mining	0	0%	0	0%	0	0%	1	25%	3	75%	4
Transportation	0	0%	0	0%	1	17%	1	17%	4	67%	6
Construction	1	25%	0	0%	1	25%	0	0%	2	50%	4
Public administration	0	0%	1	11%	5	56%	0	0%	3	33%	9
Other services	0	0%	0	0%	1	25%	2	50%	1	25%	4
Educational services	3	17%	6	33%	2	11%	2	11%	5	28%	18
Finance	0	0%	0	0%	0	0%	2	100%	0	0%	2
Wholesale trade	0	0%	0	0%	0	0%	0	0%	1	100%	1
Professional services	3	43%	0	0%	2	29%	1	14%	1	14%	7
Entertainment / arts	1	14%	1	14%	1	14%	1	14%	3	43%	7
Agriculture	0	0%	0	0%	0	0%	1	50%	1	50%	2
Utilities	0	0%	0	0%	1	33%	1	33%	1	33%	3
Real estate	0	0%	0	0%	0	0%	0	0%	1	100%	1
Information	0	0%	0	0%	1	100%	0	0%	0	0%	1
By Sector											
Public	3	13%	5	22%	7	30%	2	9%	6	26%	23
Private	7	5%	5	4%	23	17%	29	21%	72	53%	136

The importance of programming/web design skills was indicated only by 50% of the respondents from the educational services industry. Less than 50% of the remaining industries ranked this work skill as a 1 or 2 hiring priority.

This work skill carried a 1 or 2 priority from only two businesses in the health care industry, two businesses in the manufacturing industry, one construction business, one public administration business, three professional services businesses and two businesses in the entertainment / arts industry. Though a total of two businesses from the health industry gave this work skill a 1 or 2 ranking – these businesses represented a low percentage of respondents from that particular industry (6%).

A greater percentage of the public sector respondents (35%) gave programming/web design skills higher marks (1 or 2 ranking) than did the private sector respondents (9%).

Overall responses. A collective look at the importance of the various individual work skills reveals the overall importance or emphasis on the basics. Exhibit 40 illustrates. *("Total" represents total number of respondents ranking the particular work skill)*

Exhibit 40: Importance of employee job skills overall total by skill.

Overall Responses	Importance Ranking										
	Most important →								Least important		
	1		2		3		4		5		Total
	#	%	#	%	#	%	#	%	#	%	
Basic reading	149	87%	10	6%	4	2%	4	2%	4	2%	171
Intermediate reading	110	66%	18	11%	21	13%	9	5%	8	5%	166
Advanced reading	59	36%	25	15%	36	22%	13	8%	31	19%	164
Basic math	137	81%	13	8%	14	8%	2	1%	4	2%	170
Intermediate math	104	62%	14	8%	29	17%	11	7%	9	5%	167
Advanced math	60	36%	16	10%	42	25%	17	10%	32	19%	167
Basic writing	118	70%	16	10%	22	13%	6	4%	7	4%	169
Listening	153	90%	7	4%	3	2%	3	2%	5	3%	171
Customer relations	136	80%	12	7%	14	8%	4	2%	4	2%	170
Teamwork	143	83%	16	9%	4	2%	3	2%	6	4%	172
Observation	142	83%	19	11%	4	2%	2	1%	4	2%	171
Applied technology	60	37%	15	9%	23	14%	29	18%	37	23%	164
Critical thinking	91	54%	18	11%	33	19%	15	9%	13	8%	170
Locating Information	52	31%	28	17%	45	27%	28	17%	15	9%	168
Data entry	63	38%	30	18%	42	25%	18	11%	15	9%	168
Computer tech/hardware	18	11%	17	11%	42	26%	29	18%	54	34%	160
Computer application	56	34%	29	18%	40	25%	18	11%	20	12%	163
Internet	33	20%	22	14%	34	21%	23	14%	51	31%	163
Programming / Web	10	6%	10	6%	30	19%	31	20%	78	49%	159

Though the importance of various work skills changes emphasis among the industries, basic reading, basic math, listening, customer relations, teamwork, and observation appear to maintain an importance across the board.

Computer technical / hardware, computer application, Internet, and programming / web development appear to be more specialized work skills, thus important to specific industries such as mining (computer technical / hardware and computer application skills); public administration (computer application skills); finance (computer application skills and Internet skills); information (computer application skills) and educational services (web design).

FUTURE JOB SKILLS:

Future importance. Employers were asked to consider the same list of work skills and the importance they believed these skills would have in the next 3 to 5 years. Exhibit 41 compares their futuristic responses with the responses employers gave for their current hiring considerations. Note that only the top two importance rankings have been compared – demonstrating the apparent shifts to a greater or lesser emphasis on the particular skill in question. Totals represent the number of respondents providing feedback for each skill.

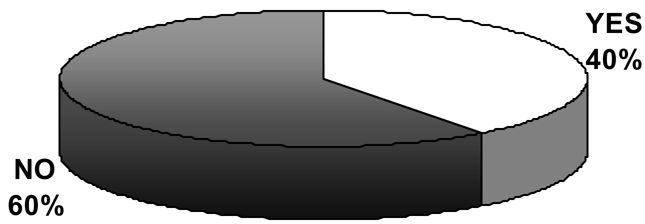
Exhibit 41: Change in basic skill need projected in the next 3 to 5 years.

Overall Responses	Importance Ranking										
	Current importance					Future importance					% Change
	1		2		Total	1		2		Total	
	#	%	#	%		#	%	#	%		
Basic reading	149	87%	10	6%	171	143	88%	9	6%	162	+1%
Intermediate reading	110	66%	18	11%	166	115	72%	17	11%	159	+6%
Advanced reading	59	36%	25	15%	164	68	44%	23	15%	156	+8%
Basic math	137	81%	13	8%	170	137	84%	10	6%	163	+1%
Intermediate math	104	62%	14	8%	167	107	67%	14	9%	160	+6%
Advanced math	60	36%	16	10%	167	74	46%	12	8%	161	+8%
Basic writing	118	70%	16	10%	169	128	79%	16	10%	162	+9%
Listening	153	90%	7	4%	171	149	91%	5	3%	163	0%
Customer relations	136	80%	12	7%	170	142	87%	5	3%	163	+3%
Teamwork	143	83%	16	9%	172	145	89%	8	5%	163	+2%
Observation	142	83%	19	11%	171	139	85%	16	10%	163	+1%
Applied technology	60	37%	15	9%	164	65	41%	11	7%	157	+2%
Critical thinking	91	54%	18	11%	170	89	55%	16	10%	161	0%
Locating Information	52	31%	28	17%	168	62	39%	29	18%	159	+9%
Data entry	63	38%	30	18%	168	88	55%	26	16%	161	+15%
Computer tech/hardware	18	11%	17	11%	160	39	25%	22	14%	156	+17%
Computer application	56	34%	29	18%	163	77	49%	25	16%	158	+13%
Internet	33	20%	22	14%	163	65	41%	22	14%	158	+21%
Programming / Web	10	6%	10	6%	159	35	23%	14	9%	154	+20%

Based on the survey responses, it appears that employers see a future emphasis on reading and math that are more advanced. Basic writing and locating information also demonstrated significant increases. The most prominent increases however, were in the computer related skills, i.e. data entry, computer technical/hardware, computer application, Internet, and programming/web. It should be noted that all of the skill sets demonstrated an increase in future importance except for listening, and critical thinking, which showed no change.

***Specific job skill needed in the future*.** Survey respondents were asked if they foresee any particular job skills that their company will need in the future. Only sixty-eight respondents provided feedback for this question. Forty percent (27) of the respondents reported foreseeing future job skills as depicted by Exhibit 42.

Exhibit 42: Job skills foreseen needed in the future.



A list of the future job skills potentially needed by the responding companies has been provided in Exhibit 43. The corresponding number indicates the importance ranking that survey respondents gave to the future job skill.

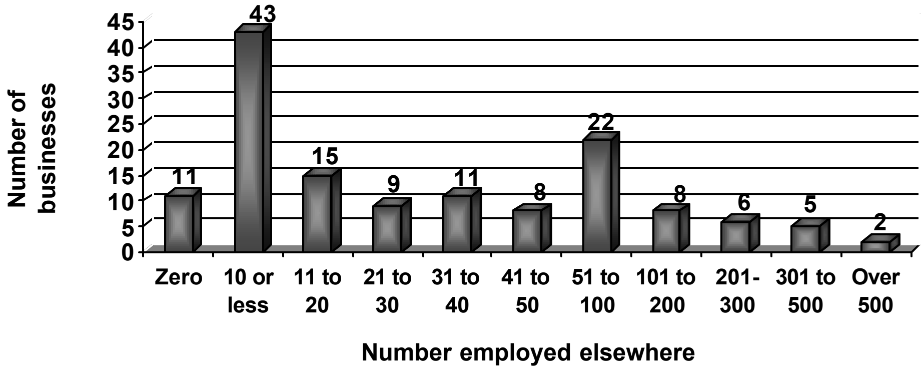
Exhibit 43: List of future job skills potentially needed by responding companies.

Job skill		Job skill		Job skill	
Basic cooking skills	1	Hospitality	1	Ability to interview	1
Care for elderly	1	Interviewing for work	1	Transcription	1
Chemistry / physics	1	Machinists	1	Transcription/coding	1
Computer networking	1	Nursing	1	Woodworking skills	1
Diets	1	Radiology	1	Dependability	1
Environmental technology	1	Science	1	Phone	1
Foreign language	1	Register (3 responses)	1	People skills	2
Special education teachers	1	Technology	1	Work ethic	2
Interviewing for employment	1	Communications	1	Computers	4
Interpersonal relationships	1	GIS base	1		

JOB APPLICANTS:

Number of applicants employed elsewhere when they applied at respondent's company. Survey specialists asked respondents to report the number of new employees they had that were employed elsewhere when making application at their company. Exhibit 44 illustrates the responses.

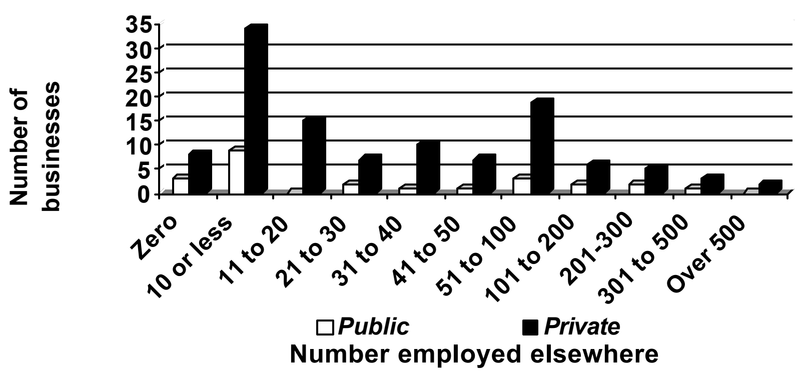
Exhibit 44: Applicants employed elsewhere when applying for job with respondent.



It appears that the majority of businesses surveyed reported 10 or less new hires being employed elsewhere when applying for a job with their company. Twenty-two companies reported having 51-100 new hires employed with other companies when taking a job with them. Only two respondents (both from the private sector) reported employing 500 or more workers that were currently employed with other companies.

Exhibit 45 illustrates the data according to public vs. private sector, which is reflective of the overall data above.

Exhibit 45: Applicants employed elsewhere when applying for job with respondent – public vs. private sector.



Number of applicants turned away. Employers were asked to reveal the approximate number of job applicants they typically turn away for open positions annually. Respondents reported turning away as few as 1 applicant per year to turning away as many as 800 applicants per year. Sixteen respondents said that they do not turn job applicants away. Exhibit 46 illustrates the number of job applicants turned away by the respondents over the course of a year; Exhibit 47 shows this by industry and by sector.

Exhibit 46: Job applicants turned away.

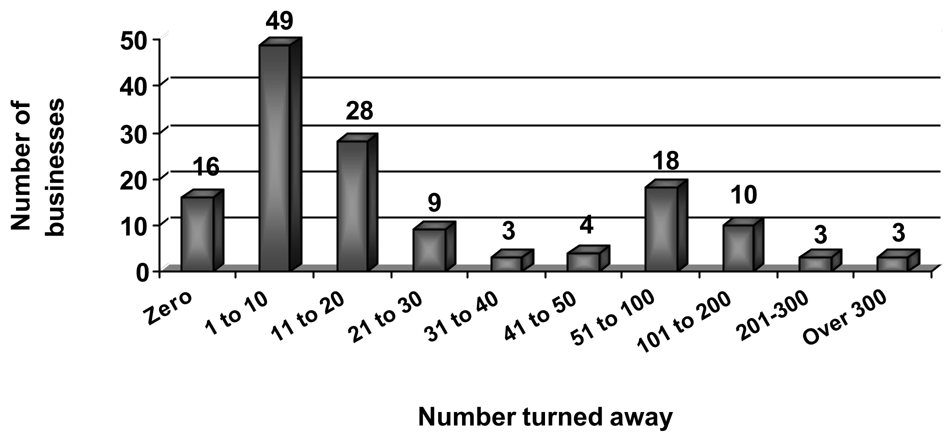


Exhibit 47: Applicants turned away by industry and by sector.

Industry	0	Number of Applicants Turned Away ≤ 10	11-20	21-30	31-40	41-50	51-100	101-200	201-300	301-over
Retail trade	2	8	1	2	1	1	3	3	0	1
Health care	2	9	3	2	1	1	6	1	1	0
Accommodations / food	1	6	5	3	1	0	1	0	0	1
Manufacturing	1	7	6	0	0	0	2	1	1	0
Mining	1	1	1	0	0	0	0	1	0	0
Transportation	1	3	1	0	0	1	0	0	0	0
Construction	1	1	0	0	0	0	1	1	0	0
Public administration	1	5	1	1	0	0	2	1	0	0
Information	0	0	0	0	0	0	0	0	0	0
Other services	1	2	0	0	0	0	0	0	0	0
Educational services	1	4	3	1	0	1	3	2	0	1
Finance	0	0	0	0	0	0	0	0	0	0
Wholesale trade	0	0	0	0	0	0	0	0	1	0
Professional services	3	1	3	0	0	0	0	0	0	0
Entertainment / arts	0	2	2	0	0	0	0	2	0	0
Agriculture	1	1	0	0	0	0	0	0	0	0
Utilities	0	0	2	0	0	0	1	0	0	0
Real estate	0	0	1	0	0	0	0	0	0	0
Sector										
Private	15	40	25	8	3	4	13	7	3	2
Public	1	9	3	1	0	0	5	3	0	1

Reasons for turning away applicants. Employers were asked to share the primary reasons that their company turns away job applicants. At the same time, they were asked to indicate whether this reason occurred some of the time (indicated by a 1, 2, or 3 on the survey) or a lot of the time (4 or 5). Exhibit 48 illustrates the frequency with which each of the reasons was mentioned. The exhibit also illustrates the number of times the reason was given by survey respondents (total).

Exhibit 48: Reasons employers turn away job applicants.

Reason	Frequency						
	Overall			Public		Private	
	Some	A lot	Total	Some	A lot	Some	A lot
Have no positions available	58	69	127	9	15	49	54
Poor recommendation from previous employers	71	15	86	6	2	65	13
Lacks appropriate previous work experience	52	25	77	5	2	47	23
Attitude and demeanor	45	30	75	7	1	38	29
Wages and benefits expectations	35	36	71	4	4	31	32
Appearance / dress / grooming	52	17	69	5	1	47	16
Lacks customer relation skills	47	18	65	7	1	40	17
Score on screening/pre-employment test	36	25	61	5	4	31	21
Criminal record	49	12	61	8	3	41	9
Lacks required reading skills	51	8	59	4	2	47	6
Lacks professional/technical certification	38	21	59	9	2	29	19
Lacks appropriate technology skills	30	27	57	5	3	25	24
Lack specialty degree/licensing	25	31	56	3	5	22	26
Lacks appropriate observation skills	36	20	56	7	0	29	20
Lacks appropriate teamwork skills	36	19	55	5	1	31	18
Lacks basic writing skills	42	13	55	4	4	38	9
Displays poor listening skills	34	21	55	7	2	27	19
Lacks required math reasoning skills	46	8	54	5	2	41	6
Drug test results	29	25	54	4	4	25	21
Unable to locate information	44	8	52	6	0	38	8
Lacks appropriate data entry skills	41	9	50	6	1	35	8

Though most often employers turn away job applicants because they have no positions available, they turn away a significant number of employees because of poor recommendations from previous employers and lack of appropriate previous work experience. Attitude, demeanor, wage and salary expectations, appearance, dress, and grooming are also noteworthy reasons employers choose not to hire a potential employee.

Other frequent reasons for turning away job applicants cited by the survey respondents included availability for work (5); did not complete application correctly (2); stealing; qualifications do not match job; do not show up for the interview; or non-union.

Reasons for releasing employees. Employers were asked to share the primary reasons that their company releases employees. At the same time, they were asked to indicate whether this reason occurred seldom (1, 2, or 3) or frequent (4 or 5). Exhibit 49 illustrates the frequency with which each reason was mentioned. The exhibit also illustrates the number of times the reason was given by survey respondents (total).

Exhibit 49: Reasons employers release employees.

Reason	Frequency		
	Seldom	Frequent	Total
Employee resigned	57	54	111
Employee is not dependable	76	27	103
Employee poorly performs their job	71	20	91
Abandonment	55	13	68
Company is being downsized	48	17	65
Employee lacks appropriate teamwork skills	42	14	56
Employees' skills no longer match company need	33	19	52

Resignations appear to be the number one reason employees leave their jobs. Dependability and poor performance are the two main reasons employers say that they have to release employees.

Exhibit 50 revisits the data comparing the public sector and the private sector.

Exhibit 50: Reasons employers release employees – public vs. private sector

Reason	Frequency			
	Public		Private	
	Seldom	Frequent	Seldom	Frequent
Employee resigned	9	11	48	43
Employee is not dependable	8	1	68	26
Employee poorly performs their job	9	1	62	19
Abandonment	5	2	50	11
Company is being downsized	7	3	41	14
Employee lacks appropriate teamwork skills	5	0	37	14
Employees' skills no longer match company need	4	1	29	18

When looking at the public vs. the private sector data, dependability and poor performance remain the top two reasons private sector employers release their employees. Companies being downsized is the top reason for public sector employee release.

Other frequent reasons for releasing employees include seasonal employment (5); retirement (8); attendance (3); insubordination (2); theft (2); random drug test (1); poor demeanor (1); transportation (1); attendance in union policy (1); non-union (1); and funding (1).

Primary reasons employees resign. CBER survey specialists asked employers what the primary reasons were that their employees resigned from their particular company. Exhibit 51 explains.

Exhibit 51: Primary reasons employees resign.

Overall Responses	Importance Ranking										
	Seldom → Frequent										
	1		2		3		4		5		Total
	#	%	#	%	#	%	#	%	#	%	
Higher salary / wages	28	26	16	15	18	17	15	14	29	27	106
Better career opportunity	32	36	10	11	17	19	15	17	14	16	88
Accept other employment	33	43	10	13	20	26	7	9	6	8	76
Location of new employer	27	36	5	7	13	17	12	16	19	25	76
Better fringe benefits	32	42	13	17	14	18	9	12	8	11	76
Medical	24	43	11	20	14	25	3	5	4	7	56
Unhappy at present comp	24	45	9	17	15	28	1	2	4	8	53
Transportation	22	48	6	13	9	20	6	13	3	7	46
Childcare	17	38	5	11	12	27	3	7	8	18	45
Other family	4	31	2	15	3	23	3	23	1	8	13
Private Sector Responses											
Higher salary / wages	25	28	14	15	14	15	13	14	25	28	91
Better career opportunity	28	38	8	11	14	19	11	15	13	18	74
Accept other employment	30	46	7	11	15	23	7	11	6	9	65
Location of new employer	24	38	5	8	10	16	10	16	15	23	64
Better fringe benefits	28	42	11	17	11	17	8	12	8	12	66
Medical	20	44	9	20	11	24	2	4	3	7	45
Unhappy at present comp	21	43	8	16	15	31	1	2	4	8	49
Transportation	19	44	6	14	9	21	6	14	3	7	43
Childcare	14	33	5	12	12	29	3	7	8	19	42
Other family	3	30	1	10	3	30	2	20	1	10	10
Public Sector Responses											
Higher salary / wages	3	20	2	13	4	27	2	13	4	27	15
Better career opportunity	4	29	2	14	3	21	4	29	1	7	14
Accept other employment	3	27	3	27	5	46	0	0	0	0	11
Location of new employer	3	25	0	0	3	25	2	17	4	33	12
Better fringe benefits	4	40	2	20	3	30	1	10	0	0	10
Medical	4	36	2	18	3	27	1	9	1	9	11
Unhappy at present comp	3	75	1	25	0	0	0	0	0	0	4
Transportation	3	100	0	0	0	0	0	0	0	0	3
Childcare	3	100	0	0	0	0	0	0	0	0	3
Other family	1	33	1	33	0	0	1	33	0	0	3

Higher salary / wages elsewhere appears to be the most frequent reason employees resigned from the companies interviewed. Better career opportunities and location of new employer appear to be major reasons employees resign their jobs, as well.

Qualified applicant pool. Employers were asked if they believed there is an adequate pool of qualified employees available from which they can hire. Over 90% (105) said that they believe there is, while 9% disagree. One hundred and fifteen responses were obtained for this question. Exhibit 52 illustrates.

Exhibit 52: Do employers believe there is a qualified applicant pool from which to hire?

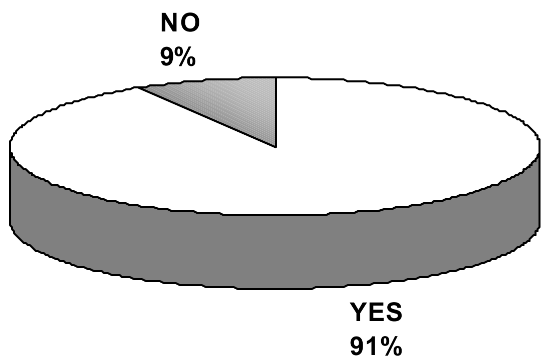
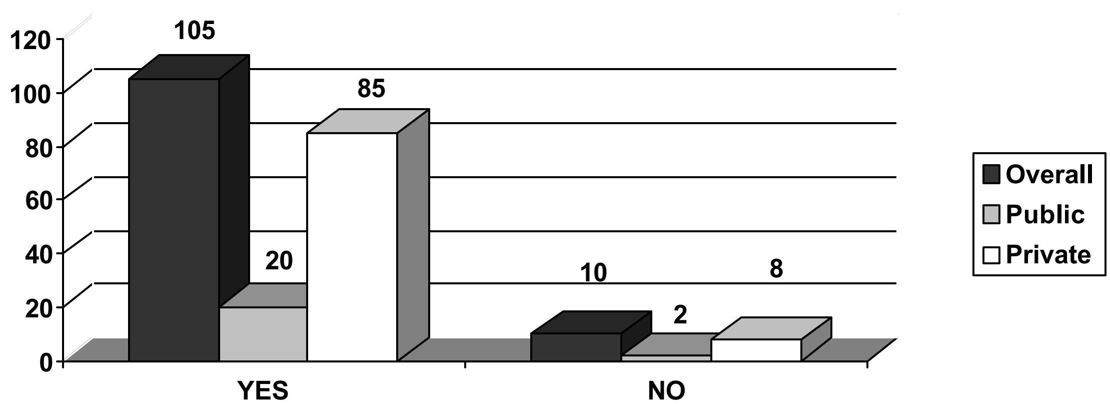


Exhibit 53 illustrates the qualified applicant pool and the breakdown between the public and private sectors.

Exhibit 53: Do employers believe there is a qualified applicant pool from which to hire – public vs. private.



Hiring new employees. Employers were asked to indicate the level of educational attainment from which they typically hire new employees. One hundred sixty-two respondents provided this information. Employers were also asked to indicate if they believed these individuals were well prepared to enter the workforce. Exhibit 54 depicts their responses.

Exhibit 54: Who do you currently hire and are they well prepared?

Overall Educational Attainment	Currently Hire?			(If yes) Well Prepared?		
	Yes	No	% Yes	Yes	No	Total
High school graduate	139	23	86%	99	14	113
College graduates	109	53	67%	87	3	90
Vo-Tech graduate	91	71	56%	63	6	69
Non-high school graduates	89	73	55%	65	24	89
Community College graduate	87	75	54%	59	3	62
Apprenticeships	21	141	13%	16	1	17
Public Sector Educational Attainment						
High school graduate	20	7	74%	17	1	18
College graduates	23	4	83%	21	0	21
Vo-Tech graduate	12	15	44%	9	1	10
Non-high school graduates	6	21	22%	4	2	6
Community College graduate	14	13	52%	11	1	12
Apprenticeships	3	24	11%	2	0	2
Private Sector Educational Attainment						
High school graduate	119	16	88%	82	13	95
College graduates	86	49	64%	66	3	69
Vo-Tech graduate	79	56	59%	54	5	59
Non-high school graduates	83	52	62%	61	22	83
Community College graduate	73	62	54%	48	2	50
Apprenticeships	18	117	13%	14	1	15

Overall, high school graduates appear to be the most popular group hired by the employers responding to the survey (86%). Of the employers hiring high school graduates, 99 (88%) believe these employees are well prepared. College graduates is the next most popular hiring pool with 67% of the respondents saying they hire from this group. Employers believe that college graduates are the best prepared of the group with 97% of those hiring college graduates saying such.

There appears to be more emphasis on hiring college graduates by the public sector (83%) than by the private sector (64%). Also, more non-high school and high school graduates are being hired in the private sector than in the public sector. Apprenticeships were utilized the least by both sectors.

Percentage of employees hired. Employers were asked to indicate the approximate percentage of employees they hired from each of the educational attainment groups.

They were asked to provide this information both for current hires as well as projected hires. In some instances, this question met with a great deal of difficulty among the survey respondents. Responses were more or less “off-the-cuff” since ample time was not available to research employment records for a more accurate response. Nevertheless, the following exhibit represents responses obtained by the survey professionals to this question. Note, not all survey respondents answered this question.

Exhibit 55: Percentage of current and future employees hired by educational attainment category.

	Current					Future				
Overall Educational Attainment	< 10%	10-25%	26-50%	51-75%	76-100%	< 10%	10-25%	26-50%	51-75%	76-100%
High school	13	29	21	15	30	5	23	4	9	9
College graduate	25	29	9	6	15	3	17	3	4	10
Vo-tech graduate	12	36	17	0	2	6	18	7	2	2
Non-high school grad	21	21	9	3	3	5	7	2	0	1
Community college grad	12	34	14	3	1	7	17	5	0	1
Apprenticeships	6	3	1	0	2	2	0	0	0	1
Public Sector Educational Attainment										
High school	6	4	1	1	3	3	5	1	0	2
College graduate	3	2	0	2	10	0	3	1	1	5
Vo-tech graduate	2	6	2	0	0	1	5	0	0	0
Non-high school grad	2	1	0	0	1	1	1	0	0	1
Community college grad	3	2	2	0	1	1	1	2	0	1
Apprenticeships	2	0	0	0	1	1	0	0	0	1
Private Sector Educational Attainment										
High school	7	25	20	14	27	2	18	4	9	7
College graduate	22	27	9	4	5	3	14	2	3	5
Vo-tech graduate	10	30	16	0	3	5	13	7	2	2
Non-high school grad	19	20	9	3	2	4	6	2	0	0
Community college grad	9	32	12	3	0	6	16	3	0	0
Apprenticeships	4	3	1	0	1	1	0	0	0	0

Exhibit 55 illustrates that overall, 30 businesses said they hire between 76% - 100% high school graduates. In the future, however, only 9 of the responding businesses expect to hire this many this percentage of their workforce from high school. Twenty-nine businesses hire between 10-25% of their workforce as college graduates. Seventeen businesses expect to hire this many college graduates in the future.

Reason for new hires. Employers were asked the reason why they hire new employees. They were allowed to provide multiple responses to this question, which are depicted in Exhibit 56.

Exhibit 56: Reason for new hires.

Overall Responses	**Importance Ranking**										
	Seldom								**Frequent**		
	1		**2**		**3**		**4**		**5**		**Total**
	#	%	#	%	#	%	#	%	#	%	
Employee turnover	53	38%	12	9%	12	9%	11	8%	51	37%	139
Increase business volume	20	30%	6	9%	13	20%	6	9%	21	32%	66
Business expansion	16	48%	4	12%	6	18%	2	6%	5	15%	33
Retirement	7	50%	0	0	0	0	2	14%	5	36%	14
Sector Responses											
Employee turnover											
Public	8	36%	3	14%	3	14%	1	5%	7	32%	22
Private	45	39%	9	8%	9	8%	10	9%	44	38%	117
Increase business volume											
Public	1	25%	1	25%	0	0%	1	25%	1	25%	4
Private	19	31%	5	9%	13	21%	5	8%	20	32%	62
Business expansion											
Public	2	67%	0	0%	0	0%	0	0%	1	33%	3
Private	14	47%	4	13%	6	20%	2	7%	4	13%	30

It appears that employee turnover is the largest reason why employers hire new workers. Increase in business volume is the second most prevalent reason for hiring new employees. Employee retirement is also a factor in employee turnover.

Anticipation of future new hires. Survey specialists asked the respondents if they anticipated their level of new hire needs to increase or decrease over the next 5 years. One hundred twenty-three respondents provided feedback for this question (Exhibit 57).

Exhibit 57: Anticipation of overall new hires and by what percent.

Number of businesses	***Percentage of growth***		***Number of businesses***	***Percentage of growth***		***Number of businesses***	***Percentage of growth***
1	**+75%**		**1**	**+12.5%**		**24**	**+**
1	**+65%**		**1**	**+12%**		**26**	**0**
1	**+60%**		**1**	**+11%**		**7**	**-**
3	**+50%**		**13**	**+10%**		**4**	**-5**
1	**+30%**		**1**	**+7%**		**6**	**-10**
1	**+25%**		**12**	**+5%**		**1**	**-25**
5	**+20%**		**4**	**+2%**		**2**	**-50**
3	**+15%**		**4**	**+1%**		**123**	**TOTAL**

Anticipation of new hires and by what percent was also reviewed according to sectors as follows in Exhibit 58 and Exhibit 59 below.

Exhibit 58: Anticipation of new public sector hires.

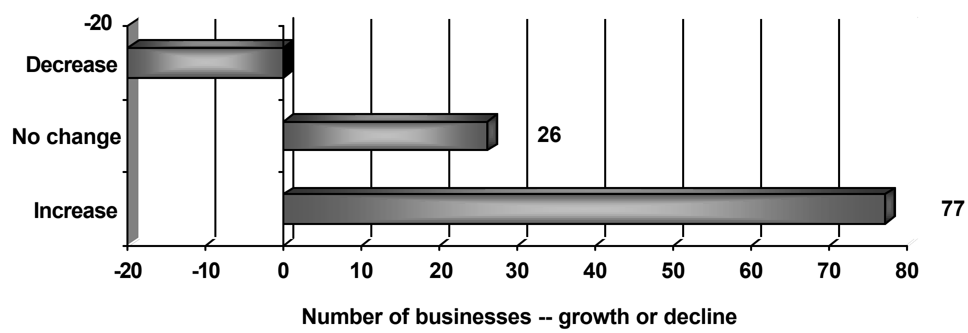
Number of businesses	Percentage of growth		Number of businesses	Percentage of growth
1	+65%		2	+10%
1	+60%		1	+2%
1	+50%		3	+
1	+15%		5	0
1	+12.5%		3	-
1	+12%		1	-10

Exhibit 59: Anticipation of new private sector hires.

Number of businesses	Percentage of growth		Number of businesses	Percentage of growth		Number of businesses	Percentage of growth
1	+75%		11	+10%		4	-
2	+50%		1	+7%		4	-5
1	+30%		12	+5%		5	-10
1	+25%		3	+2%		1	-25
5	+20%		4	+1%		2	-50
2	+15%		21	+			
1	+11%		21	0			

Exhibits 57, 58, and 59 demonstrate that more businesses expect to hire new employees and by larger percentages than those that do not or are downsizing. Twenty businesses indicated a negative change in hiring patterns over the next five years; seventy-seven businesses said they would be hiring additional employees. Twenty-six businesses expect no change. See Exhibit 60.

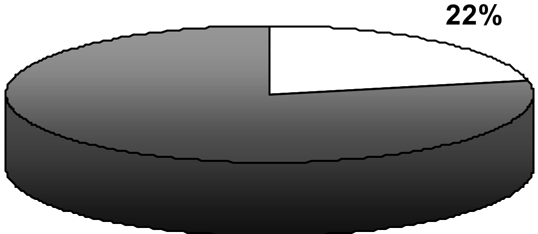
Exhibit 60: Increase vs. decrease of hiring needs over the next five years.



EDUCATION AND TRAINING NEEDS:

Survey specialists asked the business respondents a series of questions pertaining to training and their current training needs. When asked about their need for education and/or training for current employees, 78% of the respondents (138) said it was not needed, while 38 (22%) said there was a need. See Exhibit 61.

Exhibit 61: Does your company have a need for education and training of current employees?



Respondents who answered yes were asked to identify the specific type of education / training their company currently needs. The number beside each training type indicates the frequency with which it was mentioned. Exhibit 62 illustrates the responses.

Exhibit 62: Specific types of education / training needed.

Training need		Training need		Training need	
Technology training	4	Basic skills	1	Blue print reading	1
Computer	3	Math skills	1	Data base / web design	1
CNA training	2	Basic math	1	Critical thinking	1
Safety	2	Basic people skills	1	Care giving skills	1
Commercial drivers license	2	Parenting	1	Health related certificate	1
Driver safety training	2	Management	1	Various certifications	1
Public relations	2	Hospitality services	1	CEU training	1
Accounting	2				

Technology training was the top training need expressed by the survey respondents. Computer skills including data base / web design was also frequently mentioned.

Specific job areas in which positions are difficult to fill. Survey specialists asked the respondents to indicate any specific job areas in their company in which positions were difficult to fill with qualified employees. Exhibit 63 details these responses.

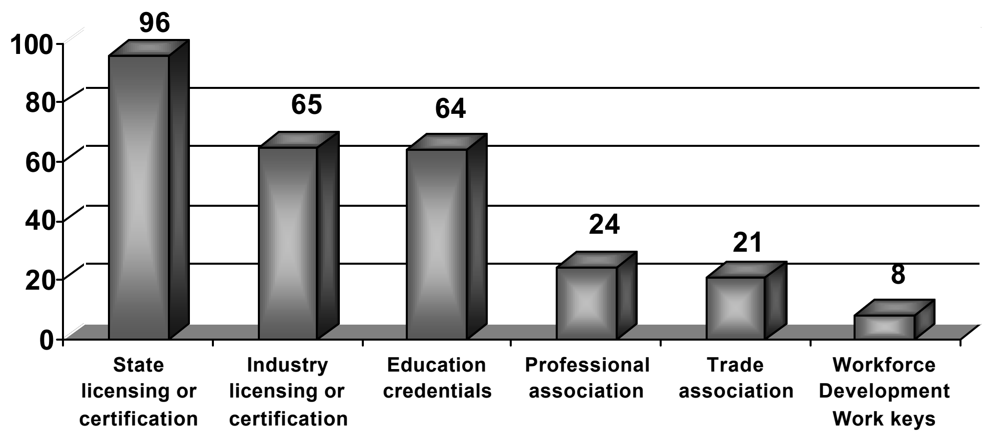
Exhibit 63: Specific job areas in which positions are difficult to fill.

Position		Position		Position	
Registered nurses	15	Sales clerk manager	1	Commercial drivers license	1
Certified Nursing Assistant	7	Ski School positions	1	Pre-kindergarten teachers	1
Radiologist	7	Software engineers	1	Speech/language patholog	1
LPN's	5	Cosmetologist	1	Manufacturing skills	1
Machinists	4	Chemist	1	Nursery	1
Foreign language	3	Home health care	1	Audiologist	1
Counselors	3	Dishwasher	1	Product designers	1
Doctor	3	Mechanic	1	Electronic technician	1
Meat cutter	3	Dental	1	Information system speci	1
Math, physics, chemistry	3	Electrical inspection	1	Graphic design	1
Engineer	3	Auto CAD	1	Clerical	1
Special Education	3	Mining	1	House monitor	1
Office help	2	Substitute	1	Paramedics / EMT	1
Manager	2	Lab technician	1	Housekeeping	1
Administrative	2	Mining	1	Exercise physiologist	1
Deli worker	2	Treatment operator	1	Driller	1
Accounting	2	Welder	1	Masonry instructor	1
Mill operator/workers	2	Supervisors	1	Child protective services	1
Activities programming	1	Bus drivers	1	Water skiing	1
Computer programmer	1	Foreman	1	Heavy machine operator	1
Computer technician	1	Pipe fitter	1	Lifeguard	1
Computer technology	1	Sales	1		

An apparent need among survey respondents centers around the health care industry and the need for more doctors, nurses, radiologists, and the like. Also machinists, counselors, meat cutters, and engineers were mentioned several times.

***Quality or competency standards*.** Employers were asked if their companies were guided by any quality of competency standards. Respondents could provide more than one answer to this question. Exhibit 64 illustrates the replies.

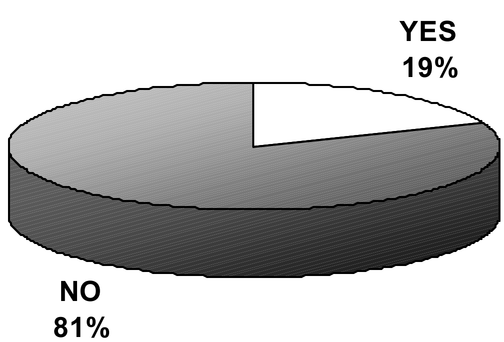
Exhibit 64: Quality or competency standards guiding companies of respondents.



Ninety-six of the responding businesses (55%) have quality or competency standards guided by state licensing or state certification. Sixty-five of the respondents (37%) have quality of competency standards guided by industry licensing or certification.

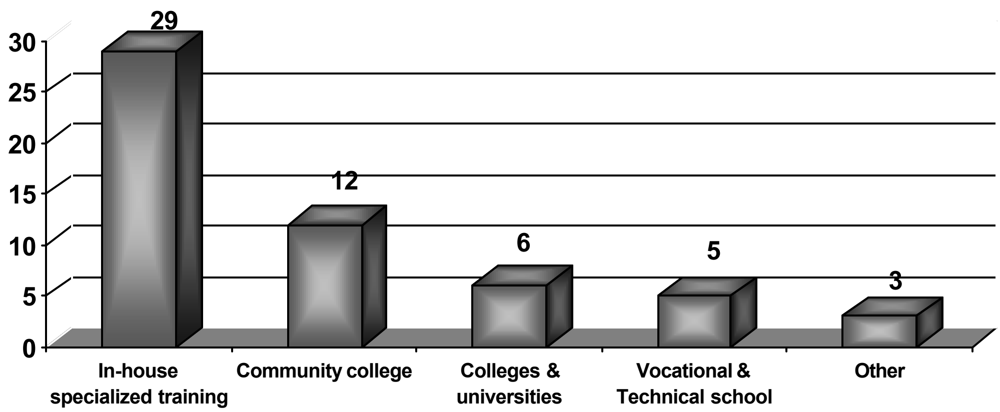
Career progression training. Respondents were asked if their companies have a need for career progression training programs that will provide advancement opportunities to present employees. Only 33 (19%) of the respondents said yes as illustrated in Exhibit 65.

Exhibit 65: Need for career progression training programs.



Types of progression training needed. Employers indicating a need for training revealed the types of progression training they would like to have. Exhibit 66 explains.

Exhibit 66: Types of progression training needed.



The majority of employers indicating a need for progression training would like to have in-house specialized training. "Other" responses included administrative structuring, associate degree for clerical staff, and machinist.

Specific careers for which the career progression training prepares employees are included in Exhibit 67. The number to the side of the career name is the frequency with which the career was mentioned by the survey respondents.

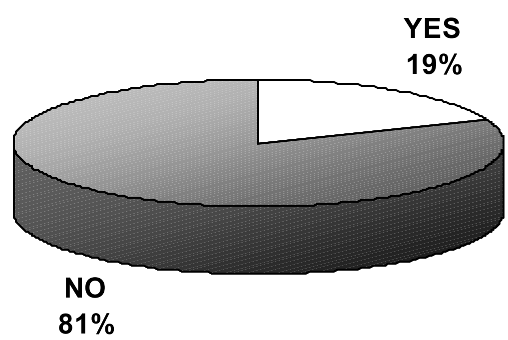
Exhibit 67: Specific careers resulting from progression training.

Career		Career		Career	
Management	23	EMT	1	Software skills training	1
LPN	5	RN's	1	Photography	1
Safety	4	Radiology	1	Graphic design	1
Administration	3	Accounting	1	Dietary	1
Counseling	2	Machinery	1	Service coordinator	1
Education	2	Nurse aide	1	Teaching	1
Engineer	2	Home health aide	1	Social work	1
CNA	2	Human resources	1		
Any hospitality field	1	Information technology	1		

The most prevalent career progression training need appears to be management with 23 responses fitting into this category. Medical related positions ranked next with LPN, Certified Nursing Associates, EMT, RNs radiology, nurse aide, home health aide, and dietary all mentioned to some degree.

Incentives for gaining additional education/training. Employers were asked if their company provided any type of tuition assistance or incentives for present employees to attain additional education (post-secondary or above). From the total respondent pool, only 19% (33) of the employers said that their company does this. Exhibit 68 describes.

Exhibit 68: Tuition assistance or incentives to attain additional education.

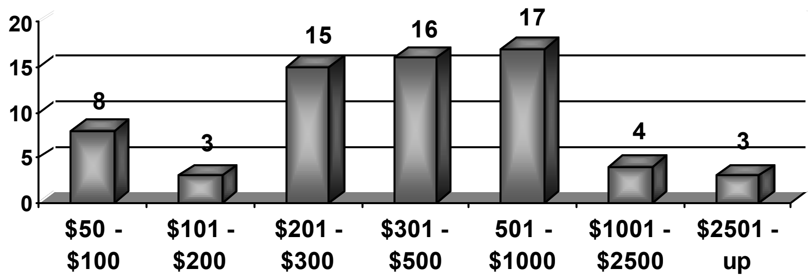


Types of tuition assistance varies greatly among the businesses. Most often, however, companies give their employees tuition reimbursement (50 companies). Respondents also said that their companies provide tuition assistance; have scholarship programs; and will provide time off from work to attend classes. Some of the businesses have a flat rate they pay. For example, one company will repay 75% for tuition and books up to $2,000 per year – if the courses are job related. Another pays $800 annually toward higher education and provides release time to go to school.

Many of the tuition reimbursement programs mentioned are based on a cause and effect arrangement. For example, if the employee makes an "C" in the class or better, then the company will reimburse 80% of the tuition cost. Or an employee must be on the job for at least one year to receive 75% reimbursement for additional education. Other companies will assist with tuition if the classes pertain to the employee's job.

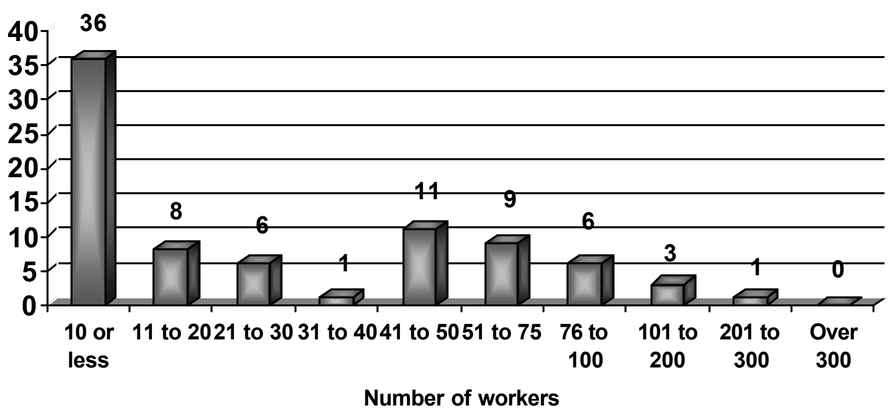
Cost per worker. Employers were asked to reveal how much they spend per worker on annual training. Sixty-six respondents said that they spend as little as $50 to as much as $5,000 per worker. The majority of respondents spend between $200 and $1,000 per employee on annual training. Exhibit 69 illustrates.

Exhibit 69: Amount responding employers spend on training per worker annually.



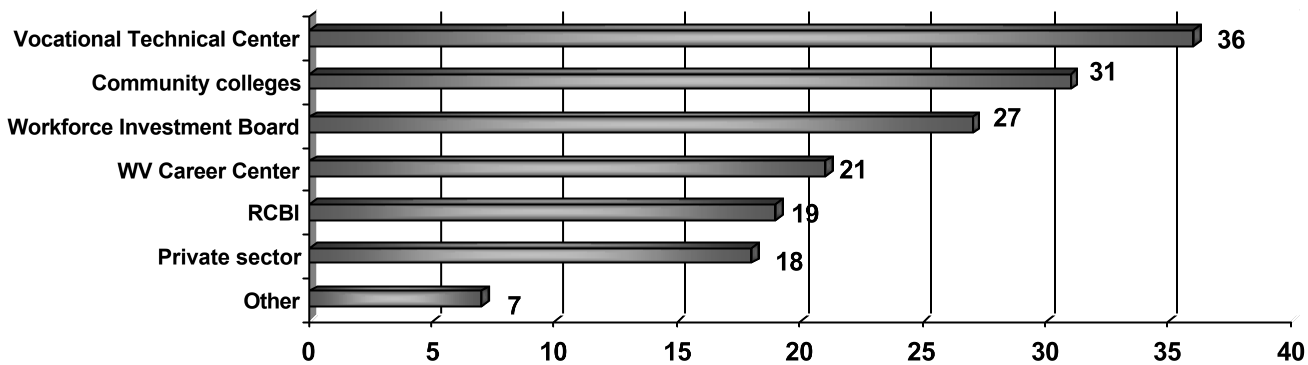
Workers undergoing annual training. Only 46% of the responding employers said that they send workers to training annually (81 reported sending workers to training). Employers send as few as 1 worker to as many as 300. Thirty-six respondents send 10 or fewer employees for annual training. The number of workers sent by employers to annual training is depicted in Exhibit 70 below.

Exhibit 70: Number of workers sent to training by responding employers.



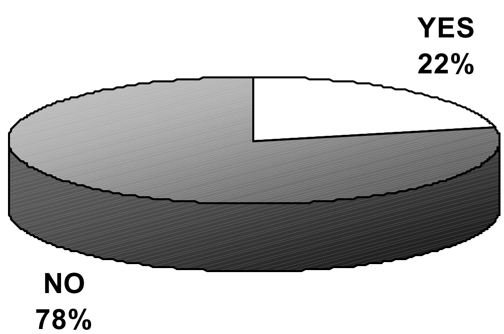
Partnership with other employee training programs. Employers were asked if they were be interested in working in partnership with other employee training programs. Vocational / technical schools were the top choice (36 respondents) with community colleges (31) and Workforce Investment Board (27) following close behind. Twenty-one respondents mentioned work for West Virginia Career Center, while 19 indicated an interest in working with RCBI. Eighteen would like to work with the private sector. "Others" mentioned included Department of Agriculture, Job Service, and West Virginia DNR. Exhibit 71 illustrates this data.

Exhibit 71: Companies interested in working in partnership with other employee training programs



Companies indicating an interest in working in partnership with other employee training programs were asked if they foresee sending employees for this training annually. Thirty-eight respondents (22%) said that they would send employees to this training on an annual basis. Exhibit 72 illustrates.

Exhibit 72: Foresee sending employees to annual training with training partnership?



Nineteen companies stating they would send employees to annual training with training partnerships said that they would spend various amounts per worker to do so. See Exhibit 73:

Exhibit 73: What companies would spend per worker to attend annual training with partnership

Amount		Amount		Amount	
$50	1	$300	2	$1,000	4
$70	1	$500	2	$2,000	1
$150	1	$750	2	$4,000	1
$200	1	$850	1	$5,000	1
Whatever it costs	1				

Four other companies said that they might send employees to annual training depending upon the training and how quickly it is completed, depending upon the number of people being trained, and depending upon the type of training being undertaken.

Interest in customized employee training programs sponsored by an external organization. Respondents were asked to comment on their interest in employee training programs tailored specifically to their needs. Fifteen percent (27) of the overall respondents said they would be interested in this type of training as depicted by Exhibit 74. Respondents further reported that they were willing to pay between $100 and $4,000 per employee for this customized training as shown in Exhibit 75.

Exhibit 74: Interest in customized employee training programs.

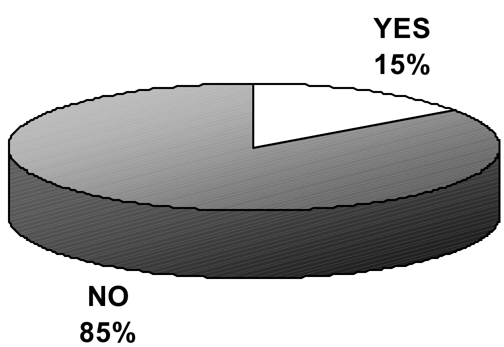
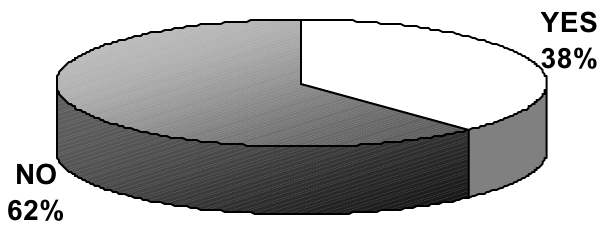


Exhibit 75: What companies would spend per worker for customized training.

Amount		Amount		Amount	
$100	1	$150	1	$1,000	1
$2,000	1	$4,000	1	Depends upon training	1
Open for suggestions	1				

Awareness of economic development or workforce development agencies. Respondents were asked if they were aware of any economic development or workforce development agencies that are available to assist them with employee training needs. Sixty-seven respondents (38%) said that they were as illustrated in Exhibit 76.

Exhibit 76: Awareness of agencies available to assist with employee training needs.



Specific agencies that companies mentioned are listed in Exhibit 77. Also included in the exhibit are the agencies that the responding companies have utilized for training.

Exhibit 77: Awareness and utilization of agencies providing employee training assistance.

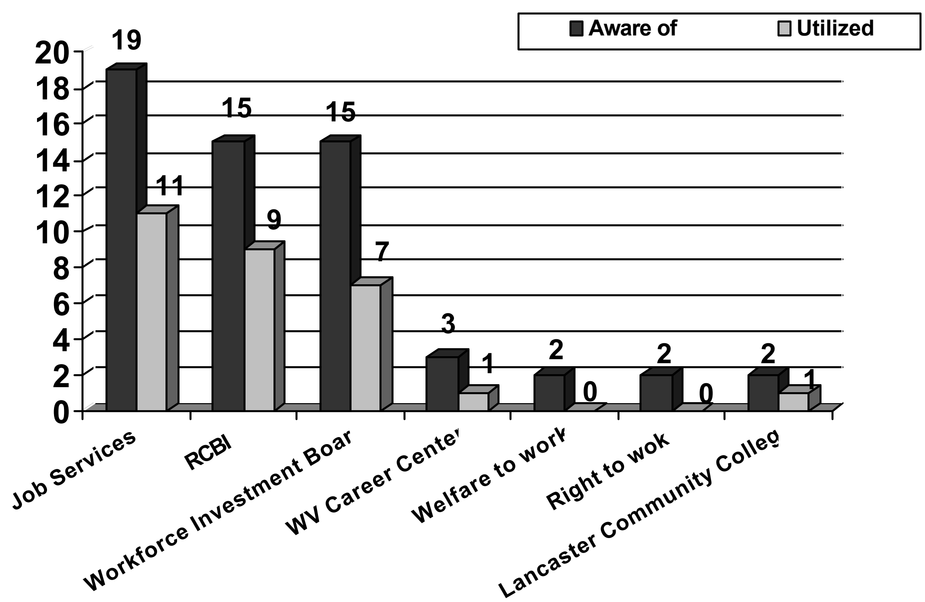


Exhibit 77 demonstrates that Job Services is the most widely known and utilized agency among the survey respondents to assist with employee training needs. The RCBI (Robert C. Byrd Institute) was mentioned by 15 respondents and utilized by 9. The Workforce Investment Board was also mentioned by 15 respondents but utilized by 7.

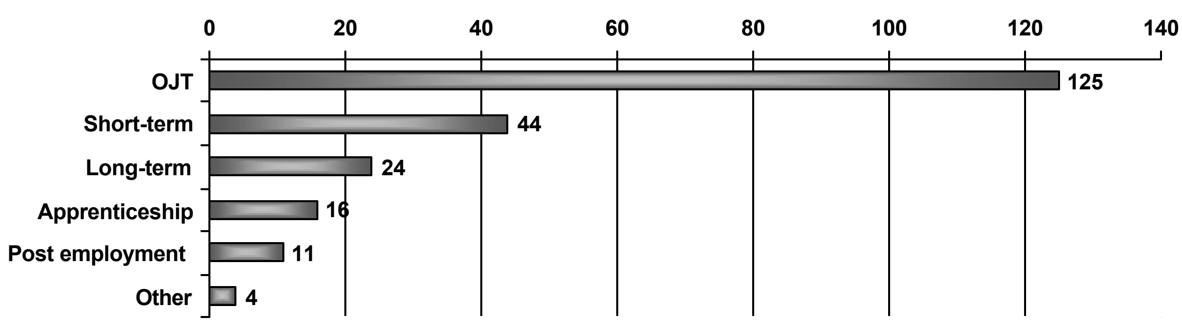
Employers utilizing these training programs were asked if they were satisfied with the services that were provided. The only negative feedback received concerned Job Services. Five respondents were not happy with the training they received citing that Job Services applicants did not have basic skills, the Job Services people provided to the respondent were not dependable (3 responses); and the people lacked skills and once they were trained they were not willing to work. Positive feedback regarding the training programs has been included in Exhibit 78.

Exhibit 78: Positive feedback regarding workforce training programs.

Agency	Feedback
RCBI (8 responses)	Provided necessary training in a timely fashion. Provided training "when we were in a bind."
WIB (6 responses)	Convenient gradual training; helped young adults and adults in the community stay and find work / training; provide training to assist those in the field; quick response for employment opportunities; very professional – created an opportunity to keep young adults and adults working in the community.
Lancaster Community College (2 responses)	Excellent. Tailored specifically for needs. Gives excellent pre-employment training.
Job Services (5 responses)	Satisfied.

Most appealing types of training programs for new hires. Survey specialists asked the respondents about the type of training programs for new hires that would be the most appealing to their company. Seventy-one percent (125) said "on-the-job" training; 25% (44) were in favor of short-term, specialized training. Exhibit 79 illustrates.

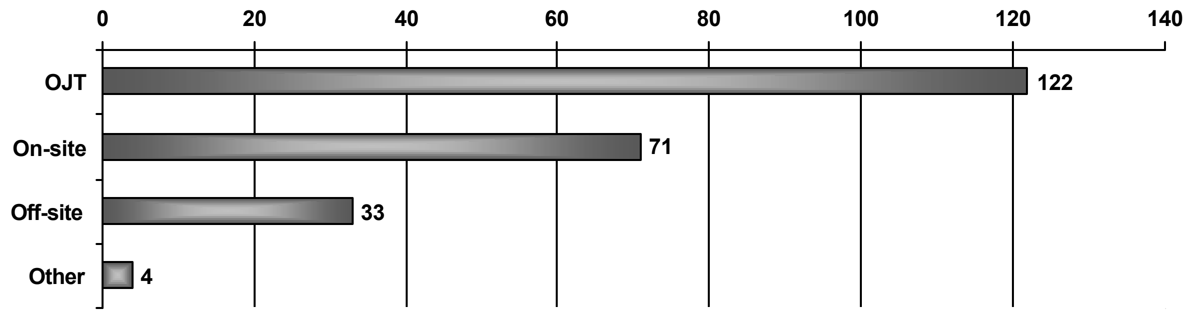
Exhibit 79: Types of training programs for new hires in which companies are most interested



"Other" responses include continued education training, degree completion, and "do own training most of the time."

Most desirable location. Employers were asked where the most desirable location would be for employee training. On-the-job-training was the most popular choice (69%) followed by on-site (40%). Off-site training appealed to only 19% of the respondents (33). Employers were allowed to choose more than one answer to the question. See Exhibit 80.

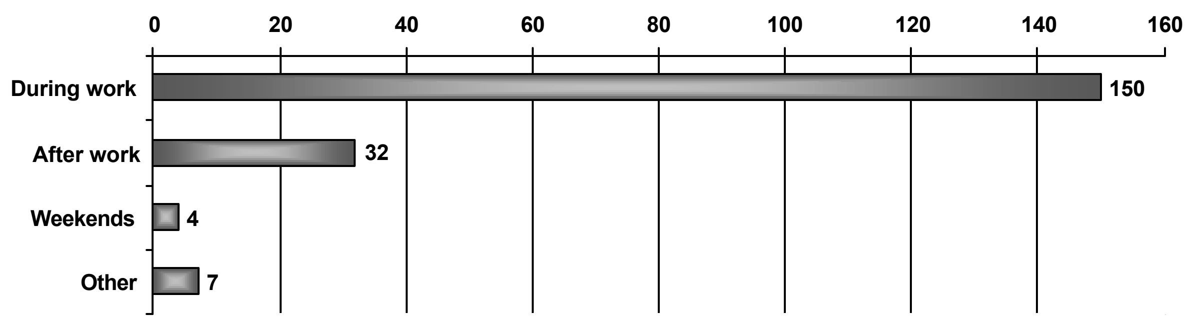
Exhibit 80: Most desirable location for employee training.



"Other" responses include locating training at the vo-tech center; and locating the training at the community college.

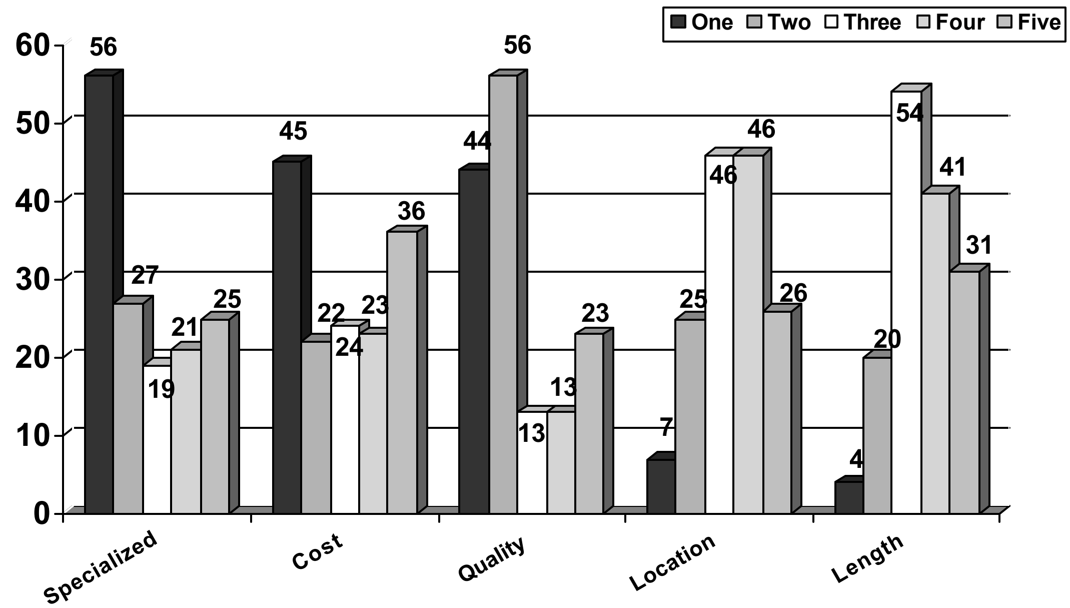
Most desirable time for training. Employers were also asked to reveal the most desirable time for employee training. Most (85%) said during work; some (18%) said after work; and few (2%) said weekends. Other responses included "on their own time." Exhibit 81 illustrates.

Exhibit 81: Most desirable time for employee training.



Employee training factors. Employers were asked to rank a series of training factors from 1 (most important) to 5 (least important) to ascertain the level of importance of these factors. It appears that employers are more concerned with the specialized training program than with the location of the training or the program length. Exhibit 82 illustrates.

Exhibit 82: Training factors most important to employers.



Assistance with assessing job skills or identifying job competencies. Few respondents (13) had a desire for assistance with assessing job skills (7%) nor with identifying job competencies (14 respondents or 8%). Exhibits 83 and 84 illustrate.

Exhibit 83: Assistance with assessing job skills?

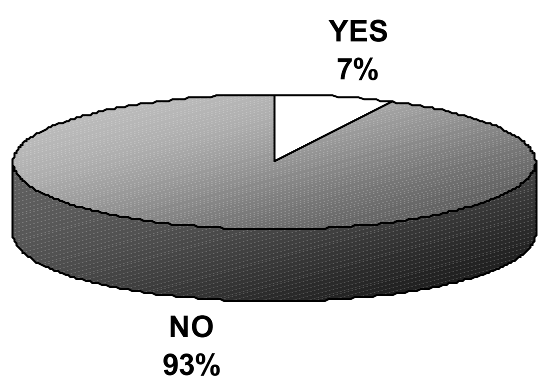
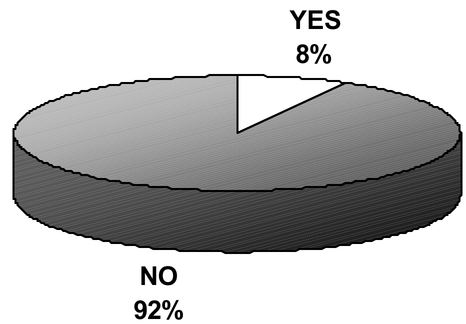


Exhibit 84: Identifying job competencies?



Employees with disabilities. Survey respondents were asked if their company hires persons with disabilities. Over 88% of the respondents (155 companies) said that their company does hire individuals with disabilities as illustrated in Exhibit 85. These companies represent 169 disabled employees. Exhibit 86 depicts the number of disabled workers businesses reported having on their employee roster.

Exhibit 85: Respondents employing individuals with disabilities.

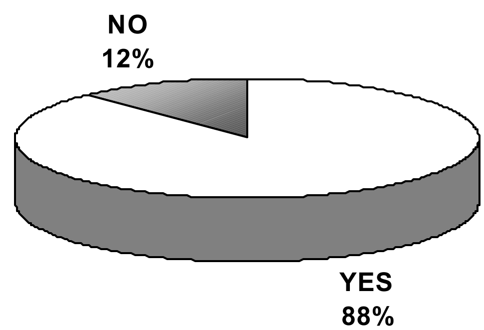
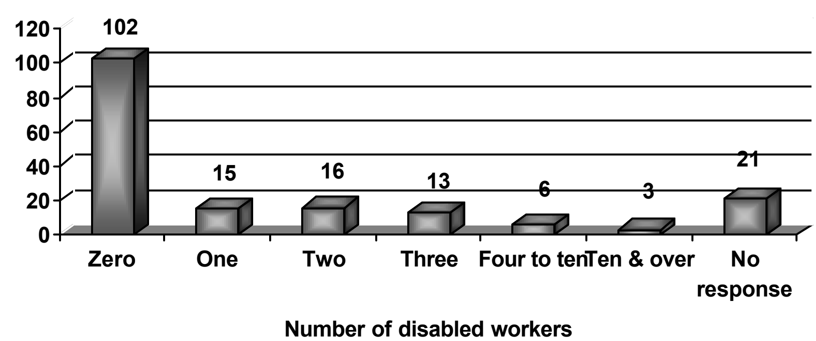


Exhibit 86: Number of disabled workers employed by respondents.



Employers were asked to report any adjustments to the workplace that were made to meet the needs of their employees with disabilities. Exhibit 87 lists their responses:

Exhibit 87: Adjustments made to the workplace to accommodate workers with disabilities.

Feedback	
ADA compliant (8 responses)	Equipment for an eye problem
No adjustment necessary (5)	Schedule flexibility
Wheelchair access (5)	Chair adjustments
Parking and building access (2)	Bathroom upgrade
Hearing impaired telephones (2)	Time off for medical reasons
Special training (2)	Elevator
Installed a ramp (2)	Work station size
Help / assistance with lifting (2)	Accessibility
Rubber mat in kitchen (employee is a cook)	Adjusted work environment to suit disability

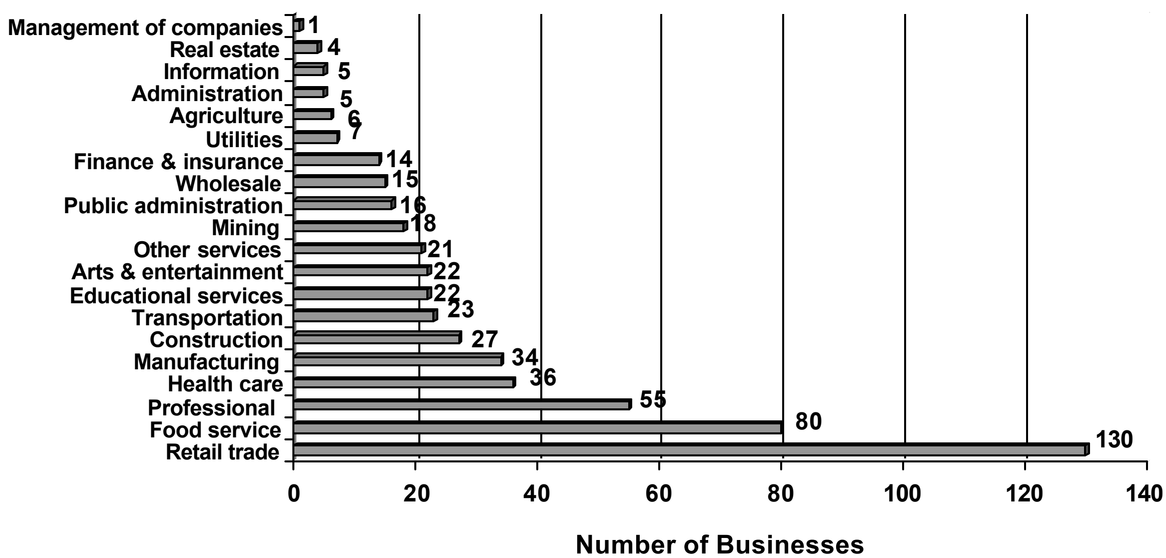
Workforce development focus groups. Finally, employers were asked if they would be interested in participating in a focus group on emerging occupations, curriculum development by industry, youth employability, and other workforce development issues. Thirty-two individuals agreed to participate. Names, companies represented, and contact telephone numbers were provided in the earlier draft report.

PREVIOUS DATA COLLECTION:

During January 2002, CBER telephone survey specialists collected 542 brief surveys of various businesses in the Region 1 geographic area. Though this survey is less comprehensive than the extensive survey conducted specifically for the State of the Workforce project, the results parallel the preceding results.

Industry representation. As in the previous survey, industries were well represented by the respondents to the shorter survey. See Exhibit 88.

Exhibit 88: Industries represented in the brief business survey.



The majority of respondents were from the retail trade industry (130), food service / accommodation industry (80), or the professional services industry (55). Firms within these particular industries typically employ fewer employees per business.

Present and future number of employees. Respondents to the brief survey were asked to report the number of workers they presently employ as well as the number of employees they anticipate hiring over the next 5 years. Responding firms said they currently have from between 1 to 1,100 employees and expect to hire from between 1 and 500 employees over the coming 5 years.

Exhibit 89 illustrates the current number of employees held by the respondents while Exhibit 90 shows the number of employees respondents expect to hire over the next 5 years.

Exhibit 89: Current number of employees reported by short survey respondents.

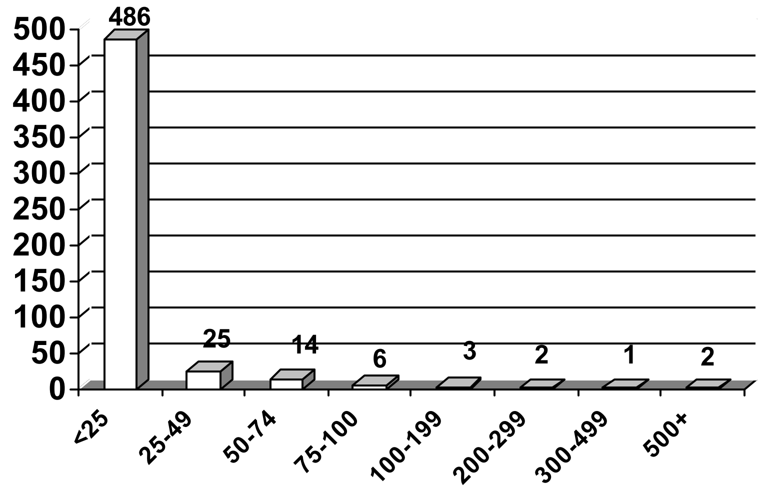


Exhibit 89 demonstrates that most of the respondents (511) to the brief survey employed fewer than 50 employees and thus represent the smaller firms located within the region.

Exhibit 90: Number of employees anticipated to be hired over the next five years.

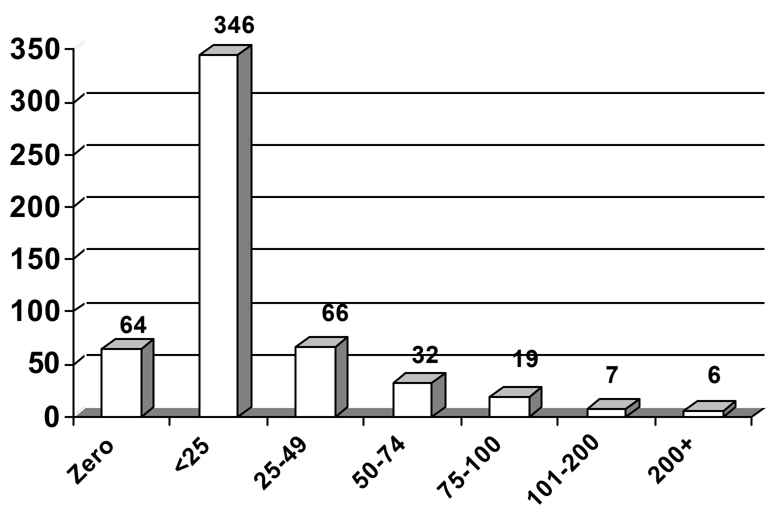


Exhibit 90 illustrates that most respondents anticipate hiring less than 25 new employees over the next five years. Only 13 respondents anticipate hiring over 100 new employees during this timeframe.

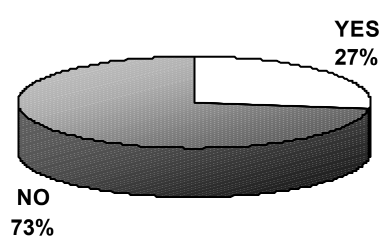
Job skills. Respondents were asked open–ended questions concerning job skills and knowledge they look for when hiring new employees. Oral skills and people skills topped the list with 242 firms looking for one of these two attributes in their new employees. Computer skills and math skills were the next most popular job skill these employers desired from new hires (86 & 83 respectively). Written skills were also frequently mentioned.

Experience and appearance were listed by several respondents while specific certifications such as commercial driver's license, EMT, and K-12 certifications were also noted.

Respondents said they found that basic math and oral skills were lacking during interviews with potential employees. Experience, common sense, lack of education, and a lack of the willingness to work were also prevalent. Many respondents also cited the lack of written skills, computer skills, and people skills they have noted while conducting new employee interviews over the past year.

Willingness to pay for employees to further education. Respondents to the short survey were asked if they would be willing to pay or partially pay for continuing education for their employees. Nearly three-fourths of the respondents (392) were not willing to assist while 148 (27%) said yes. Exhibit 91 illustrates.

Exhibit 91: Employers' willingness to assist employee with continuing education expenses.



The data from the short survey supports the data obtained during the extensive survey effort in that it appears that employers from both efforts have identified similar needs regarding hiring new employees and what skills they believe are lacking among the present employee pool. Further both efforts demonstrate that there active hiring is anticipated over the next five years – with perhaps more hiring activity anticipated in the larger firms.

Finally, many employers are willing to assist employees with continuing education. These employers are willing to either pay for or partially pay for additional education and training for their workers.

Section II:

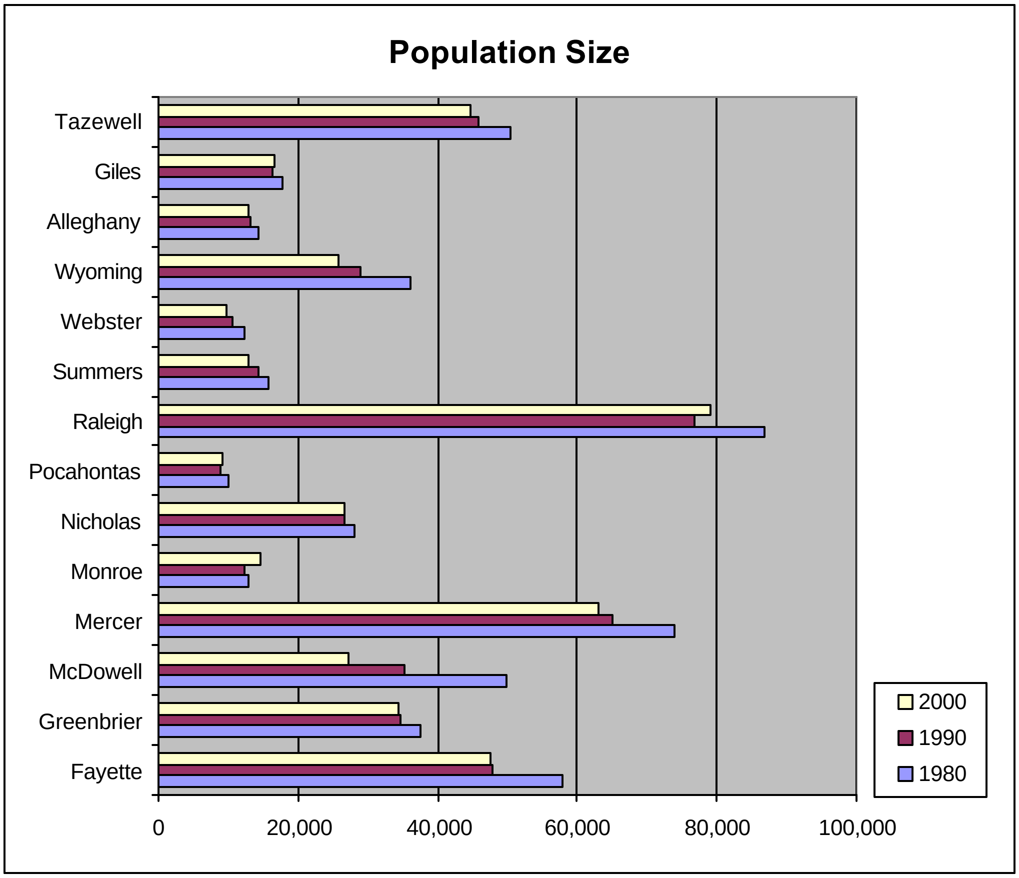
Regional Profile

State of the Workforce Report
Region 1 Workforce Investment Board

Section II: Regional Profile — *Table of Contents*

SUMMARY OF DATA FINDINGS

- Population is small, and continuing to decline, in some parts of the region. Outmigration, the leading cause of declining population, continued in many counties in the late 1990s.
- The aging of the workforce is expected to continue as the baby-boom generation enters retirement age. Potential shortfalls in the workforce are expected after 2009. However, this shortfall may be sooner if the trend in outmigration continues and the rate of migration of youth and young adults are greater than that of the general population.
- Low labor force participation rates in most of the region. Factors that may contribute to these low rates include, but are not limited to, relatively large proportions of retirees and high rates of adult population with work disability.
- Low labor force participation rates contribute directly to the region's relatively small labor force. Current trends show uncertainty in the future direction of the labor force.
- The unemployment rates are generally higher than the state and national averages, but not alarmingly so. However, it should be remembered that unemployment rates do not account for "discouraged workers," individuals who are not working, and because of discouragement are not looking for a job.
- The educational attainment of the workforce is improving but still below the national average. Lack of educational attainment has direct implications on worker productivity and earnings, and may deter potential employers with higher paying jobs from coming to the region. Of particular concern is that the 25-44 years old group is the second largest group among those who lack a high school diploma, after the 60 years and older group.
- Low levels of basic skills in the region, as measured by the Level 1 literacy rate, may be a leading cause of barrier to employment, leading to relative lower labor force participation rates and higher unemployment rates, as well as relatively lower paying jobs.
- While improvements in the ACT standardized test scores in some counties are encouraging, they still fall below the national average. It should also be cautioned that because only about one in every two children in the region takes the test, observations about trends in test scores are representative of the average student performance only to the extent that the test takers are representative of the student population.
- The region's relatively low per capita personal income and median income levels may be due to lack of job opportunities and/or higher paying jobs, both direct consequences of low educational attainment and basic skills. The income measures are likely to be biased downward due to the region's relatively high proportion of retirees and high percentage of adult population with work disability.
- At the 1-digit level, the top employing industries in the region are services, trade, and government. At the 1- and 2-digit level, they are health services, educational services, eating and drinking places, and automotive dealers and gasoline service stations. This is expected to continue into the near future.



Why Is This Important?

Since population size is the number of residents who live in a geographic area, it is an indicator of the potential size of the labor force adjusting for commuters.

How Are We Doing?

In 2000, except for Mercer and Raleigh counties, all other counties in the region have less than 50,000 residents. The population in Workforce Investment Area 1 is about 19.37 percent of the state's population, down from 20.17 percent a decade ago and 21.61 in 1980. There is limited diversity in the region and state (see table on page 3).

What Are The Implications?

The relatively small population size suggests a small labor force.

Population Size, 1970 to 2000

	1970	1980	1990	2000
Fayette	49,332	57,863	47,952	47,579
Greenbrier	32,090	37,665	34,693	34,453
McDowell	50,666	49,899	35,233	27,329
Mercer	63,206	73,942	64,980	62,980
Monroe	11,272	12,873	12,406	14,583
Nicholas	22,552	28,126	26,775	26,562
Pocahontas	8,870	9,919	9,008	9,131
Raleigh	70,080	86,821	76,819	79,220
Summers	13,213	15,875	14,204	12,999
Webster	9,809	12,245	10,729	9,719
Wyoming	30,095	35,993	28,990	25,708
Alleghany	12,461	14,333	13,176	12,926
Giles	16,741	17,810	16,366	16,657
Tazewell	39,816	50,511	45,960	44,598
WIA 1	361,185	421,221	361,789	350,263
W V	1,744,237	1,949,644	1,793,477	1,808,344
US	203,211,926	226,545,805	248,709,873	281,421,906

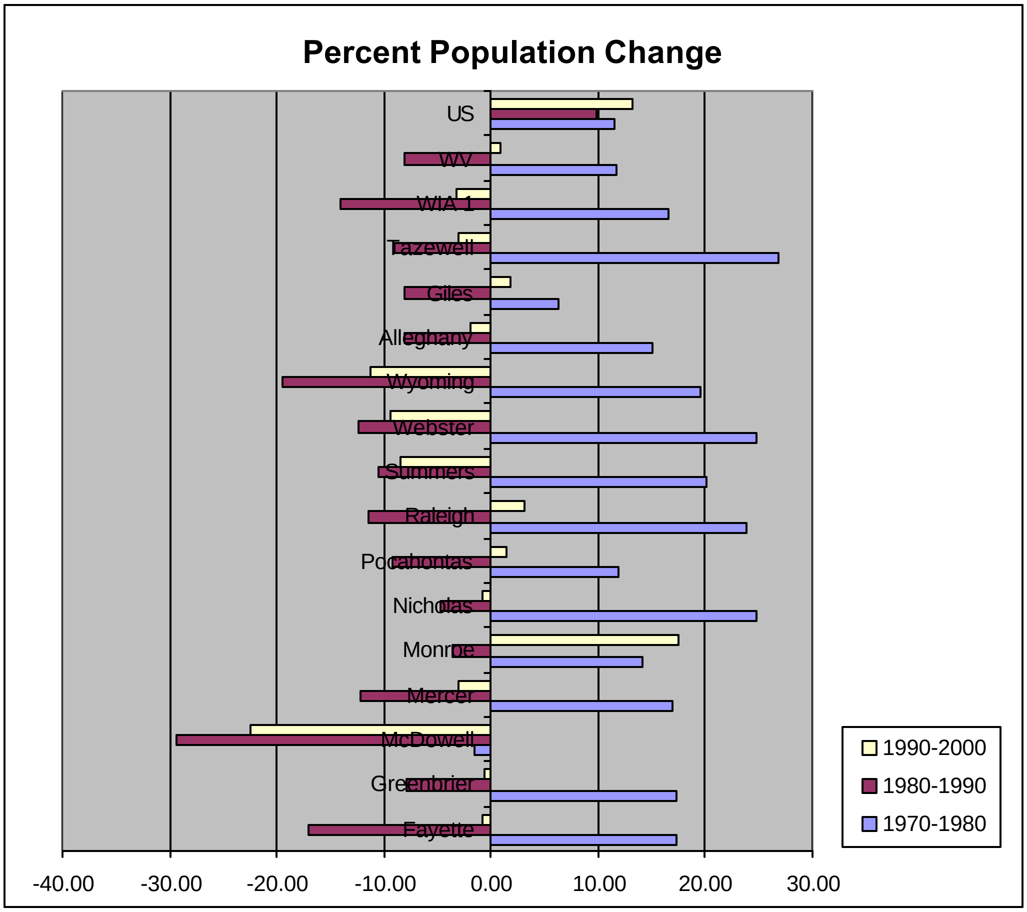
Source: http://www.census.gov/population/cencounts/ and

http://factfinder.census.gov/servlet/BasicFactsServlet (Census 2000: Population and Housing (QT)).

Percent of Population, 2000

	Race			Hispanic or Latino and Race						
	One Race	White	Two or More Races	Hispanic or Latino	Mexican	Puerto Rican	Cuban	Other Hispanic or Latino	Not Hispanic or Latino	White Alone
Fayette	99.10	92.70	0.90	0.70	0.30	0.10	0.00	0.30	99.30	92.20
Greenbrier	99.00	95.20	1.00	0.70	0.20	0.10	0.00	0.40	99.30	94.70
McDowell	99.30	87.10	0.70	0.50	0.20	0.00	0.00	0.20	99.50	86.70
Mercer	99.20	92.60	0.80	0.50	0.10	0.10	0.00	0.20	99.50	92.20
Monroe	99.10	92.70	0.90	0.50	0.10	0.00	0.00	0.30	99.50	92.20
Nicholas	99.50	98.80	0.50	0.50	0.20	0.00	0.00	0.30	99.50	98.50
Pocahontas	99.40	98.40	0.60	0.40	0.10	0.10	0.00	0.30	99.60	98.00
Raleigh	99.20	89.60	0.80	0.90	0.20	0.10	0.00	0.60	99.10	88.90
Summers	99.20	96.60	0.80	0.50	0.10	0.10	0.00	0.20	99.50	96.10
Webster	99.30	99.20	0.70	0.40	0.10	0.00	0.00	0.20	99.60	98.80
Wyoming	99.50	98.60	0.50	0.50	0.10	0.00	0.00	0.40	99.50	98.10
Alleghany	99.50	96.30	0.50	0.40	0.10	0.10	0.00	0.20	99.60	96.10
Giles	99.50	97.40	0.50	0.60	0.30	0.00	0.00	0.20	99.40	96.90
Tazewell	99.40	96.20	0.60	0.50	0.10	0.10	0.00	0.30	99.50	95.80
WIA 1	99.20	93.16	0.80	0.62	0.17	0.07	0.02	0.37	99.38	92.67
W V	99.10	95.00	0.90	0.70	0.20	0.10	0.00	0.30	99.30	94.60
US	97.60	75.10	2.40	12.50	7.30	1.20	0.40	3.60	87.50	69.10

Source: http://factfinder.census.gov/servlet/BasicFactsServlet (Census 2000: Population and Housing (QT)).



Why Is This Important?

The percentage change in an area's population size indicates how quickly the population, hence the potential size of the labor force, is increasing or decreasing.

How Are We Doing?

In the 1970s, all counties, except McDowell and Giles, experienced above average population growth rates relative to the state and the nation. However, the 1980s saw above average population decline in all but three counties, Greenbrier, Monroe, and Nicholas. Four counties, Monroe, Pocahontas, Raleigh, and Giles, experienced population growth in the 1990s while the rate of population decline fell in the other counties. A very high rate of population decline continued in McDowell county. Within Workforce Investment Area 1, population decline slowed from 14.11 percent in the 1980s to 3.19 percent in the 1990s. Meanwhile, from 1990 to 2000, the state's population grew marginally by 0.83 percent, and the nation's population increased by 13.15 percent.

What Are The Implications?

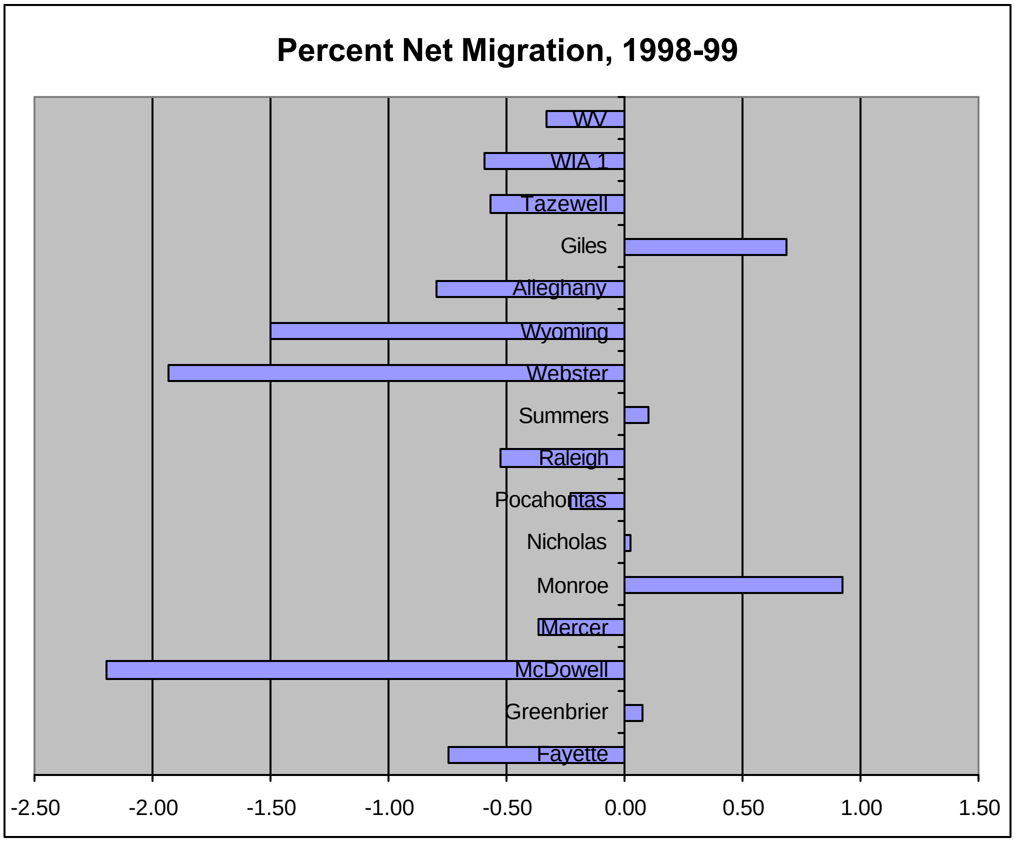
Except for Monroe county, the population trend in all other counties, the region, and the state, although improving, is not keeping up with the rest of the country. Furthermore, as long as the change in population remains negative, the pool of potential labor force will continue to fall.

Percent Population Change, 1970 to 2000

	1970-1980	1980-1990	1990-2000
Fayette	17.29	-17.13	-0.78
Greenbrier	17.37	-7.89	-0.69
McDowell	-1.51	-29.39	-22.43
Mercer	16.99	-12.12	-3.08
Monroe	14.20	-3.63	17.55
Nicholas	24.72	-4.80	-0.80
Pocahontas	11.83	-9.18	1.37
Raleigh	23.89	-11.52	3.13
Summers	20.15	-10.53	-8.48
Webster	24.83	-12.38	-9.41
Wyoming	19.60	-19.46	-11.32
Alleghany	15.02	-8.07	-1.90
Giles	6.39	-8.11	1.78
Tazewell	26.86	-9.01	-2.96
WIA 1	16.62	-14.11	-3.19
W V	11.78	-8.01	0.83
US	11.48	9.78	13.15

Source: http://www.census.gov/population/cencounts/ and

http://factfinder.census.gov/servlet/BasicFactsServlet (Census 2000: Population and Housing (QT)).



Why Is This Important?

Percent net migration provides important information about the rate of population movement into and out of a geographic area. This may be an indicator of the desirability of the area in terms of place of residence or job/career opportunities.

How Are We Doing?

In the 1998-99 period, net inmigration of less than one percent each occurred in five counties while net outmigration occurred in the other nine counties, as high as 2.19 percent in McDowell county. The rate of outmigration in Workforce Investment Area 1 exceeds the state average.

What Are The Implications?

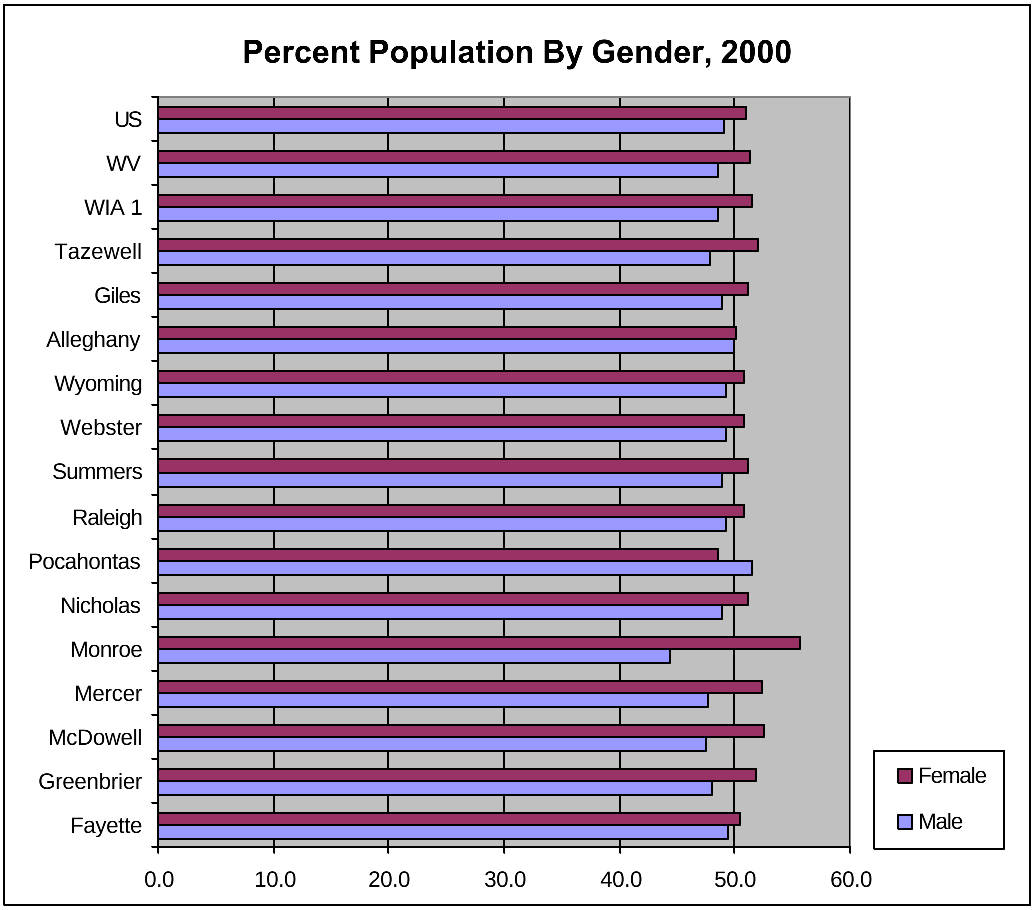
When viewed together with the population data, this suggests that net outmigration is likely an important reason for the population decline and/or slow population growth in the region.

Percent Net Migration, 1998-99

	Population on 7/1/98	Net International Migration	Net Domestic Migration	Net Total Migration	Percent Migration 1998-99
Fayette	47,094	4	-357	-353	-0.75
Greenbrier	35,349	9	17	26	0.07
McDowell	29,997	1	-659	-658	-2.19
Mercer	64,342	6	-238	-232	-0.36
Monroe	13,191	0	122	122	0.92
Nicholas	27,557	2	6	8	0.03
Pocahontas	9,093	0	-21	-21	-0.23
Raleigh	79,232	20	-437	-417	-0.53
Summers	13,919	-1	15	14	0.10
Webster	10,238	1	-199	-198	-1.93
Wyoming	27,341	0	-410	-410	-1.50
Alleghany	12,197	6	-103	-97	-0.80
Giles	16,244	0	112	112	0.69
Tazewell	46,659	21	-286	-265	-0.57
WIA 1	357,353	42	-2,161	-2,119	-0.59
W V	1,811,688	238	-6,298	-6,060	-0.33

Source: http://eire.census.gov/popest/archives/county/co-99-3/99C3_51.txt and

http://eire.census.gov/popest/archives/county/co-99-3/99C3_54.txt.



Why Is This Important?

The percent of population by gender can be useful to anticipate variations in labor force participation rates because the labor force participation rate for men tends to be higher than that of women's.

How Are We Doing?

The proportion of women in the region varies from 2.4 percent below the national average in Pocahontas county to 4.7 percent above the national average in Monroe county. Overall, the proportion of women in the Workforce Investment Area 1 region is similar to that of the state, and only 0.6 percent more than the nation.

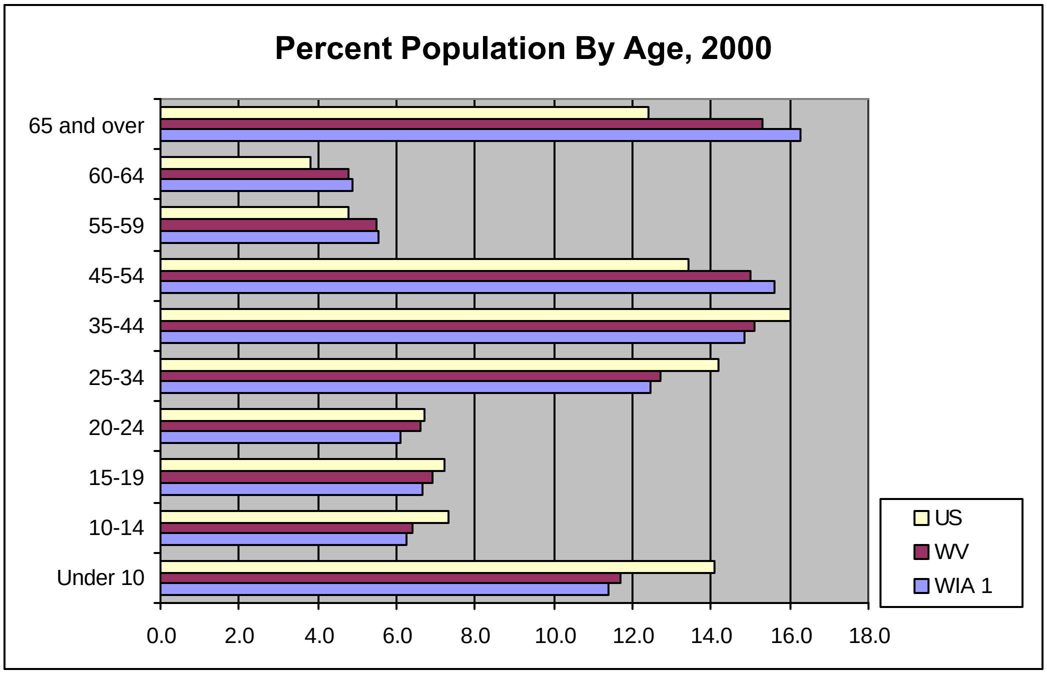
What Are The Implications?

A higher than average percent of women in some counties may help explain a relatively lower labor force participation rate in those counties. However, since the percentage of women in the region largely compares to that of the state and the country, substantial differences in labor force participation rates between the region and the state or country are likely to be due to factor(s) other than gender.

Percent Population by Gender, 2000

	Male	Female
Fayette	49.5	50.5
Greenbrier	48.1	51.9
McDowell	47.5	52.5
Mercer	47.7	52.3
Monroe	44.4	55.6
Nicholas	48.9	51.1
Pocahontas	51.5	48.5
Raleigh	49.2	50.8
Summers	48.9	51.1
Webster	49.2	50.8
Wyoming	49.2	50.8
Alleghany	49.9	50.1
Giles	48.9	51.1
Tazewell	47.9	52.1
WIA 1	48.5	51.5
W V	48.6	51.4
US	49.1	50.9

Source: http://factfinder.census.gov/servlet/BasicFactsServlet (Census 2000: Population and Housing (QT)).



Why Is This Important?

The population age distribution can have implications on the entry and exit, and the experience of the workforce (entry-level, mid-level managers, and upper management). It can indicate important changes in the labor force such as projected retirements, changes in career paths, and new entrants.

How Are We Doing?

The percentage of population in the counties' and region's 0-44 years old groups are generally lower than the state's and nation's comparable groups. On the other hand, the percentage of population in the counties' and region's 45 years and older groups are generally higher than the state's and the nation's. The median age (see table on page 11) tells a similar story, where every county in the region has a median age higher than the state's and country's.

Within each county, Workforce Investment Area 1, and the state, the 15-19 years old groups are generally larger than the 60-64 years old groups and the 10-14 years old groups larger than the 55-59 years old groups, but the 0-9 years old groups are smaller than the 45-54 years old groups. At the national level, only the first two comparisons yield similar results. Also, within each geographic area of county, Workforce Investment Area 1, and state, the 25-34 years old groups are consistently (and considerably) smaller than the 35-44 years old groups.

What Are The Implications?

Although the region and the state has a larger proportion of older population compared to the nation, the number of potential entry-level workers should exceed the number of potential retirees between the years 2000 to 2010, everything else equal. However, after year 2010, the region's and state's potential retirees will outnumber the potential entry-level workers, again holding all else constant. Various areas of management may experience shortages in the near future due to limited choices resulting from a smaller pool of available workers.

Percent Population by Age, 2000

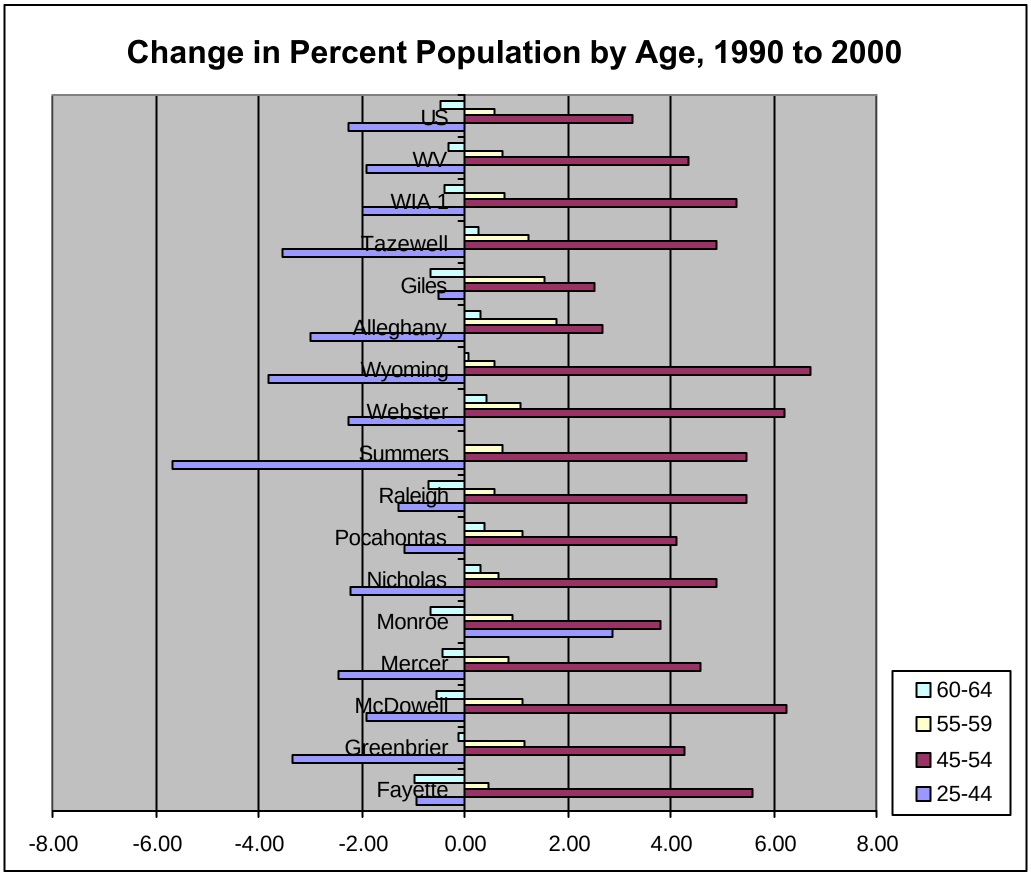
Years	Under 5	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-59	60-64	65-74	75-84	85 and over	Median Age
Fayette	5.6	5.9	6.1	6.9	6.8	12.4	14.7	15.3	5.2	4.6	8.6	5.8	2.1	39.6
Greenbrier	5.5	6.0	6.2	6.4	5.2	11.2	14.9	15.4	6.1	5.4	9.5	6.0	2.3	41.6
McDowell	5.1	6.2	7.2	7.1	5.3	11.4	15.4	15.8	5.5	4.7	8.5	5.8	1.8	40.5
Mercer	5.8	5.8	5.7	6.7	6.9	12.5	13.7	15.0	5.6	4.9	9.0	6.3	2.0	40.2
Monroe	5.0	5.5	6.1	5.8	5.9	14.4	16.0	15.0	6.2	4.9	8.4	5.4	1.6	39.7
Nicholas	5.4	6.2	7.2	7.0	5.6	12.2	15.4	15.4	5.5	5.1	8.3	5.0	1.7	39.4
Pocahontas	5.0	5.8	6.5	5.4	5.2	11.9	15.6	15.3	6.3	5.8	9.3	5.6	2.4	41.9
Raleigh	5.5	5.9	6.2	6.4	6.3	13.6	15.0	15.8	5.3	4.6	8.3	5.4	1.7	39.5
Summers	4.6	5.8	5.9	6.6	5.1	10.6	14.1	15.7	6.0	5.6	10.7	6.7	2.5	43.4
Webster	5.1	6.5	6.9	6.8	5.6	11.8	14.9	16.1	5.7	5.3	8.2	5.2	1.9	40.4
Wyoming	5.7	5.7	6.4	7.0	6.2	11.9	15.6	17.2	5.4	4.9	8.4	4.3	1.2	40.1
Alleghany	5.6	6.5	6.6	6.3	4.0	11.7	15.1	15.8	7.2	5.6	8.5	5.5	1.6	41.1
Giles	5.7	6.0	6.5	5.9	4.7	13.2	15.2	14.6	6.7	4.9	8.7	6.3	1.7	40.2
Tazewell	5.3	6.0	6.1	6.7	5.7	11.8	15.4	16.2	6.1	5.2	8.6	5.3	1.7	40.7
WIA 1	5.5	5.9	6.3	6.6	6.1	12.4	14.8	15.6	5.6	4.9	8.7	5.6	1.9	
W V	5.6	6.1	6.4	6.9	6.6	12.7	15.1	15.0	5.5	4.8	8.2	5.3	1.8	38.9
US	6.8	7.3	7.3	7.2	6.7	14.2	16.0	13.4	4.8	3.8	6.5	4.4	1.5	35.3

Source: http://factfinder.census.gov/servlet/BasicFactsServlet (Census 2000: Population and Housing (QT)).

Population by Age, 2000

Years	Under 5	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-59	60-64	65-74	75-84	85 and over
Fayette	2,685	2,820	2,892	3,302	3,216	5,881	7,015	7,282	2,493	2,179	4,084	2,753	977
Greenbrier	1,904	2,052	2,143	2,215	1,784	3,873	5,123	5,295	2,102	1,861	3,263	2,052	786
McDowell	1,406	1,692	1,981	1,954	1,460	3,115	4,197	4,314	1,512	1,296	2,315	1,591	496
Mercer	3,638	3,644	3,606	4,206	4,345	7,850	8,651	9,468	3,509	3,094	5,688	3,995	1,286
Monroe	723	800	894	842	857	2,097	2,327	2,186	900	715	1,222	791	229
Nicholas	1,439	1,654	1,908	1,857	1,488	3,253	4,079	4,088	1,462	1,360	2,194	1,340	440
Pocahontas	452	526	591	495	475	1,088	1,424	1,400	575	528	852	508	217
Raleigh	4,357	4,681	4,889	5,060	5,013	10,807	11,871	12,541	4,183	3,618	6,560	4,256	1,384
Summers	604	757	761	856	660	1,379	1,834	2,041	786	728	1,397	865	331
Webster	500	635	670	665	540	1,147	1,444	1,567	555	514	795	506	181
Wyoming	1,467	1,478	1,654	1,792	1,604	3,065	4,009	4,414	1,378	1,261	2,163	1,117	306
Alleghany	721	846	850	820	518	1,508	1,954	2,038	926	720	1,101	717	207
Giles	944	1,007	1,079	977	790	2,203	2,525	2,429	1,112	809	1,456	1,042	284
Tazewell	2,359	2,678	2,733	2,975	2,545	5,283	6,854	7,222	2,710	2,317	3,819	2,364	739
WIA 1	23,199	25,270	26,651	28,016	25,295	52,549	63,307	66,285	24,203	21,000	36,909	23,897	7,863
W V	101,805	111,150	116,182	125,578	120,109	229,094	272,249	270,466	98,916	85,900	148,463	96,653	31,779
US	19,175,798	20,549,505	20,528,072	20,219,890	18,964,001	39,891,724	45,148,527	37,677,952	13,469,237	10,805,447	18,390,986	12,361,180	4,239,587

Source: http://factfinder.census.gov/servlet/BasicFactsServlet (Census 2000: Population and Housing (QT)).



Why Is This Important?

The change in percent of population by age provides another means to assess entry and exit, and experience of the workforce.

How Are We Doing?

With few exceptions, counties across the region experienced decreases in the percent of population in the under 5, 5-24, and 25-44 years old groups in the 1990s. Cumulatively, the rate of decline for population under 45 years old in Workforce Investment Area 1 is larger than the state's and nation's decline. During this same period, there are significant increases in the counties' percent of population in the 45-54 years old group and marginal increases in the 55-59 years old groups. Changes in the 60-64 years and older groups are mixed. The growth rates for population above 44 years old in Workforce Investment Area 1 are larger than the state and national averages. Refer to Appendix A for the actual percent of population by age.

What Are The Implications?

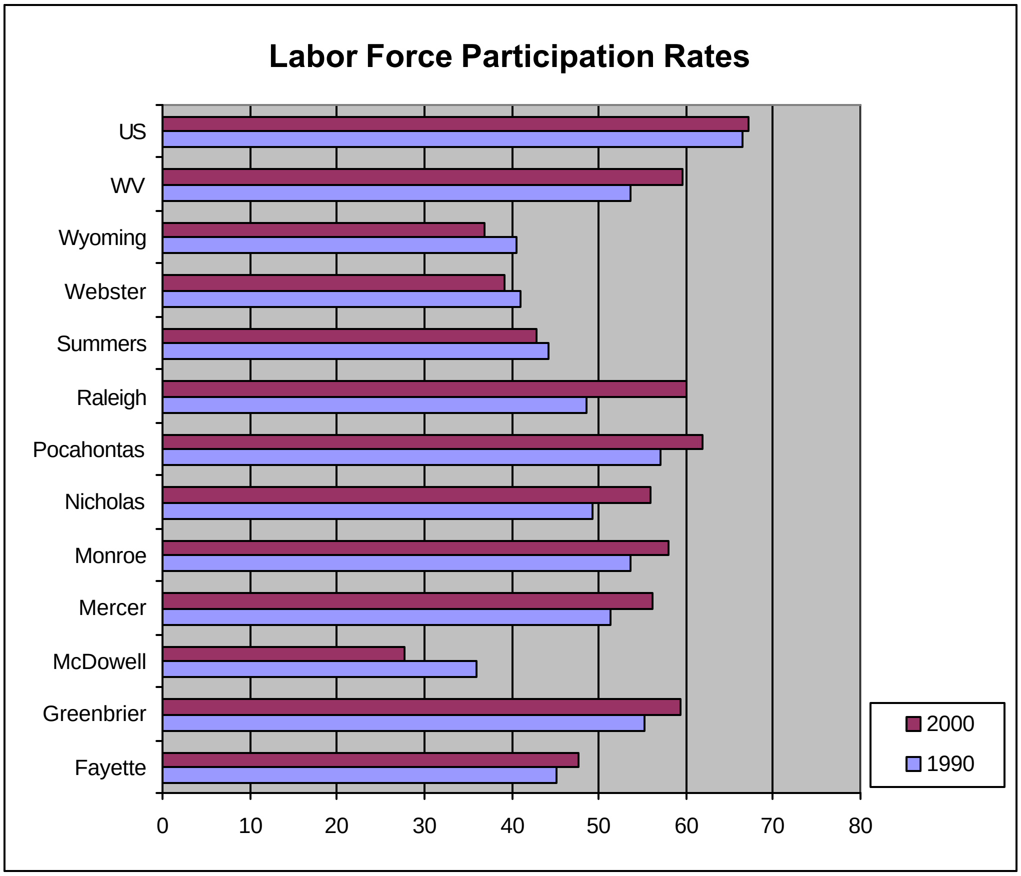
This data agrees with earlier findings that potential problems with replacing workers will become more acute as the 45-54 years old groups begin to retire in 2010. Further, there may be potential shortages in various areas of management as the 25-44 years old group advances in their careers, particularly the 25-34 years olds.

Change in Percent Population by Age, 1990 to 2000

Years	Under 5	5-24	25-44	45-54	55-59	60-64	65-74	75-84	85 and over
Fayette	0.41	-4.00	-0.94	5.61	0.46	-0.96	-1.18	0.09	0.52
Greenbrier	-0.15	-2.65	-3.32	4.27	1.18	0.13	0.37	0.13	0.39
McDowell	-1.06	-5.42	-1.89	6.25	1.12	-0.53	-0.44	1.07	0.70
Mercer	0.37	-3.73	-2.45	4.58	0.85	-0.43	-0.68	0.93	0.45
Monroe	-0.96	-4.26	2.86	3.80	0.94	-0.66	-1.55	-0.05	0.07
Nicholas	-1.07	-3.67	-2.20	4.91	0.66	0.29	0.17	0.48	0.42
Pocahontas	-1.01	-1.81	-1.17	4.10	1.14	0.40	-0.56	-1.46	0.47
Raleigh	-0.17	-4.00	-1.29	5.48	0.59	-0.70	-0.69	0.42	0.36
Summers	-0.58	-2.46	-5.67	5.49	0.73	-0.01	0.75	0.96	0.69
Webster	-1.28	-4.01	-2.26	6.22	1.08	0.44	-0.54	-0.03	0.38
Wyoming	-0.12	-6.52	-3.81	6.71	0.58	0.06	1.37	1.09	0.54
Alleghany	-0.22	-3.53	-2.97	2.66	1.80	0.30	0.02	1.33	0.60
Giles	-0.08	-2.71	-0.49	2.54	1.54	-0.67	-1.56	1.03	0.50
Tazewell	-0.54	-4.21	-3.52	4.91	1.24	0.26	0.35	1.02	0.59
WIA 1	-0.23	-4.05	-1.98	5.27	0.78	-0.39	-0.37	0.51	0.47
WV	-0.35	-2.82	-1.91	4.33	0.75	-0.31	-0.48	0.41	0.38
US	-0.58	-0.44	-2.27	3.26	0.57	-0.47	-0.78	0.36	0.26

Source: http://factfinder.census.gov/servlet/BasicFactsServlet (Census 1990: Age and Sex (QT)) and

http://factfinder.census.gov/servlet/BasicFactsServlet (Census 2000: Population and Housing (QT)).



Why Is This Important?

The labor force participation rate reports the percent of 16-year old and above noninstitutionalized civilian adults who are in the official labor force. By definition, the labor force includes those who are working and those unemployed and actively looking for a job.

How Are We Doing?

Changes in the total, male, and female labor force participation rates in Workforce Investment Area 1 are mixed during the 1990s. Seven counties experienced increases in all three rates while four had declines in the same rates. The labor force participation rates in all eleven counties are below the national averages.

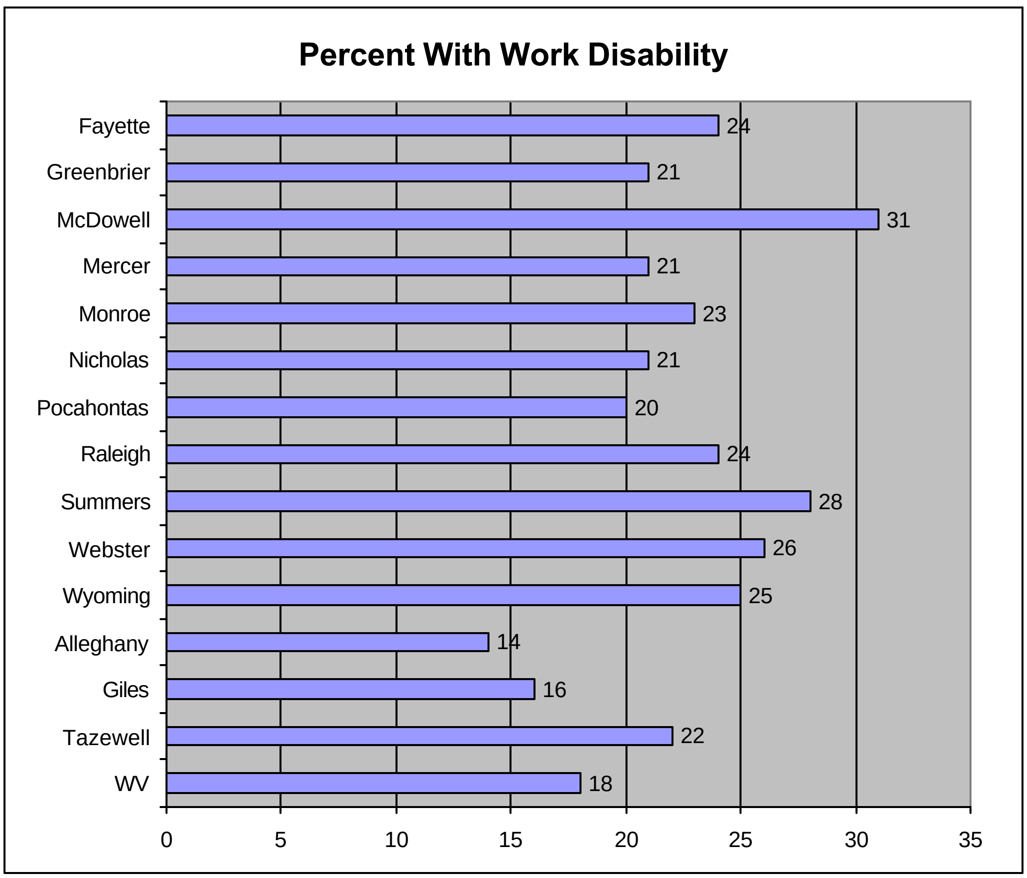
What Are The Implications?

Recall that compared to the state and nation, a larger percent of Workforce Investment Area 1's population is aged 65 years and older. This, and higher than average percent of population with work disability (see chart on page 15), contribute to relatively low labor force participation rates.

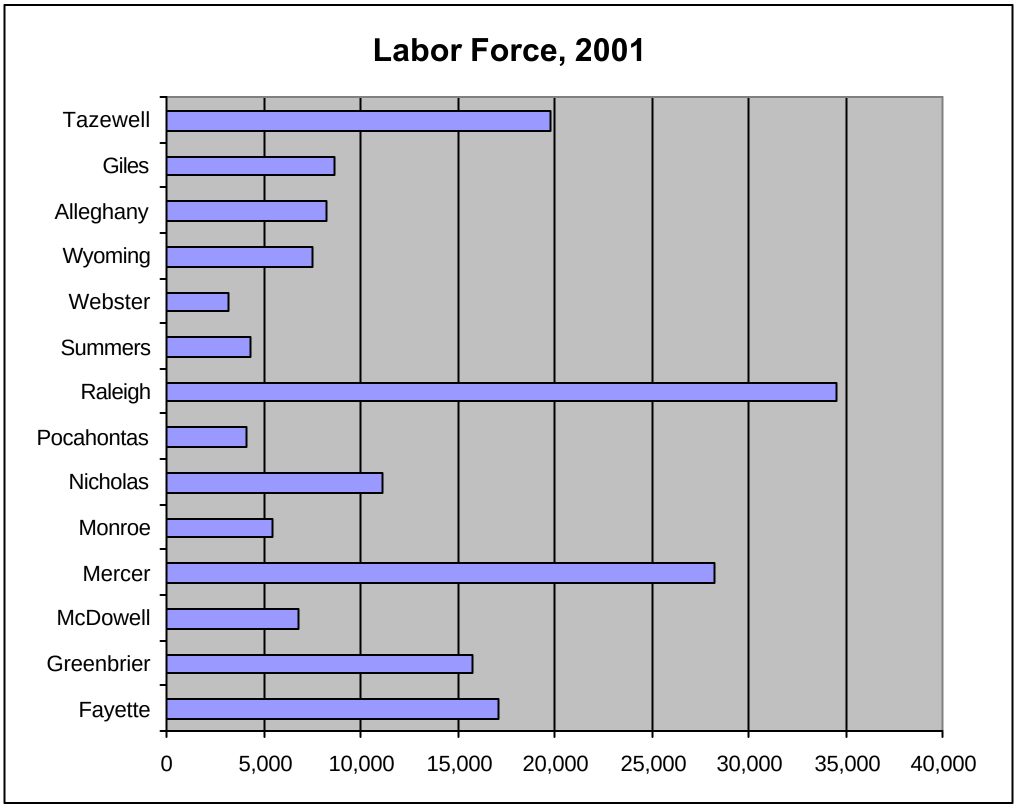
Labor Force Participation Rates, 1990 and 2000

	Total		Male		Female	
	1990	2000	1990	2000	1990	2000
Fayette	45.1	47.7	56.0	58.7	35.4	37.9
Greenbrier	55.2	59.3	65.9	70.8	45.6	49.0
McDowell	36.1	27.8	47.9	36.7	25.9	20.1
Mercer	51.4	56.1	62.8	68.3	41.9	45.8
Monroe	53.7	58.0	65.9	70.7	42.4	46.3
Nicholas	49.3	56.0	61.6	69.8	37.8	43.3
Pocahontas	57.0	62.0	66.4	72.8	48.2	51.8
Raleigh	48.5	60.1	60.4	74.5	38.4	47.9
Summers	44.3	42.9	60.1	57.6	32.4	31.8
Webster	41.0	39.2	56.0	53.1	27.2	26.4
Wyoming	40.6	37.0	56.7	51.4	25.9	23.8
WV	53.6	59.6	65.3	72.3	43.2	48.2
US	66.5	67.2	76.4	74.7	57.5	60.2

Source: http://www.state.wv.us/scripts/bep/lmi/cntydata.cfm and http://stats.bls.gov/emp/emplab1.htm.



Source: http://www.casas.org (based on 1990 Census).



Why Is This Important?

The size of the labor force is the sum of those who are working and those unemployed and actively looking for a job.

How Are We Doing?

Of the fourteen counties in the region, eight have a labor force under 10,000, four between 10,000 and 20,000, one between 20,000 and 30,000, and one above 30,000. In 2001, the labor force in Workforce Investment Area 1 is about 16.58 percent of the state's labor force, down from 17.14 percent in 2000 and 17.73 percent in 1990.

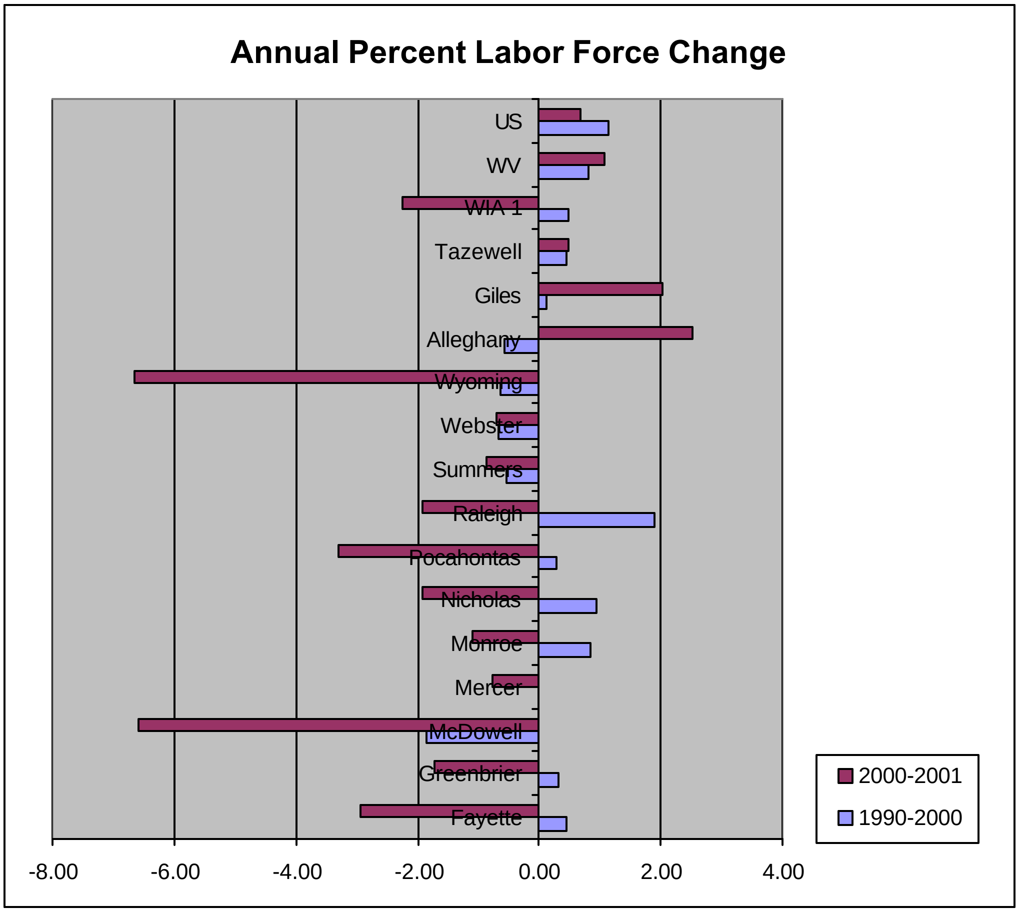
What Are The Implications?

The labor force in the counties and region are relatively small, accounting for a small proportion of the state's labor force. In fact, the region's share of the state's labor force is smaller than the region's share of the state's population, which would suggest possible lower labor force participation rates, as seen earlier.

Labor Force, 1990 to 2001

	1990	2000	2001
Fayette	16,819	17,603	17,084
Greenbrier	15,494	16,010	15,737
McDowell	8,807	7,304	6,823
Mercer	28,479	28,475	28,258
Monroe	5,103	5,559	5,498
Nicholas	10,274	11,299	11,084
Pocahontas	4,187	4,302	4,160
Raleigh	29,117	35,184	34,504
Summers	4,664	4,418	4,379
Webster	3,397	3,177	3,154
Wyoming	8,557	8,041	7,507
Alleghany	8,554	8,086	8,290
Giles	8,397	8,491	8,663
Tazewell	18,815	19,700	19,794
WIA 1	134,898	141,372	138,189
W V	760,638	824,578	833,315
US	125,840,000	140,863,000	141,815,000

Source: http://data.bls.gov/cgi-bin/dsrv?la and ftp://ftp.bls.gov/pub/special.requests/lf/aat1.txt.



Why Is This Important?

The percent change in the labor force indicates how quickly the labor force is increasing or decreasing.

How Are We Doing?

During 1990-2000, eight counties experienced modest increases in their respective labor forces with Raleigh outperforming the nation. The labor force in Workforce Investment Area 1 grew at a rate of 0.47 percent per year, below the state's 0.81 percent and the nation's 1.13 percent. In the 2000-2001 period, only the three Virginia counties enjoyed labor force growth. The labor force in Workforce Investment Area 1 fell by 2.25 percent compared to the state's growth of 1.06 percent and the nation's 0.68 percent increase.

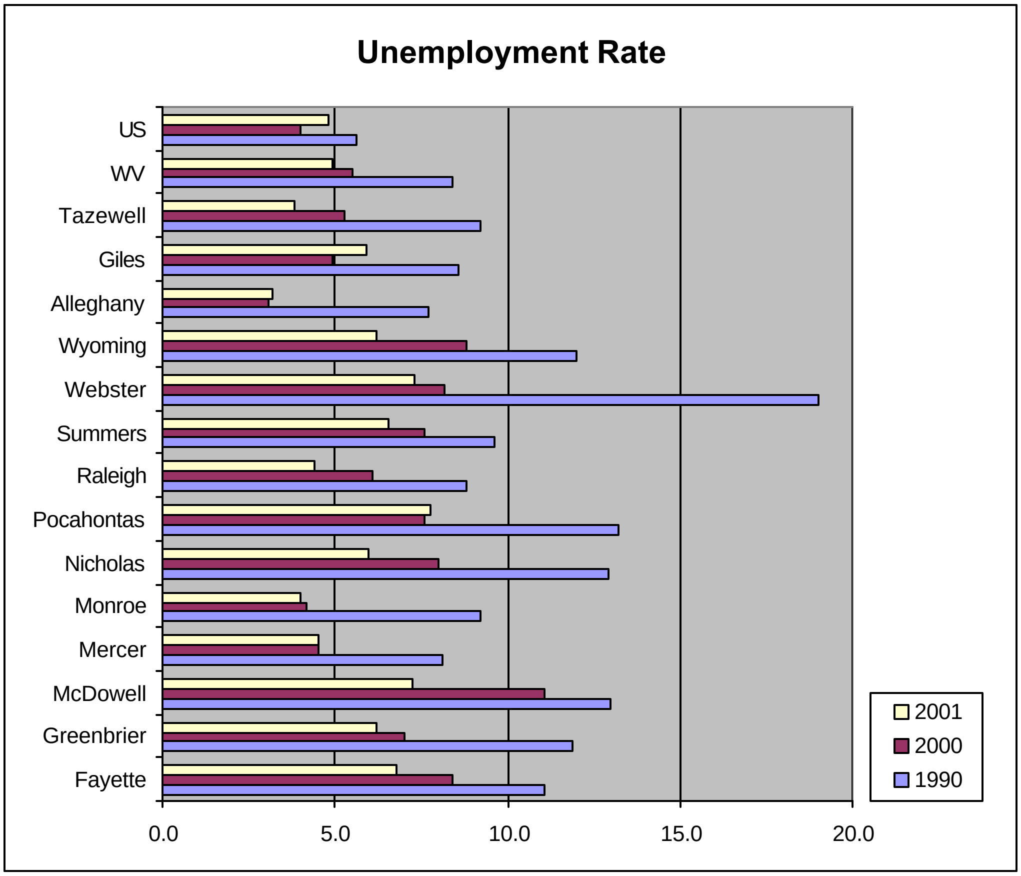
What Are The Implications?

There is significant doubt about the future direction of the pool of labor force in much of the Workforce Investment Area 1 region.

Percent Labor Force Change, 1990 to 2001

	1990-2000	Annual Rate	
		1990-2000	2000-2001
Fayette	4.66	0.46	-2.95
Greenbrier	3.33	0.33	-1.71
McDowell	-17.07	-1.85	-6.58
Mercer	-0.01	0.00	-0.76
Monroe	8.94	0.86	-1.10
Nicholas	9.98	0.96	-1.90
Pocahontas	2.75	0.27	-3.30
Raleigh	20.84	1.91	-1.93
Summers	-5.27	-0.54	-0.88
Webster	-6.48	-0.67	-0.72
Wyoming	-6.03	-0.62	-6.65
Alleghany	-5.47	-0.56	2.52
Giles	1.12	0.11	2.03
Tazewell	4.70	0.46	0.48
WIA 1	4.80	0.47	-2.25
W V	8.41	0.81	1.06
US	11.94	1.13	0.68

Source: http://data.bls.gov/cgi-bin/dsrv?la and ftp://ftp.bls.gov/pub/special.requests/lf/aat1.txt.



Why Is This Important?

The unemployment rate measures the percent of the labor force that is unemployed.

How Are We Doing?

Every county in the region is enjoying a lower unemployment rate today compared to in 1990. However, only the rates in Mercer, Monroe, Raleigh, Alleghany, and Tazewell are below the state and national averages.

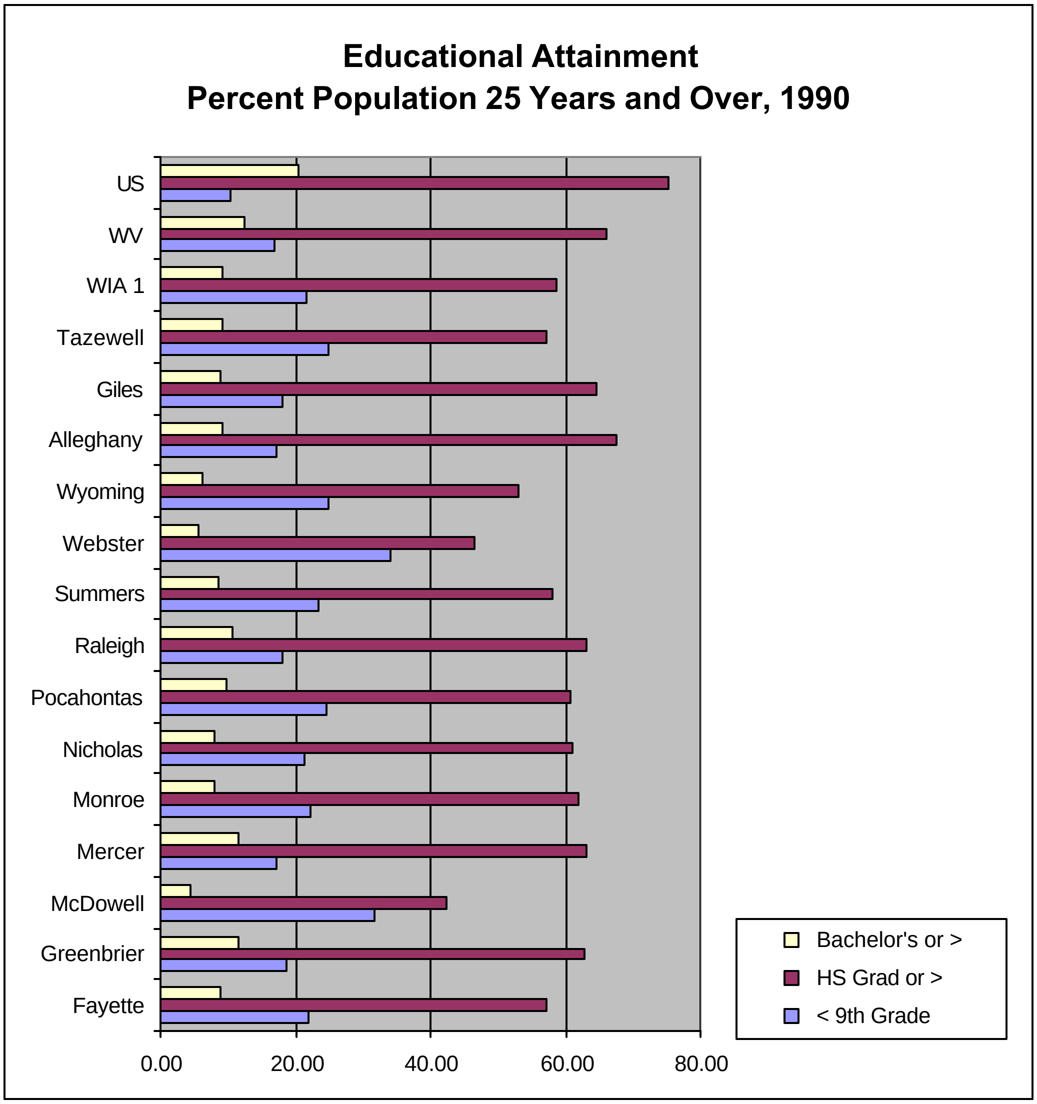
What Are The Implications?

The percent of the labor force that is looking for a job but unable to secure employment is on the decline. It should, however, be reminded that the unemployment rate does not account for individuals who would like to be working but are discouraged and therefore not looking for jobs.

Unemployment Rate, 1990 to 2001

	1990	2000	2001
Fayette	11.1	8.4	6.8
Greenbrier	11.9	7.0	6.2
McDowell	13.0	11.1	7.2
Mercer	8.1	4.5	4.5
Monroe	9.2	4.2	4.0
Nicholas	12.9	8.0	6.0
Pocahontas	13.2	7.6	7.7
Raleigh	8.8	6.1	4.4
Summers	9.6	7.6	6.5
Webster	19.0	8.2	7.3
Wyoming	12.0	8.8	6.2
Alleghany	7.7	3.1	3.2
Giles	8.6	4.9	5.9
Tazewell	9.2	5.3	3.8
WV	8.4	5.5	4.9
US	5.6	4.0	4.8

Source: http://data.bls.gov/cgi-bin/dsrv?la and ftp://ftp.bls.gov/pub/special.requests/lf/aat1.txt.



Why Is This Important?

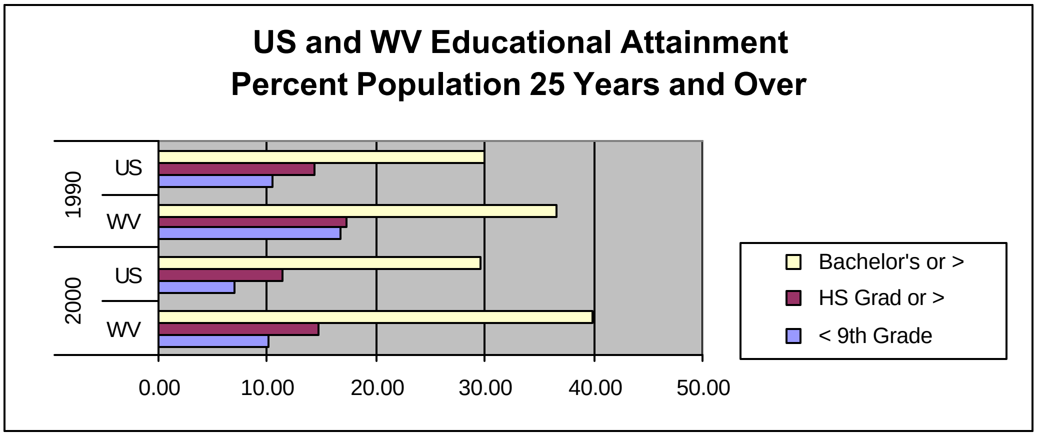
The educational attainment of the 25 years and older population is an important measure of the quality, and hence productivity and earnings of the workforce. Importantly, there is substantial evidence that education level and income are highly correlated.

How Are We Doing?

According to the 1990 Census, the overall educational attainment of the 25 years and older population in all the counties are below the state and national averages. The 2000 Census finds that the educational attainment of the state's 25 years and older population has improved but is still below the national average. For this same group of the population, the gap between the state's and nation's percent of high school graduates and higher decreased between 1990 and 2000, but the gap between the state's and nation's percent of bachelor's degree or higher increased during this same period.

What Are The Implications?

Relatively lower levels of education and productivity in the region's workforce not only translates directly to lower earnings, but may also deter potential employers from coming to the region. It is worthwhile to emphasize that while it is encouraging that the educational attainment of the state's 25 years and older population have increased, it must grow faster than the nation for the state to reduce and close the gap with the rest of the country. The same holds true for both the individual counties.

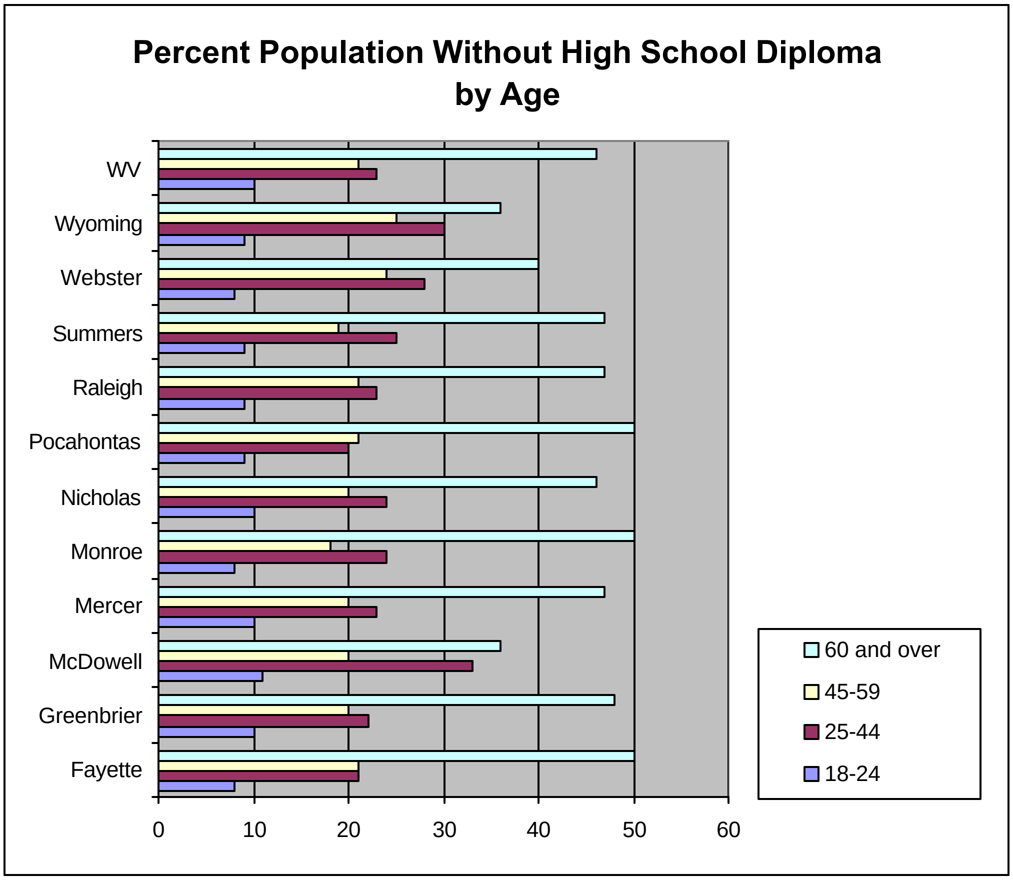


Educational Attainment, Percent Population 25 Years and Over

	Less than 9th grade	9th to 12th grade, no diploma	HS graduate (and equivalent)	Some college, no degree	Associate degree	Bachelor's degree	Graduate or professional degree		Percent HS graduate or >	Percent bachelor's degree or >
2000										
WV	10.08	14.75	39.88	16.86	4.31	8.66	5.46		75.17	14.12
US	6.94	11.47	29.53	20.53	6.47	16.09	8.97		81.59	25.06
1990										
Fayette	22.03	20.90	34.05	10.99	3.19	5.90	2.94		57.07	8.84
Greenbrier	18.64	18.40	35.43	12.57	3.47	6.27	5.22		62.96	11.49
McDowell	31.84	25.83	28.23	7.93	1.59	2.73	1.85		42.33	4.59
Mercer	17.27	19.62	33.57	13.69	4.24	7.35	4.26		63.11	11.61
Monroe	22.31	15.61	41.69	9.69	2.70	5.04	2.95		62.07	7.99
Nicholas	21.31	17.52	41.77	9.30	2.11	4.73	3.28		61.18	8.00
Pocahontas	24.53	14.82	38.76	9.41	2.82	6.83	2.84		60.65	9.66
Raleigh	17.95	18.88	34.04	13.84	4.59	6.62	4.10		63.18	10.71
Summers	23.37	18.68	35.80	10.92	2.72	5.13	3.37		57.95	8.51
Webster	34.15	19.34	30.87	8.41	1.68	3.79	1.77		46.52	5.56
Wyoming	24.85	22.17	35.52	9.13	2.18	3.40	2.76		52.99	6.16
Alleghany	17.22	15.36	37.12	16.02	4.99	5.50	3.79		67.41	9.29
Giles	17.93	17.58	38.65	12.29	4.66	5.25	3.64		64.49	8.89
Tazewell	25.03	17.66	28.44	14.31	5.47	6.40	2.69		57.31	9.09
WIA 1	21.53	19.82	34.60	11.53	3.31	5.68	3.54		58.66	9.22
WV	16.75	17.26	36.62	13.24	3.80	7.52	4.81		65.99	12.33
US	10.39	14.38	29.99	18.74	6.16	13.11	7.22		75.24	20.34

Source: http://factfinder.census.gov/servlet/BasicFactsServlet (Census 1990: Education and Language Spoken at Home (QT)) and

http://factfinder.census.gov/home/en/c2ss.htm.



Why Is This Important?

Information about the age distribution of the population lacking in high school education highlights the age groups which may be most affected by low education levels.

How Are We Doing?

Across Workforce Investment Area 1 and the state, those 60 years and older form the largest group without a high school diploma. In all but Fayette and Pocahontas counties, the 24-44 years old group is the next largest group without a high school diploma, followed by the 45-59 years old group. The 18-24 years old group is the smallest group without a high school diploma in the region and the state.

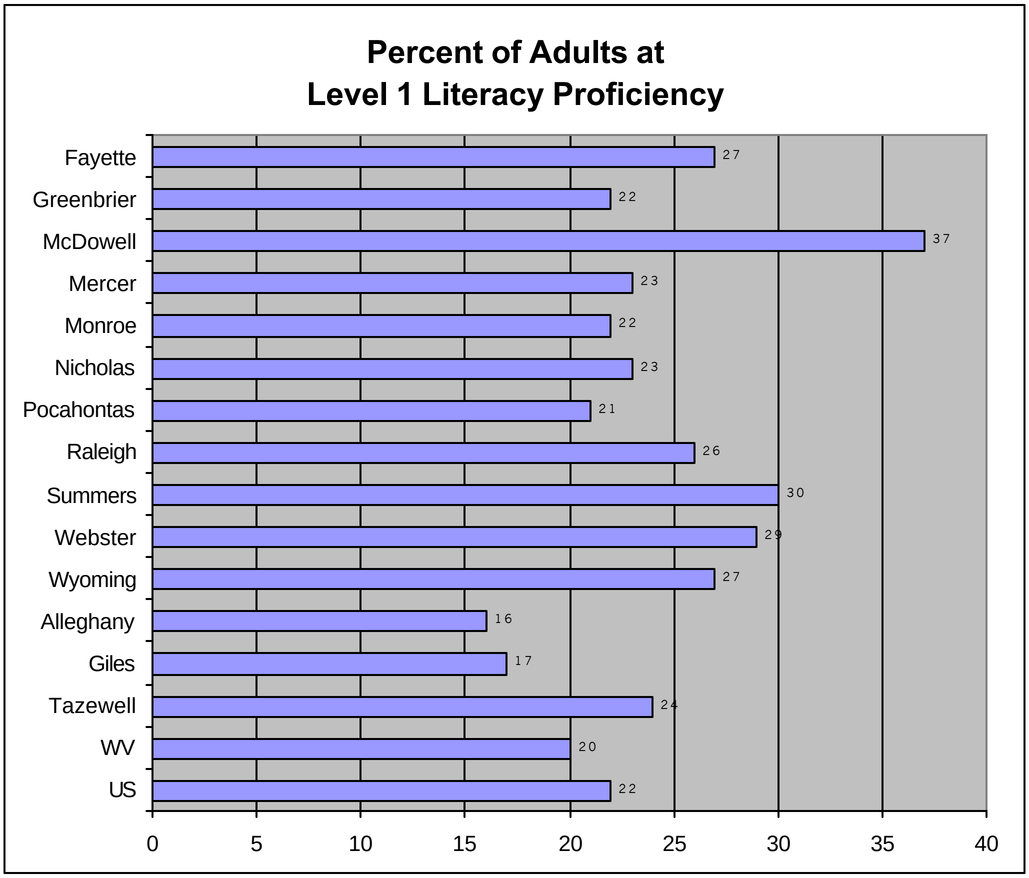
What Are The Implications?

To the extent that a large proportion of those who currently lack a high school education is generally older, the region's and state's problem with relatively low educational attainment at the high school level may decrease with time.

Percent of Population Without High School Diploma by Age

Age	18-24	25-44	45-59	60 and over
Fayette	8	21	21	50
Greenbrier	10	22	20	48
McDowell	11	33	20	36
Mercer	10	23	20	47
Monroe	8	24	18	50
Nicholas	10	24	20	46
Pocahontas	9	20	21	50
Raleigh	9	23	21	47
Summers	9	25	19	47
Webster	8	28	24	40
Wyoming	9	30	25	36
W V	10	23	21	46

Source: http://wvabe.org/fiveyearplan.htm (WV Department of Education Adult Basic Education State Plan to be effective until June 30, 2004).



Source: http://www.casas.org.

Why Is This Important?

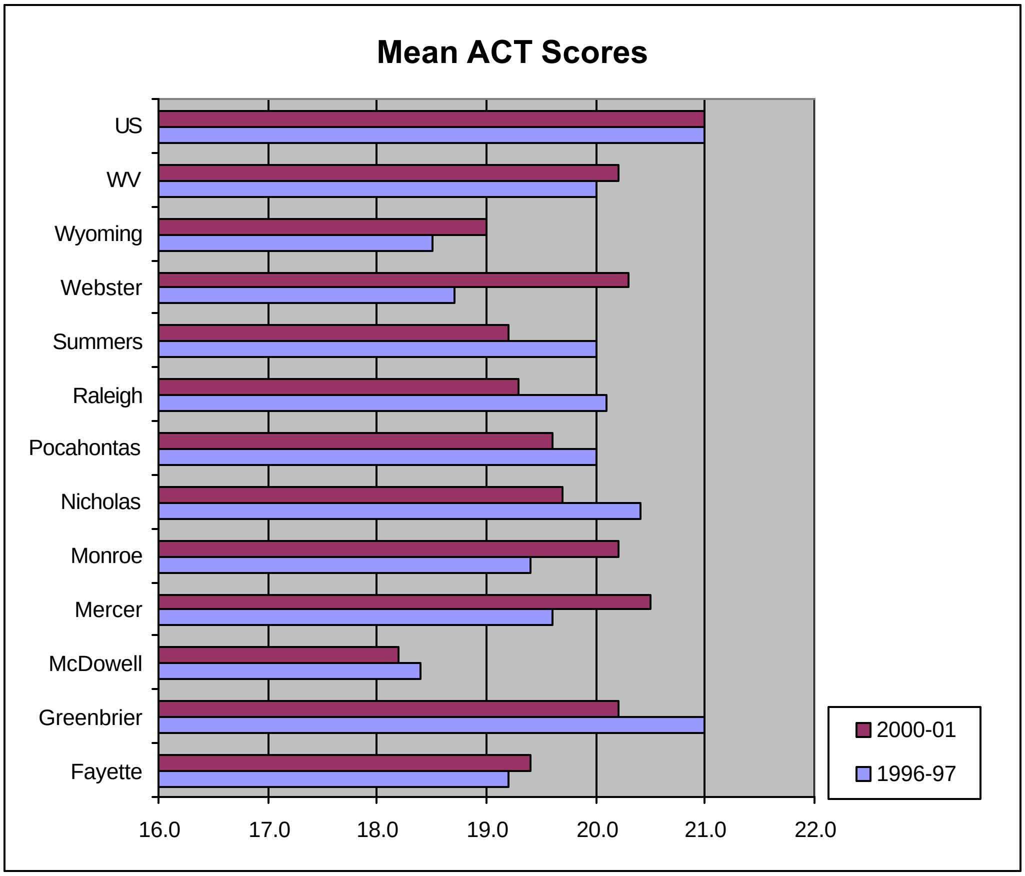
Adults who score at Level 1 literacy skills indicate difficulty performing such everyday tasks as locating an intersection on a street, map, reading and comprehending a short newspaper article, or calculating total cost on an order form. Therefore, lower percentages of adults at Level 1 literacy proficiency are more desirable.

How Are We Doing?

Twenty percent of the state's adult population performed at Level 1 literacy proficiency compared to twenty two percent in the nation. West Virginia ranks 33rd, tied with three other states, on the lowest percentage of adults at Level 1 literacy. All the counties in Workforce Investment Area 1 scored worse than the state. Three counties in the region, Pocahontas, Alleghany, and Giles, scored better than the national average.

What Are The Implications?

Except for Alleghany and Giles counties, over one in five adults in the region have difficulty performing everyday tasks. This suggests that these adults may encounter difficulties in securing employment and/or performing their jobs.



Why Is This Important?

Standardized test scores, such as the ACT (American College Testing), provide a relative measure of student performance.

How Are We Doing?

Changes in the ACT mean (composite) scores are mixed across the Workforce Investment Area 1 region. The average test scores in every county is below the national average, and only one is marginally above the state average.

It is also important to note that only about one in every two children in the region was tested in the school year 2000-01.

What Are The Implications?

Improving student performance in standardized tests is a desirable goal because students who perform better, particularly in math and science, typically enjoy a broader range of career options. However, the mean score is representative of the average student only to the extent that the test takers are representative of the student population

Mean ACT Scores, 1996-97 to 2000-01*

	1996-97	1997-98	1998-99	1999-00	2000-01
Fayette	19.2	19.3	19.1	19.3	19.4
Greenbrier	21.0	20.2	20.5	20.3	20.2
McDowell	18.4	19.0	18.5	18.7	18.2
Mercer	19.6	19.9	20.1	19.9	20.5
Monroe	19.4	19.3	20.4	19.8	20.2
Nicholas	20.4	19.7	19.8	19.7	19.7
Pocahontas	20.0	20.0	20.3	20.9	19.6
Raleigh	20.1	19.7	19.5	19.6	19.3
Summers	20.0	20.4	19.7	20.1	19.2
Webster	18.7	20.5	19.6	19.4	20.3
Wyoming	18.5	19.4	19.4	18.8	19.0
WV	20.0	20.1	20.2	20.2	20.2
US	21.0	21.0	21.0	21.0	21.0

Source: http://wvde.state.wv.us/data/trend_data_96_97_thru_00_01.pdf.

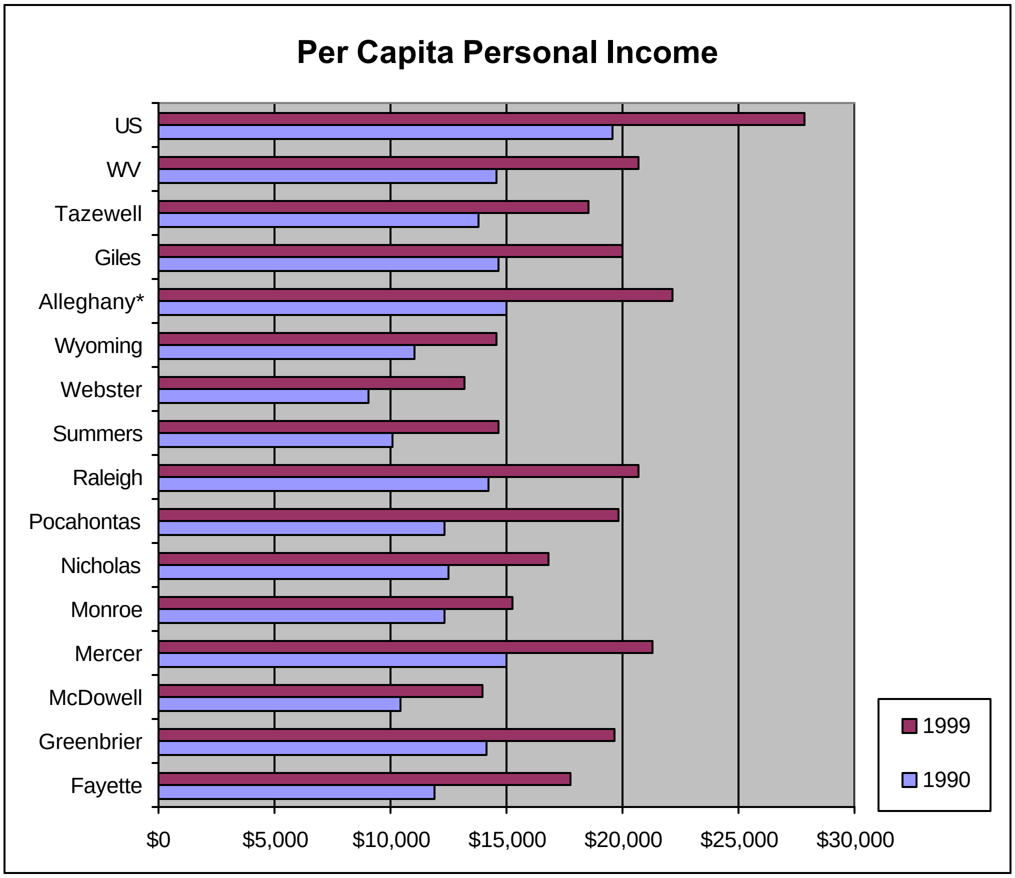
*Data on ACT, Percent Students Tested is not available for Alleghany, Giles, and Tazewell counties. Most students in Virginia take the SAT and not the ACT.

Percent Students Tested, 1996-97 to 2000-01*

	1996-97	1997-98	1998-99	1999-00	2000-01
Fayette	55.8	62.3	52.0	54.1	57.7
Greenbrier	60.1	58.5	57.7	55.7	58.6
McDowell	43.0	37.2	40.7	44.1	43.0
Mercer	52.3	46.6	45.7	51.2	51.1
Monroe	50.0	54.6	42.5	59.9	51.1
Nicholas	55.7	56.2	51.5	61.7	63.0
Pocahontas	50.9	45.0	53.5	65.9	58.0
Raleigh	51.5	52.2	49.0	55.3	50.2
Summers	59.9	61.1	52.1	50.3	63.1
Webster	59.5	50.8	43.1	52.3	55.1
Wyoming	40.7	44.8	32.0	54.3	58.9
WV County Mean	55.2	53.5	52.4	56.7	58.1

Source: http://wvde.state.wv.us/data/trend_data_96_97_thru_00_01.pdf.

*Data on ACT, Percent Students Tested is not available for Alleghany, Giles, and Tazewell counties. Most students in Virginia take the SAT and not the ACT.



Why Is This Important?

Per capita personal income measures the average current income received from all sources minus personal contributions for social insurance. The quality of jobs and training of workers are effectively gauged by this data. By way of caution, a relatively high number of retirees may bias this number downwards since retirement income is lower than working income in most instances

How Are We Doing?

The 1999 per capita personal income of Mercer and Alleghany counties exceed the state average but fall below the national average. The gap appears to be increasing in all the counties.

What Are The Implications?

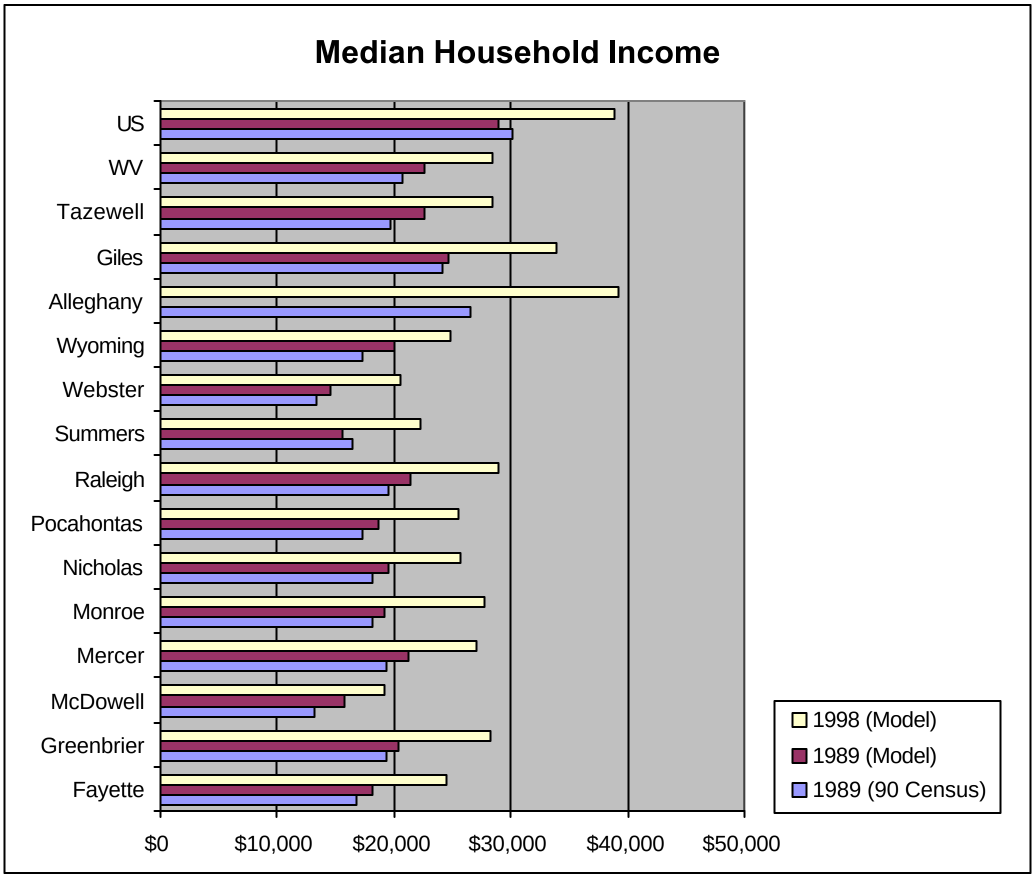
The lower relative per capita personal income suggests lower regional levels of economic activity. This suggests a less prosperous area, which results in less economic activity that depends on regional income and lower state and local tax receipts that are income or expenditure related. Affecting personal income should be the ultimate policy goal of training and economic development programs.

Per Capita Personal Income, 1980 to 2000

	1980	1990	1999	2000
Fayette	$6,812	$11,859	$17,787	
Greenbrier	$7,313	$14,121	$19,630	
McDowell	$7,256	$10,447	$14,002	
Mercer	$8,570	$14,995	$21,256	
Monroe	$6,213	$12,298	$15,281	
Nicholas	$8,234	$12,531	$16,814	
Pocahontas	$6,603	$12,287	$19,811	
Raleigh	$8,382	$14,215	$20,687	
Summers	$5,387	$10,050	$14,647	
Webster	$5,655	$9,093	$13,183	
Wyoming	$7,078	$11,014	$14,606	
Alleghany*	$7,323	$14,959	$22,136	
Giles	$7,702	$14,661	$19,963	
Tazewell	$8,717	$13,787	$18,534	
WV	$8,172	$14,579	$20,720	$21,767
US	$10,183	$19,584	$27,859	$29,451

*Alleghany, Clifton Forge + Covington

Source: http://www.bea.gov.



Why Is This Important?

Median household income is a relative measure of the purchasing power of households. Like per capita personal income, median household income effectively gauges the quality of jobs and training of workers in the area. As before, it is cautioned that the high number of retirees may bias this number downwards.

How Are We Doing?

Data from the 1990 Census and the Current Population Survey Model Estimates are presented. Differences in the median income data results from the way in which data are collected and processed (for more detailed information, go to http://www.census.gov/hhes/www/saipe/techdoc/centable.html). Both the Census and model estimates are provided because while the former is reported data, it is not available on a regular basis. The model data is.

Two important points about the Census and modeled median income. First, comparisons of the 1990 Census data and the 1989 modeled data show that except for Summers county, the latter consistently overestimates the actual median income in the region. This highlights the empirical challenges inherent in county level predictions. Second, it follows that the estimates for 1998 (the most current pending release of detailed 2000 Census) should be viewed with caution and used primarily as guidelines.

According to the 1998 estimates, all but Alleghany county's median household incomes are below the national average.

What Are The Implications?

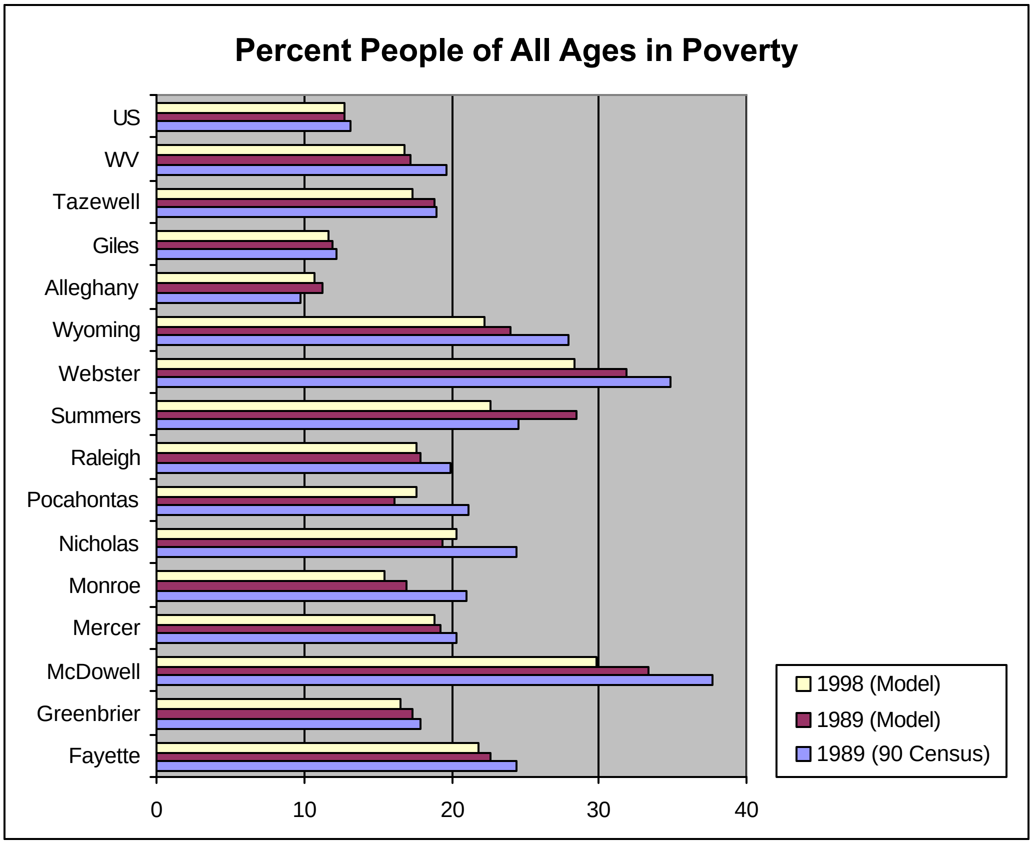
As with per capita personal income, the lower relative median household income suggests lower levels of economic activity in the region. Training and economic development programs should also target affecting median household income.

Median Household Income, 1989 and 1998

	1989 (90 Census)	1989 (Model)	1998 (Model)
Fayette	$16,774	$18,075	$24,565
Greenbrier	$19,411	$20,321	$28,302
McDowell	$13,141	$15,675	$19,104
Mercer	$19,365	$21,149	$27,095
Monroe	$18,217	$19,156	$27,763
Nicholas	$18,116	$19,514	$25,737
Pocahontas	$17,237	$18,670	$25,474
Raleigh	$19,566	$21,404	$28,968
Summers	$16,457	$15,660	$22,179
Webster	$13,371	$14,514	$20,536
Wyoming	$17,248	$20,003	$24,886
Alleghany	$26,486		$39,135
Giles	$24,125	$24,742	$33,825
Tazewell	$19,670	$22,589	$28,504
WV	$20,795	$22,542	$28,460
US	$30,056	$28,906	$38,885

Source: http://www.census.gov/hhes/www/saipe/stcty/estimate.html

(U.S. Census Bureau, Housing and Household Economic Statistics Division, Small Area Estimates Branch).



Why Is This Important?

The Federal poverty definition establishes a level of family income, adjusted for the number of family members, at which consumption of basic goods and services is potentially lacking. These data are typically strongly correlated with educational levels and per capita income at the regional level.

How Are We Doing?

Again, data from the 1990 Census and the Current Population Survey Model Estimates are presented. Differences in the poverty data results from the way in which data are collected and processed, and differences in the definition of the "poverty universe" (for detailed information, go to http://www.census.gov/hhes/www/saipe/techdoc/centable.html).

A comparison of the 1990 Census and modeled data for 1989 and modeled data for 1998 (the most current pending release of detailed 2000 Census) illustrates two important points. First, with the exception of Summers and Alleghany counties, the model contains consistent underestimates of the Census poverty rates in the region's counties. Second, the 1998 model predictions of poverty rate reductions in every county, except Nicholas and Pocahontas, should be viewed cautiously.

Although the 1998 model data suggests some potential improvements, it is clear that poverty rates in all but Alleghany and Giles counties exceed the national rate. This suggests that for these counties, about one in five households are not receiving adequate income for food, clothing, housing, and transportation. These households are far below the income threshold necessary to purchase housing, save for college tuition, or invest for retirement or health care expenses. Though not universally true, poor job skills, and health and educational deficits are the leading contributors to poverty.

What Are The Implications?

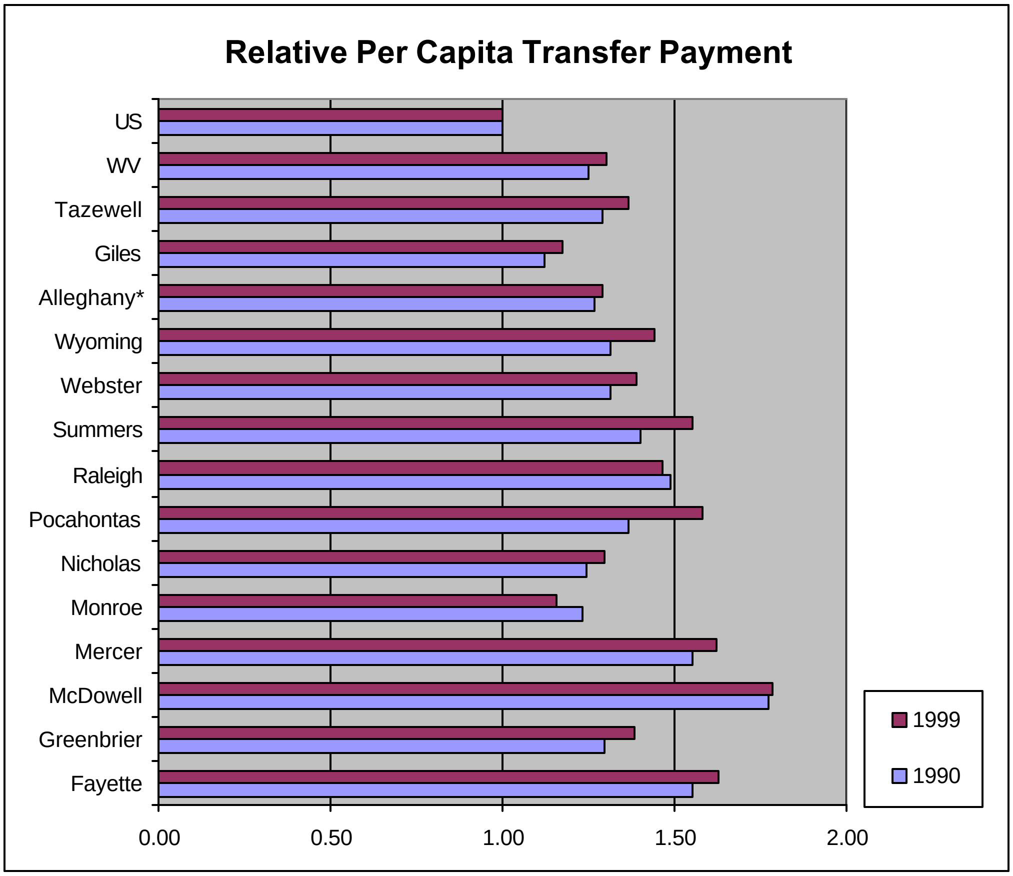
Economic growth is necessarily less robust than optimal, given that most of these families lack the skills or education to enjoy near average wages for their labor.

Percent People of All Ages in Poverty, 1989 and 1998

	1989 (90 Census)	1989 (Model)	1998 (Model)
Fayette	24.4	22.7	21.8
Greenbrier	17.9	17.4	16.5
McDowell	37.7	33.4	29.8
Mercer	20.4	19.3	18.9
Monroe	21.0	16.9	15.4
Nicholas	24.4	19.4	20.3
Pocahontas	21.2	16.2	17.6
Raleigh	19.9	17.9	17.6
Summers	24.5	28.5	22.7
Webster	34.8	31.8	28.3
Wyoming	27.9	24.0	22.2
Alleghany	9.7	11.3	10.7
Giles	12.2	11.9	11.6
Tazewell	19	18.9	17.4
WV	19.7	17.2	16.8
US	13.1	12.8	12.7

Source: http://www.census.gov/hhes/www/saipe/stcty/estimate.html

(U.S. Census Bureau, Housing and Household Economic Statistics Division, Small Area Estimates Branch).



Why Is This Important?

Transfer payments are payments that do not result from current production. Since retirement income is generally lower than working income, a relatively high number of retirees may bias this number upwards and bias the income data downwards.

How Are We Doing?

Generally, the relative per capita transfer payment of the counties and the state has been rising since 1980. The relative per capita transfer payments in Monroe, Alleghany, and Giles are lower than the state's average, but all are above the national mean.

What Are The Implications?

A higher relative per capita transfer payment implies a lower relative level of economic activity. This simply illustrates the region's relatively higher retirement and disability insurance benefit payments (see Appendix B for detailed breakdown of the transfer payments, in dollars and as a percent of total transfer payment).

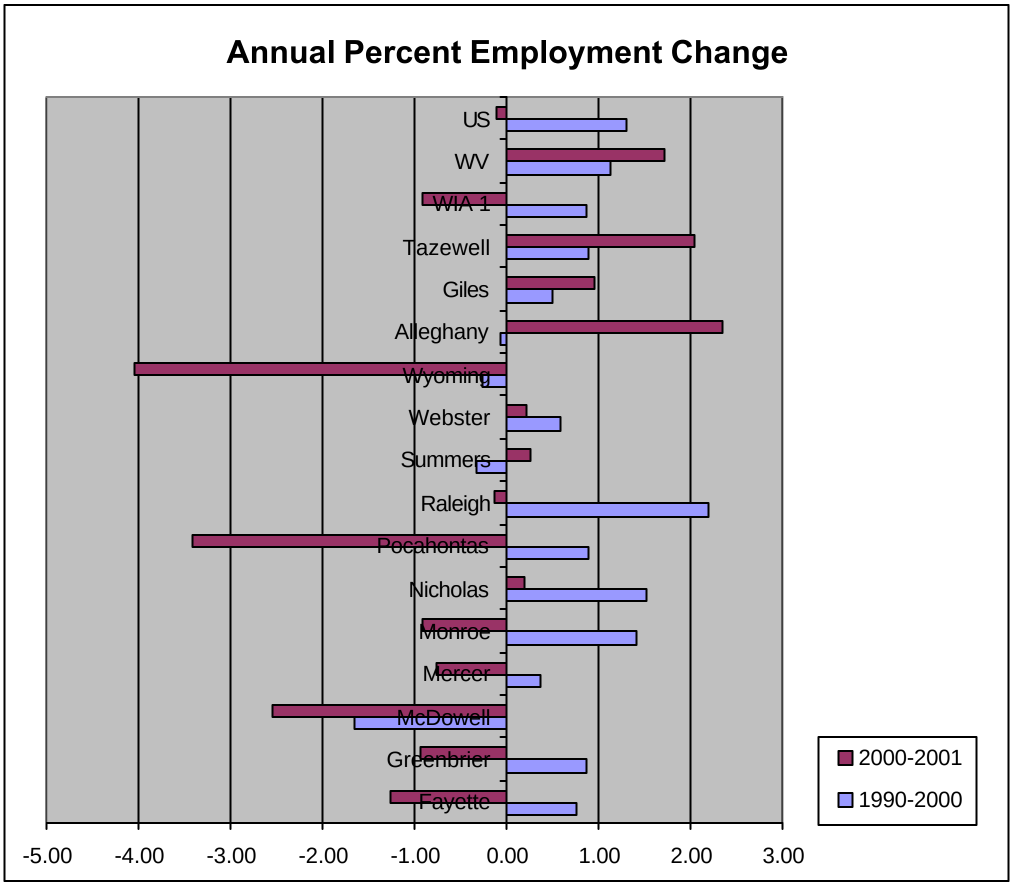
Relative Per Capita Transfer Payment, 1980 to 2000 (US=1.00)

	1980	1990	1999	2000
Fayette	1.66	1.55	1.63	
Greenbrier	1.21	1.29	1.38	
McDowell	1.67	1.77	1.79	
Mercer	1.42	1.55	1.62	
Monroe	1.18	1.23	1.16	
Nicholas	1.19	1.24	1.30	
Pocahontas	1.09	1.36	1.58	
Raleigh	1.47	1.49	1.47	
Summers	1.31	1.40	1.55	
Webster	1.44	1.31	1.39	
Wyoming	1.22	1.32	1.44	
Alleghany*	1.17	1.27	1.29	
Giles	1.03	1.12	1.18	
Tazewell	1.21	1.29	1.36	
W V	1.18	1.25	1.30	1.31
US	1.00	1.00	1.00	1.00

* Alleghany, Clifton Forge + Covington

Detailed information about the transfer payments is presented in Appendix B.

Source: http://www.bea.gov and Center for Business and Economic Research.



Why Is This Important?

The level of employment and its rate of change reflect the area's level of economic activity and its dynamics. It can have important implications on the desirability of the area as a place of residence and/or employment, and consequently influence migration patterns.

How Are We Doing?

Consistent with the labor force data, the levels of employment in eight counties are below 10,000, four between 10,000 and 20,000, one between 20,000 and 30,000, and one above 30,000. In 2001, regional employment is about 16.48 percent of the state's, down from 17.33 percent in 1990.

During the 1990s, Monroe, Nicholas, and Raleigh enjoyed employment growth rates exceeding the state and national averages. Other counties experienced only marginal changes in employment. Overall, employment in Workforce Investment Area 1 grew at an annual rate of 0.88 percent. In 2000-2001, Workforce Investment Area 1 experienced a net decline in employment despite modest growth at the state level. This rate of decline is faster than the national rate.

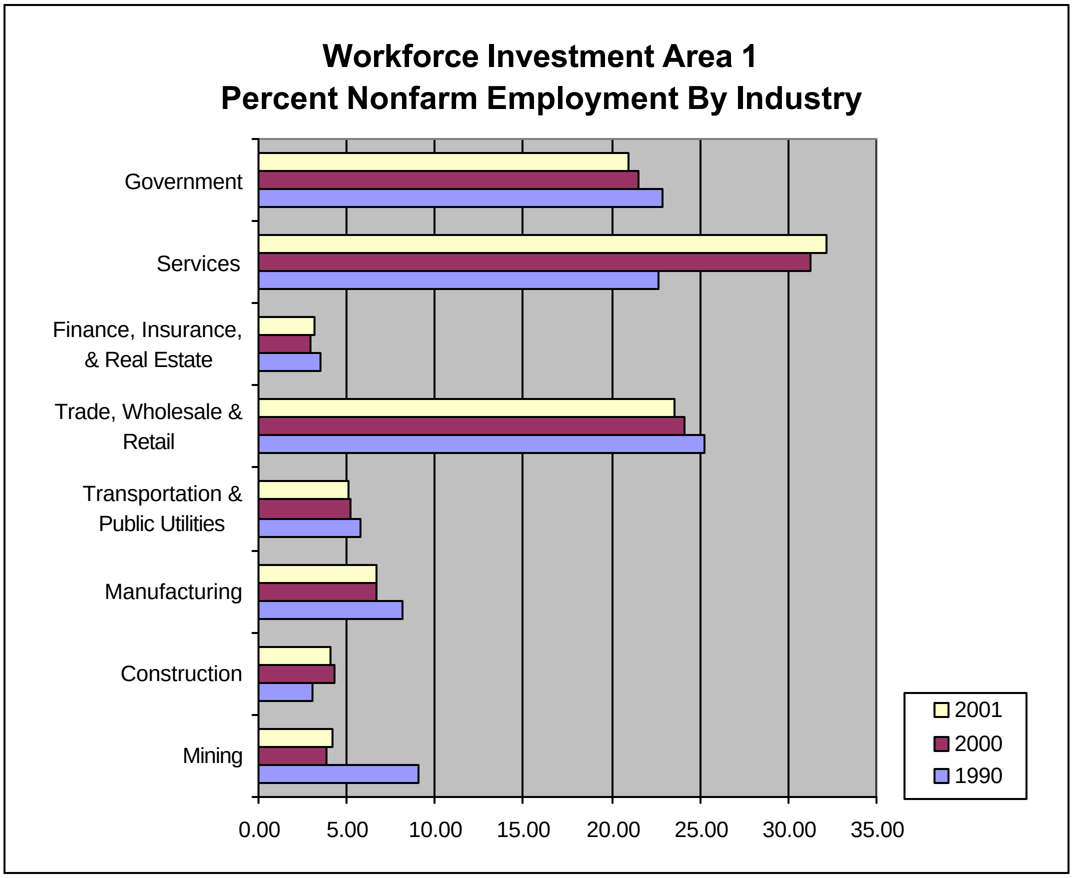
What Are The Implications?

Employment in the region is relatively small, accounting for only a small percent of the state's employment. Limited employment growth in the region further impacts job and career advancement opportunities in the region.

Employment, 1990 to 2001

	1990	2000	2001	Annual Percent Change	
				1990-2000	2000-2001
Fayette	14,948	16,132	15,929	0.77	-1.26
Greenbrier	13,644	14,890	14,752	0.88	-0.93
McDowell	7,661	6,492	6,328	-1.64	-2.53
Mercer	26,180	27,187	26,983	0.38	-0.75
Monroe	4,631	5,326	5,277	1.41	-0.92
Nicholas	8,951	10,400	10,421	1.51	0.20
Pocahontas	3,636	3,974	3,838	0.89	-3.41
Raleigh	26,567	33,034	32,990	2.20	-0.13
Summers	4,215	4,084	4,095	-0.32	0.27
Webster	2,753	2,918	2,924	0.58	0.21
Wyoming	7,532	7,335	7,039	-0.26	-4.04
Alleghany	7,893	7,838	8,023	-0.07	2.36
Giles	7,677	8,072	8,150	0.50	0.96
Tazewell	17,091	18,662	19,042	0.88	2.04
WIA 1	120,718	131,772	130,576	0.88	-0.91
W V	696,762	778,952	792,367	1.12	1.72
US	118,793,000	135,208,000	135,073,000	1.30	-0.10

Source: http://data.bls.gov/cgi-bin/dsrv?la and ftp://ftp.bls.gov/pub/special.requests/lf/aat1.txt.



Why Is This Important?

Observing the employment share of major industry groups provides a means to identify where jobs and career opportunities lie.

How Are We Doing?

In 2001, at the 1-digit industry code level, the services industry provided the most regional employment at 32.20 percent, wholesale and retail trade second at 23.58 percent, and government third at 20.98 percent. This is true for many counties and the state as well where services, trade, and government are the leading employers. Detailed data on the number of employment and share of employment at the 1-digit industry level by counties, region, and state is provided in the next two tables. The third table provides a summary of the region's top employing industries at the 1- and 2-digit level, and a summary of the best paying industries and other wage information (mean, entry, experienced, and median wages). Appendix C presents detailed employment and wage data at the 1- and 2-digit levels.

What Are The Implications?

Identifying current needs and future needs allows better planning and targeting of training and development resources.

Nonfarm Employment by Industry, 1990 to 2001

		Total Nonfarm Payroll	Goods Producing	Mining	Coal Mining	Construction	Manufacturing	Durable Goods	Nondurable Goods	Service Producing	Transportation & Public Utilities	Trade, Wholesale & Retail	Finance, Insurance, & Real Estate	Services	Government	Federal	State and Local
Fayette	1990	11,920	2,280	830	830	370	1,090	990	100	9,630	550	2,920	450	2,570	3,150	330	2,830
	2000	13,230	1,800	220	210	570	1,010	930	80	11,430	590	2,940	360	4,150	3,380	310	3,070
	2001	13,170	1,720	250	240	520	960	880	80	11,450	580	2,930	340	4,350	3,250	290	2,960
Greenbrier	1990	11,860	2,360	400	290	340	1,620	900	720	9,500	580	2,710	360	3,780	2,080	160	1,930
	2000	13,230	1,650	190	110	370	1,090	880	210	11,580	490	3,140	290	5,340	2,320	150	2,180
	2001	13,400	1,760	220	140	420	1,110	910	210	11,640	480	3,170	280	5,460	2,250	130	2,130
McDowell	1990	6,720	1,810	1,600	1,600	100	100			4,910	320	1,360	210	900	2,120	140	1,990
	2000	5,870	930	730	730	90	110			4,950	310	960	190	1,390	2,100	100	2,000
	2001	5,920	1,040	820	820	110	120			4,880	310	940	190	1,440	2,010	90	1,920
Mercer	1990	22,780	2,660	80	60	690	1,890	1,290	600	20,120	1,980	6,670	910	5,290	5,270	310	4,960
	2000	24,740	2,790	50	10	1,010	1,730	1,380	350	21,950	1,650	6,410	820	7,990	5,080	330	4,750
	2001	24,460	2,640	40	10	910	1,690	1,310	380	21,830	1,660	6,160	790	8,140	5,070	300	4,770
Monroe	1990	1,990	360	30	30	80	250			1,630	80	270	50	360	870	310	560
	2000	2,390	470	0	0	100	370			1,920	100	300	60	660	800	230	560
	2001	2,400	470	0	0	100	370			1,930	90	280	70	680	810	230	580
Nicholas	1990	7,930	2,630	1,460	1,460	200	960	460	500	5,300	390	1,970	220	1,140	1,580	150	1,430
	2000	9,160	2,100	580	580	400	1,130	950	170	7,060	580	2,330	210	2,010	1,920	130	1,790
	2001	9,180	2,120	650	650	350	1,130	960	170	7,050	530	2,300	200	2,100	1,930	130	1,810
Pocahontas	1990	3,330	950	20	0	100	840			2,380	130	400	110	910	840	100	740
	2000	3,860	690	10	0	170	500			3,170	210	500	70	1,540	860	90	780
	2001	3,860	660	30	0	130	510			3,200	200	530	70	1,550	840	80	770
Raleigh	1990	24,140	4,190	2,360	2,270	990	840	520	320	19,950	1,050	7,190	930	6,360	4,420	890	3,540
	2000	31,210	4,240	1,350	1,300	1,820	1,070	760	310	26,980	1,320	9,030	1,120	10,180	5,330	1,600	3,730
	2001	32,080	4,490	1,570	1,540	1,790	1,130	780	340	27,590	1,300	8,950	1,450	10,620	5,280	1,620	3,660
Summers	1990	2,620	80	0	0	30	60			2,540	530	530	100	420	960	50	910
	2000	2,650	140	0	0	60	80			2,520	190	670	70	750	830	50	780
	2001	2,660	150	0	0	80	70			2,510	190	660	60	780	820	40	780
Webster	1990	1,970	590	360	360	10	230			1,380	130	330	50	250	620	30	600
	2000	2,380	720	280	280	80	360			1,660	100	320	50	480	710	30	680
	2001	2,350	680	260	260	60	360			1,670	130	300	50	500	700	20	680
Wyoming	1990	5,790	1,940	1,700	1,640	110	130			3,850	400	980	160	770	1,530	130	1,400
	2000	5,830	1,480	970	870	270	240			4,360	480	1,040	130	1,370	1,340	100	1,240
	2001	5,960	1,570	1,050	940	300	220			4,390	480	1,000	120	1,530	1,260	90	1,170
WIA 1	1990	98,457	19,797	8,867	8,567	3,017	7,977	4,187	2,267	78,677	5,637	24,827	3,477	22,357	22,507	2,577	20,007
	2000	114,550	16,980	4,370	4,080	4,930	7,680	6,440	1,250	97,560	6,010	27,640	3,370	35,870	24,670	3,120	21,560
	2001	115,440	17,290	4,870	4,580	4,770	7,650	6,360	1,300	98,150	5,940	27,220	3,620	37,170	24,220	3,010	21,210
WV	1990	630,100	150,300	35,600	29,900	27,200	87,500	49,300	38,200	479,800	37,700	145,100	24,900	144,700	127,400	17,200	110,200
	2000	735,800	134,900	20,500	15,800	33,500	80,900	48,400	32,400	600,900	37,400	164,200	29,500	226,800	143,100	22,500	120,600
	2001	735,400	133,600	22,400	17,600	33,800	77,400	46,200	31,200	601,800	37,000	161,600	29,500	232,700	141,000	21,800	119,200

Source: http://www.state.wv.us/scripts/bep/lmi/cntydata.cfm.

Percent Nonfarm Employment by Industry, 1990 to 2001

		Goods Producing	Mining	Coal Mining	Construction	Manufacturing	Durable Goods	Nondurable Goods	Service Producing	Transportation & Public Utilities	Trade, Wholesale & Retail	Finance, Insurance, & Real Estate	Services	Government	Federal	State and Local
Fayette	1990	19.13	6.96	6.96	3.10	9.14	8.31	0.84	80.79	4.61	24.50	3.78	21.56	26.43	2.77	23.74
	2000	13.61	1.66	1.59	4.31	7.63	7.03	0.60	86.39	4.46	22.22	2.72	31.37	25.55	2.34	23.20
	2001	13.06	1.90	1.82	3.95	7.29	6.68	0.61	86.94	4.40	22.25	2.58	33.03	24.68	2.20	22.48
Greenbrier	1990	19.90	3.37	2.45	2.87	13.66	7.59	6.07	80.10	4.89	22.85	3.04	31.87	17.54	1.35	16.27
	2000	12.47	1.44	0.83	2.80	8.24	6.65	1.59	87.53	3.70	23.73	2.19	40.36	17.54	1.13	16.48
	2001	13.13	1.64	1.04	3.13	8.28	6.79	1.57	86.87	3.58	23.66	2.09	40.75	16.79	0.97	15.90
McDowell	1990	26.93	23.81	23.81	1.49	1.49			73.07	4.76	20.24	3.13	13.39	31.55	2.08	29.61
	2000	15.84	12.44	12.44	1.53	1.87			84.33	5.28	16.35	3.24	23.68	35.78	1.70	34.07
	2001	17.57	13.85	13.85	1.86	2.03			82.43	5.24	15.88	3.21	24.32	33.95	1.52	32.43
Mercer	1990	11.68	0.35	0.26	3.03	8.30	5.66	2.63	88.32	8.69	29.28	3.99	23.22	23.13	1.36	21.77
	2000	11.28	0.20	0.04	4.08	6.99	5.58	1.41	88.72	6.67	25.91	3.31	32.30	20.53	1.33	19.20
	2001	10.79	0.16	0.04	3.72	6.91	5.36	1.55	89.25	6.79	25.18	3.23	33.28	20.73	1.23	19.50
Monroe	1990	18.09	1.51	1.51	4.02	12.56			81.91	4.02	13.57	2.51	18.09	43.72	15.58	28.14
	2000	19.67	0.00	0.00	4.18	15.48			80.33	4.18	12.55	2.51	27.62	33.47	9.62	23.43
	2001	19.58	0.00	0.00	4.17	15.42			80.42	3.75	11.67	2.92	28.33	33.75	9.58	24.17
Nicholas	1990	33.17	18.41	18.41	2.52	12.11	5.80	6.31	66.83	4.92	24.84	2.77	14.38	19.92	1.89	18.03
	2000	22.93	6.33	6.33	4.37	12.34	10.37	1.86	77.07	6.33	25.44	2.29	21.94	20.96	1.42	19.54
	2001	23.09	7.08	7.08	3.81	12.31	10.46	1.85	76.80	5.77	25.05	2.18	22.88	21.02	1.42	19.72
Pocahontas	1990	28.53	0.60	0.00	3.00	25.23			71.47	3.90	12.01	3.30	27.33	25.23	3.00	22.22
	2000	17.88	0.26	0.00	4.40	12.95			82.12	5.44	12.95	1.81	39.90	22.28	2.33	20.21
	2001	17.10	0.78	0.00	3.37	13.21			82.90	5.18	13.73	1.81	40.16	21.76	2.07	19.95
Raleigh	1990	17.36	9.78	9.40	4.10	3.48	2.15	1.33	82.64	4.35	29.78	3.85	26.35	18.31	3.69	14.66
	2000	13.59	4.33	4.17	5.83	3.43	2.44	0.99	86.45	4.23	28.93	3.59	32.62	17.08	5.13	11.95
	2001	14.00	4.89	4.80	5.58	3.52	2.43	1.06	86.00	4.05	27.90	4.52	33.10	16.46	5.05	11.41
Summers	1990	3.05	0.00	0.00	1.15	2.29			96.95	20.23	20.23	3.82	16.03	36.64	1.91	34.73
	2000	5.28	0.00	0.00	2.26	3.02			95.09	7.17	25.28	2.64	28.30	31.32	1.89	29.43
	2001	5.64	0.00	0.00	3.01	2.63			94.36	7.14	24.81	2.26	29.32	30.83	1.50	29.32
Webster	1990	29.95	18.27	18.27	0.51	11.68			70.05	6.60	16.75	2.54	12.69	31.47	1.52	30.46
	2000	30.25	11.76	11.76	3.36	15.13			69.75	4.20	13.45	2.10	20.17	29.83	1.26	28.57
	2001	28.94	11.06	11.06	2.55	15.32			71.06	5.53	12.77	2.13	21.28	29.79	0.85	28.94
Wyoming	1990	33.51	29.36	28.32	1.90	2.25			66.49	6.91	16.93	2.76	13.30	26.42	2.25	24.18
	2000	25.39	16.64	14.92	4.63	4.12			74.79	8.23	17.84	2.23	23.50	22.98	1.72	21.27
	2001	26.34	17.62	15.77	5.03	3.69			73.66	8.05	16.78	2.01	25.67	21.14	1.51	19.63
WIA 1	1990	20.11	9.01	8.70	3.06	8.10	4.25	2.30	79.91	5.73	25.22	3.53	22.71	22.86	2.62	20.32
	2000	14.82	3.81	3.56	4.30	6.70	5.62	1.09	85.17	5.25	24.13	2.94	31.31	21.54	2.72	18.82
	2001	14.98	4.22	3.97	4.13	6.63	5.51	1.13	85.02	5.15	23.58	3.14	32.20	20.98	2.61	18.37
WV	1990	23.85	5.65	4.75	4.32	13.89	7.82	6.06	76.15	5.98	23.03	3.95	22.96	20.22	2.73	17.49
	2000	18.33	2.79	2.15	4.55	10.99	6.58	4.40	81.67	5.08	22.32	4.01	30.82	19.45	3.06	16.39
	2001	18.17	3.05	2.39	4.60	10.52	6.28	4.24	81.83	5.03	21.97	4.01	31.64	19.17	2.96	16.21

Source: http://www.state.wv.us/scripts/bep/lmi/cntydata.cfm.

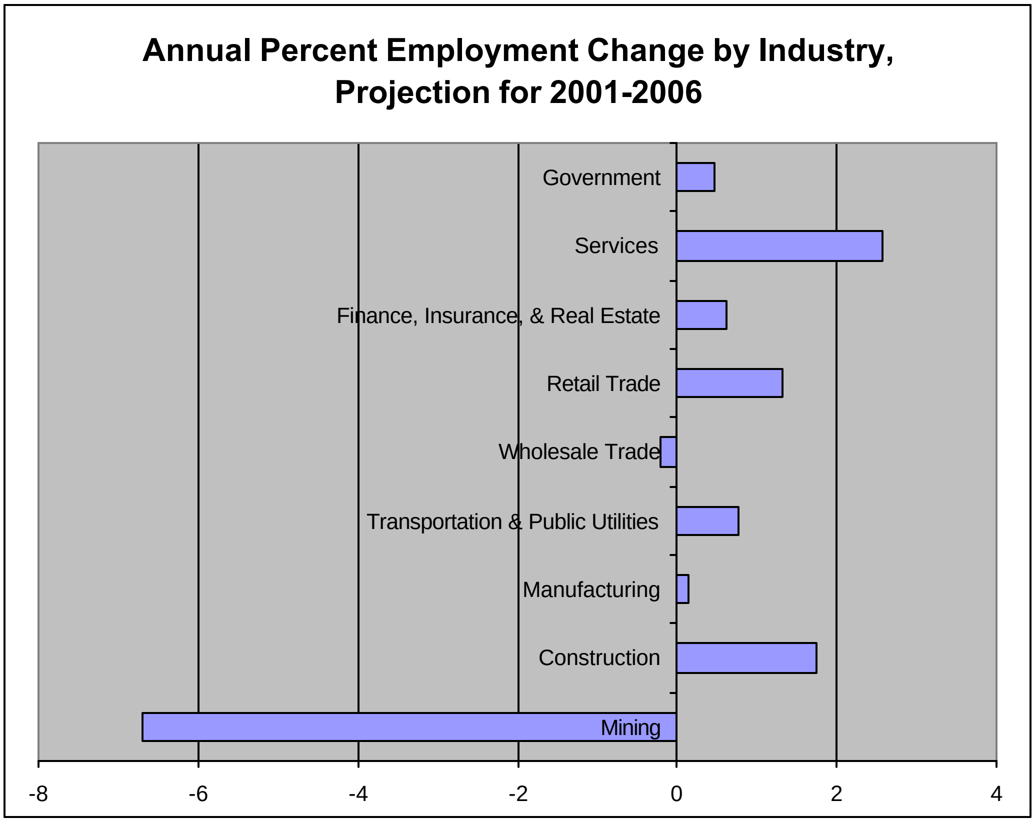
Total All Industries, Workforce Investment Area 1, 2000 and 2001

	2000		2001	
Top Employing Industries	**Employment**	**Percent**	**Employment**	**Percent**
Health Services	16,860	14.0	16,860	14.0
Educational Services	13,640	11.3	13,640	11.3
Eating and Drinking Places	7,050	5.8	7,050	5.8
Automotive Dealers and Gasoline Service Stations	5,330	4.4	5,330	4.4
Best Paying Industries*	**Employment**	**Mean Wage**	**Employment**	**Mean Wage**
Securities and Commodity Brokers, Dealers, Exchanges, and Services	40	$27.91	40	$28.51
Insurance Carriers	280	$22.46	280	$22.95
Coal Mining	4,760	$20.01	4,760	$20.44
Oil and Gas Extraction	280	$16.85	280	$17.22
Across All Industries and All Occupations	**Mean Wage**		**Mean Wage**	
Mean wage**	$12.42		$12.69	
Entry wage	$6.40		$6.54	
Experienced wage	$15.43		$15.76	
Median wage	$10.14		$10.36	

*See Appendix D for Comparative Occupational Wages, 2001.

**Mean wage 1999: $11.96 and mean wage 1998: $11.55.

Source: http://www.state.wv.us/bep/lmi/wia/wia1.htm.



Why Is This Important?

Identifying trends in employment share of major industry groups provide a means to identify future jobs and career opportunities.

How Are We Doing?

The 2001-2006 projections for the region's employment anticipate services to enjoy the highest growth rate, followed by construction and retail trade. Employment in the mining sector is expected to continue to fall.

In terms of number of employment, current trends should continue. That is, services, trade, and government are expected to provide the most jobs respectively.

What Are The Implications?

Identifying new and/or high employment growth industries and declining industries allow better planning and targeting of training and development resources.

Projections for Percent Employment Change By Industry, Five-Year Geometric Average 2001-2006*

	Mining	Construction	Manufacturing	Transportation & Public Utilities	Wholesale Trade	Retail Trade	Finance, Insurance, & Real Estate	Services	Government
Fayette	-10.34	1.32	0.66	1.28	-2.20	0.18	0.13	1.63	1.24
Greenbrier	-15.30	-0.35	1.05	0.68	2.84	1.56	1.93	2.25	0.64
McDowell	-0.30	-0.58	0.65	0.05	-7.89	-1.69	2.33	0.53	0.18
Mercer	1.44	2.26	0.44	0.31	-3.94	0.77	1.15	3.05	0.09
Monroe		1.93	0.86	2.09	1.88	-1.25	-8.05	2.65	-2.55
Nicholas	-37.12	3.16	-0.77	2.49	-0.97	1.90	0.32	3.06	1.23
Pocahontas		2.69	-1.39	1.96	-244.68	0.45	2.32	2.51	0.59
Raleigh	-2.26	2.48	-4.00	0.48	1.15	2.39	-0.03	2.96	1.08
Summers		-1.78	-2.99	-0.29	2.62	3.29	-0.73	1.18	-1.81
Webster	-4.03	4.25	2.21	3.48	-1.11	-0.13	3.74	2.30	1.24
Wyoming	-16.30	-0.76	4.93	-0.66	1.57	0.19	1.16	2.61	-1.72
Alleghany		3.01	1.38	-0.91	1.48	0.29	3.53	0.68	1.22
Giles		1.06	0.30	7.62	0.55	0.65	3.11	0.88	-0.23
Tazewell	-0.11	1.73	1.16	3.05	-0.55	2.58	1.02	1.52	1.48
WIA 1	-6.69	1.75	0.15	0.76	-0.21	1.33	0.62	2.58	0.47

*See Appendix E for Occupational Projections, 1998-2008 and Appendix F for Occupational Projections by Total Growth, 1998-2008.

Source: Center for Business and Economic Research.

APPENDIX A

PERCENT POPULATION BY AGE, 1990

and

PERCENT POPULATION BY AGE, 2000

Percent Population by Age, 1990

Years	Under 5	5-24	25-44	45-54	55-59	60-64	65-74	75-84	85 And Over
Fayette	5.19	29.70	28.04	9.69	4.74	5.56	9.78	5.71	1.58
Greenbrier	5.65	26.45	29.42	11.13	4.92	5.53	9.13	5.87	1.91
McDowell	6.16	31.22	28.69	9.55	4.38	5.23	8.94	4.73	1.10
Mercer	5.43	28.83	28.65	10.42	4.75	5.33	9.68	5.37	1.55
Monroe	5.96	27.56	27.54	11.20	5.26	5.56	9.95	5.45	1.53
Nicholas	6.47	29.67	29.80	10.49	4.84	4.81	8.13	4.52	1.28
Pocahontas	6.01	24.71	28.67	11.20	5.16	5.40	9.86	7.06	1.93
Raleigh	5.67	28.80	29.89	10.32	4.71	5.30	8.99	4.98	1.34
Summers	5.18	25.86	30.37	10.21	5.27	5.61	9.95	5.74	1.81
Webster	6.38	29.81	28.96	9.88	4.62	4.86	8.74	5.23	1.52
Wyoming	5.82	31.82	31.31	10.49	4.82	4.84	7.03	3.21	0.66
Alleghany	5.82	26.93	29.77	13.14	5.40	5.30	8.48	4.17	1.00
Giles	5.78	25.81	28.89	12.06	5.16	5.57	10.26	5.27	1.20
Tazewell	5.84	28.71	30.72	11.29	4.86	4.94	8.25	4.28	1.11
WIA 1	5.70	29.01	29.25	10.32	4.78	5.29	9.09	5.14	1.43
W V	5.95	28.82	29.71	10.67	4.75	5.11	8.68	4.89	1.42
US	7.38	28.94	32.47	10.14	4.23	4.27	7.28	4.04	1.24

Source: http://factfinder.census.gov/servlet/BasicFactsServlet (Census 1990: Age and Sex (QT)).

Percent Population by Age, 2000

Years	Under 5	5-24	25-44	45-54	55-59	60-64	65-74	75-84	85 And Over
Fayette	5.6	25.7	27.1	15.3	5.2	4.6	8.6	5.8	2.1
Greenbrier	5.5	23.8	26.1	15.4	6.1	5.4	9.5	6.0	2.3
McDowell	5.1	25.8	26.8	15.8	5.5	4.7	8.5	5.8	1.8
Mercer	5.8	25.1	26.2	15.0	5.6	4.9	9.0	6.3	2.0
Monroe	5.0	23.3	30.4	15.0	6.2	4.9	8.4	5.4	1.6
Nicholas	5.4	26.0	27.6	15.4	5.5	5.1	8.3	5.0	1.7
Pocahontas	5.0	22.9	27.5	15.3	6.3	5.8	9.3	5.6	2.4
Raleigh	5.5	24.8	28.6	15.8	5.3	4.6	8.3	5.4	1.7
Summers	4.6	23.4	24.7	15.7	6.0	5.6	10.7	6.7	2.5
Webster	5.1	25.8	26.7	16.1	5.7	5.3	8.2	5.2	1.9
Wyoming	5.7	25.3	27.5	17.2	5.4	4.9	8.4	4.3	1.2
Alleghany	5.6	23.4	26.8	15.8	7.2	5.6	8.5	5.5	1.6
Giles	5.7	23.1	28.4	14.6	6.7	4.9	8.7	6.3	1.7
Tazewell	5.3	24.5	27.2	16.2	6.1	5.2	8.6	5.3	1.7
WIA 1	5.5	25.0	27.3	15.6	5.6	4.9	8.7	5.6	1.9
W V	5.6	26.0	27.8	15.0	5.5	4.8	8.2	5.3	1.8
US	6.8	28.5	30.2	13.4	4.8	3.8	6.5	4.4	1.5

Source: http://factfinder.census.gov/servlet/BasicFactsServlet (Census 2000: Population and Housing (QT)).

APPENDIX B

TRANSFER PAYMENTS

Transfer Payments, thousands of dollars and percent of total transfer payments **Fayette**

	1980		1990		1999	
	$ (000)	%	$ (000)	%	$ (000)	%
Total transfer payments	117,893	100.00	177,094	100.00	277,605	100.00
Government payments to individuals	113,841	96.56	171,097	96.61	269,326	97.02
Retirement & disability insur. benefit pymts.	74,615	63.29	98,349	55.53	127,963	46.10
Old age, survivors, & disability ins. pymts.	42,989	36.46	67,312	38.01	100,761	36.30
Railroad retirement and disability payments	2,108	1.79	3,250	1.84	3,369	1.21
Worker's compensation payments (Fed & State)	2,499	2.12	6,272	3.54	8,692	3.13
Other govt. disability ins. & ret. pymts.	27,019	22.92	21,515	12.15	15,141	5.45
Medical payments	13,455	11.41	42,854	24.20	98,272	35.40
Medicare payments	8,877	7.53	27,707	15.65	51,845	18.68
Public assistance medical care	4,450	3.77	14,746	8.33	46,101	16.61
Military medical insurance payments	128	0.11	401	0.23	326	0.12
Income maintenance benefit payments	10,197	8.65	17,825	10.07	26,908	9.69
Supplemental security income (SSI) payments	2,561	2.17	4,697	2.65	10,660	3.84
Family assistance	2,780	2.36	4,036	2.28	1,490	0.54
Food stamps	3,629	3.08	6,865	3.88	6,925	2.49
Other income maintenance	1,227	1.04	2,227	1.26	7,833	2.82
Unemployment insurance benefit payments	8,926	7.57	3,415	1.93	4,504	1.62
State unemployment insurance compensation	7,149	6.06	3,259	1.84	4,321	1.56
Unemp. comp. for Fed. civilian empl. (UCFE)						
Unemp. compensation for railroad employees	110	0.09				
Unemployment compensation for veterans (UCX)	171	0.15	97	0.05	139	0.05
Other unemployment compensation	1,484	1.26				
Veterans benefit payments	5,445	4.62	6,755	3.81	8,961	3.23
Veterans pension and disability payments	4,781	4.06	6,211	3.51	8,500	3.06
Veterans readjustment payments	387	0.33	194	0.11	272	0.10
Veterans life insurance benefit payments	261	0.22	348	0.20	189	0.07
Other assistance to veterans						
Fed ed.& train. assist. paymts.(excl.vets)	1,198	1.02	1,863	1.05	2,621	0.94
Other payments to individuals					97	0.03
Payments to nonprofit institutions	2,396	2.03	2,799	1.58	4,723	1.70
Federal government payments	830	0.70	767	0.43	1,245	0.45
State and local government payments	961	0.82	1,114	0.63	1,875	0.68
Business payments	605	0.51	918	0.52	1,603	0.58
Business payments to individuals	1,656	1.40	3,198	1.81	3,556	1.28

Source: http://www.bea.gov.

Transfer Payments, thousands of dollars and percent of total transfer payments **Greenbrier**

	1980		1990		1999	
	$ (000)	%	$ (000)	%	$ (000)	%
Total transfer payments	56,242	100.00	107,092	100.00	178,342	100.00
Government payments to individuals	53,601	95.30	102,745	95.94	172,119	96.51
Retirement & disability insur. benefit pymts.	32,624	58.01	56,595	52.85	79,861	44.78
Old age, survivors, & disability ins. pymts.	23,294	41.42	42,590	39.77	65,154	36.53
Railroad retirement and disability payments	2,107	3.75	3,412	3.19	3,391	1.90
Worker's compensation payments (Fed & State)	1,739	3.09	5,486	5.12	7,300	4.09
Other govt. disability ins. & ret. pymts.	5,484	9.75	5,107	4.77	4,016	2.25
Medical payments	7,721	13.73	29,474	27.52	69,008	38.69
Medicare payments	5,450	9.69	17,968	16.78	33,885	19.00
Public assistance medical care	2,159	3.84	11,139	10.40	34,825	19.53
Military medical insurance payments	112	0.20	367	0.34	298	0.17
Income maintenance benefit payments	4,611	8.20	8,098	7.56	13,926	7.81
Supplemental security income (SSI) payments	1,690	3.00	2,937	2.74	5,772	3.24
Family assistance	527	0.94	1,151	1.07	367	0.21
Food stamps	1,581	2.81	2,736	2.55	3,209	1.80
Other income maintenance	813	1.45	1,274	1.19	4,578	2.57
Unemployment insurance benefit payments	4,975	8.85	3,467	3.24	3,322	1.86
State unemployment insurance compensation	4,280	7.61	3,391	3.17	3,242	1.82
Unemp. comp. for Fed. civilian empl. (UCFE)						
Unemp. compensation for railroad employees	122	0.22				
Unemployment compensation for veterans (UCX)	63	0.11			52	0.03
Other unemployment compensation	507	0.90	0	0.00	0	0.00
Veterans benefit payments	3,459	6.15	4,755	4.44	5,452	3.06
Veterans pension and disability payments	3,013	5.36	4,361	4.07	5,272	2.96
Veterans readjustment payments	260	0.46	144	0.13	142	0.08
Veterans life insurance benefit payments	177	0.31	249	0.23		
Other assistance to veterans					0	0.00
Fed ed.& train. assist. paymts.(excl.vets)	208	0.37	330	0.31	477	0.27
Other payments to individuals					73	0.04
Payments to nonprofit institutions	1,562	2.78	2,029	1.89	3,539	1.98
Federal government payments	541	0.96	556	0.52	940	0.53
State and local government payments	627	1.11	808	0.75	1,415	0.79
Business payments	394	0.70	665	0.62	1,184	0.66
Business payments to individuals	1,079	1.92	2,318	2.16	2,684	1.50

Source: http://www.bea.gov.

Transfer Payments, thousands of dollars and percent of total transfer payments **McDowell**

	1980		1990		1999	
	$ (000)	%	$ (000)	%	$ (000)	%
Total transfer payments	102,253	100.00	147,761	100.00	191,062	100.00
Government payments to individuals	98,768	96.59	143,379	97.03	185,881	97.29
Retirement & disability insur. benefit pymts.	68,149	66.65	85,293	57.72	90,891	47.57
Old age, survivors, & disability ins. pymts.	35,548	34.76	57,666	39.03	69,798	36.53
Railroad retirement and disability payments	967	0.95	1,596	1.08	1,990	1.04
Worker's compensation payments (Fed & State)	2,170	2.12	3,317	2.24	3,240	1.70
Other govt. disability ins. & ret. pymts.	29,464	28.81	22,714	15.37	15,863	8.30
Medical payments	7,980	7.80	28,310	19.16	48,765	25.52
Medicare payments	5,954	5.82	22,875	15.48	32,112	16.81
Public assistance medical care	1,985	1.94	5,300	3.59	16,570	8.67
Military medical insurance payments			135	0.09	83	0.04
Income maintenance benefit payments	12,701	12.42	23,608	15.98	37,934	19.85
Supplemental security income (SSI) payments	2,856	2.79	7,165	4.85	17,972	9.41
Family assistance	3,939	3.85	5,614	3.80	2,203	1.15
Food stamps	4,498	4.40	8,150	5.52	8,367	4.38
Other income maintenance	1,408	1.38	2,679	1.81	9,392	4.92
Unemployment insurance benefit payments	5,796	5.67	2,260	1.53	2,896	1.52
State unemployment insurance compensation	5,351	5.23	2,166	1.47	2,825	1.48
Unemp. comp. for Fed. civilian empl. (UCFE)						
Unemp. compensation for railroad employees	58	0.06				
Unemployment compensation for veterans (UCX)	60	0.06			51	0.03
Other unemployment compensation	310	0.30	0	0.00	0	0.00
Veterans benefit payments	3,862	3.78	3,544	2.40	4,925	2.58
Veterans pension and disability payments	3,361	3.29	3,219	2.18	4,615	2.42
Veterans readjustment payments	281	0.27	141	0.10	84	0.04
Veterans life insurance benefit payments	204	0.20	182	0.12	226	0.12
Other assistance to veterans					0	0.00
Fed ed.& train. assist. paymts.(excl.vets)	276	0.27	337	0.23	409	0.21
Other payments to individuals					61	0.03
Payments to nonprofit institutions	2,061	2.02	2,045	1.38	2,954	1.55
Federal government payments	714	0.70	560	0.38	780	0.41
State and local government payments	827	0.81	814	0.55	1,174	0.61
Business payments	520	0.51	671	0.45	1,000	0.52
Business payments to individuals	1,424	1.39	2,337	1.58	2,227	1.17

Source: http://www.bea.gov.

Transfer Payments, thousands of dollars and percent of total transfer payments **Mercer**

	1980		1990		1999	
	$ (000)	%	$ (000)	%	$ (000)	%
Total transfer payments	129,564	100.00	239,604	100.00	379,524	100.00
Government payments to individuals	124,380	96.00	231,479	96.61	368,239	97.03
Retirement & disability insur. benefit pymts.	77,450	59.78	129,831	54.19	172,618	45.48
Old age, survivors, & disability ins. pymts.	45,428	35.06	88,116	36.78	128,417	33.84
Railroad retirement and disability payments	8,667	6.69	12,866	5.37	15,920	4.19
Worker's compensation payments (Fed & State)	4,543	3.51	11,362	4.74	14,352	3.78
Other govt. disability ins. & ret. pymts.	18,812	14.52	17,487	7.30	13,929	3.67
Medical payments	19,799	15.28	64,031	26.72	142,333	37.50
Medicare payments	11,733	9.06	39,168	16.35	65,880	17.36
Public assistance medical care	7,907	6.10	24,334	10.16	76,076	20.05
Military medical insurance payments	159	0.12	529	0.22	377	0.10
Income maintenance benefit payments	11,835	9.13	21,809	9.10	33,684	8.88
Supplemental security income (SSI) payments	3,002	2.32	6,774	2.83	14,898	3.93
Family assistance	3,066	2.37	4,440	1.85	1,501	0.40
Food stamps	4,311	3.33	7,844	3.27	8,183	2.16
Other income maintenance	1,456	1.12	2,751	1.15	9,102	2.40
Unemployment insurance benefit payments	7,156	5.52	3,639	1.52	2,882	0.76
State unemployment insurance compensation	6,426	4.96	3,245	1.35	2,682	0.71
Unemp. comp. for Fed. civilian empl. (UCFE)						
Unemp. compensation for railroad employees	405	0.31	321	0.13	94	0.02
Unemployment compensation for veterans (UCX)	87	0.07			72	0.02
Other unemployment compensation	219	0.17	0	0.00	0	0.00
Veterans benefit payments	6,229	4.81	7,967	3.33	10,734	2.83
Veterans pension and disability payments	5,251	4.05	7,256	3.03	10,080	2.66
Veterans readjustment payments	579	0.45	265	0.11	443	0.12
Veterans life insurance benefit payments	373	0.29	443	0.18	211	0.06
Other assistance to veterans					0	0.00
Fed ed.& train. assist. paymts.(excl.vets)	1,905	1.47	4,153	1.73	5,856	1.54
Other payments to individuals					132	0.03
Payments to nonprofit institutions	3,065	2.37	3,792	1.58	6,411	1.69
Federal government payments	1,062	0.82	1,039	0.43	1,707	0.45
State and local government payments	1,230	0.95	1,509	0.63	2,570	0.68
Business payments	773	0.60	1,244	0.52	2,134	0.56
Business payments to individuals	2,119	1.64	4,333	1.81	4,874	1.28

Source: http://www.bea.gov.

Transfer Payments, thousands of dollars and percent of total transfer payments **Monroe**

	1980		1990		1999	
	$ (000)	%	$ (000)	%	$ (000)	%
Total transfer payments	18,784	100.00	36,350	100.00	56,091	100.00
Government payments to individuals	17,880	95.19	34,796	95.72	53,753	95.83
Retirement & disability insur. benefit pymts.	11,114	59.17	20,454	56.27	28,516	50.84
Old age, survivors, & disability ins. pymts.	8,760	46.64	16,590	45.64	24,308	43.34
Railroad retirement and disability payments	577	3.07	846	2.33	1,082	1.93
Worker's compensation payments (Fed & State)	533	2.84	1,697	4.67	2,118	3.78
Other govt. disability ins. & ret. pymts.	1,244	6.62	1,321	3.63	1,008	1.80
Medical payments	2,672	14.22	8,377	23.05	15,916	28.38
Medicare payments	2,509	13.36	7,490	20.61	13,389	23.87
Public assistance medical care	127	0.68	772	2.12	2,415	4.31
Military medical insurance payments			115	0.32	112	0.20
Income maintenance benefit payments	1,934	10.30	3,527	9.70	6,185	11.03
Supplemental security income (SSI) payments	881	4.69	1,499	4.12	2,893	5.16
Family assistance	165	0.88	440	1.21	132	0.24
Food stamps	543	2.89	1,021	2.81	1,023	1.82
Other income maintenance	345	1.84	567	1.56	2,137	3.81
Unemployment insurance benefit payments	921	4.90	713	1.96	495	0.88
State unemployment insurance compensation	773	4.12	700	1.93	475	0.85
Unemp. comp. for Fed. civilian empl. (UCFE)	0	0.00				
Unemp. compensation for railroad employees			0	0.00		
Unemployment compensation for veterans (UCX)						
Other unemployment compensation	100	0.53	0	0.00	0	0.00
Veterans benefit payments	1,166	6.21	1,598	4.40	2,436	4.34
Veterans pension and disability payments	1,049	5.58	1,467	4.04	2,313	4.12
Veterans readjustment payments	68	0.36				
Veterans life insurance benefit payments			82	0.23	86	0.15
Other assistance to veterans	0	0.00	0	0.00	0	0.00
Fed ed.& train. assist. paymts.(excl.vets)	72	0.38	118	0.32	178	0.32
Other payments to individuals						
Payments to nonprofit institutions	535	2.85	726	2.00	1,328	2.37
Federal government payments	185	0.98	199	0.55	354	0.63
State and local government payments	215	1.14	289	0.80	533	0.95
Business payments	135	0.72	238	0.65	441	0.79
Business payments to individuals	369	1.96	828	2.28	1,010	1.80

Source: http://www.bea.gov.

Transfer Payments, thousands of dollars and percent of total transfer payments **Nicholas**

	1980		1990		1999	
	$ (000)	%	$ (000)	%	$ (000)	%
Total transfer payments	41,132	100.00	79,371	100.00	130,318	100.00
Government payments to individuals	39,155	95.19	76,018	95.78	125,467	96.28
Retirement & disability insur. benefit pymts.	24,497	59.56	43,884	55.29	63,825	48.98
Old age, survivors, & disability ins. pymts.	16,376	39.81	33,463	42.16	53,842	41.32
Railroad retirement and disability payments	246	0.60	544	0.69	868	0.67
Worker's compensation payments (Fed & State)	1,516	3.69	3,710	4.67	4,278	3.28
Other govt. disability ins. & ret. pymts.	6,359	15.46	6,167	7.77	4,837	3.71
Medical payments	4,925	11.97	17,649	22.24	41,922	32.17
Medicare payments	2,993	7.28	11,156	14.06	21,985	16.87
Public assistance medical care	1,894	4.60	6,331	7.98	19,791	15.19
Military medical insurance payments			162	0.20	146	0.11
Income maintenance benefit payments	3,993	9.71	8,941	11.26	12,880	9.88
Supplemental security income (SSI) payments	1,085	2.64	2,206	2.78	5,100	3.91
Family assistance	826	2.01	1,974	2.49	425	0.33
Food stamps	1,511	3.67	3,648	4.60	3,639	2.79
Other income maintenance	571	1.39	1,113	1.40	3,716	2.85
Unemployment insurance benefit payments	3,394	8.25	2,240	2.82	2,524	1.94
State unemployment insurance compensation	2,942	7.15	2,157	2.72	2,395	1.84
Unemp. comp. for Fed. civilian empl. (UCFE)						
Unemp. compensation for railroad employees						
Unemployment compensation for veterans (UCX)	77	0.19			63	0.05
Other unemployment compensation	335	0.81				
Veterans benefit payments	2,188	5.32	3,030	3.82	3,887	2.98
Veterans pension and disability payments	1,882	4.58	2,746	3.46	3,598	2.76
Veterans readjustment payments	185	0.45	109	0.14	143	0.11
Veterans life insurance benefit payments	112	0.27	174	0.22	146	0.11
Other assistance to veterans					0	0.00
Fed ed.& train. assist. paymts.(excl.vets)	156	0.38	254	0.32	372	0.29
Other payments to individuals					57	0.04
Payments to nonprofit institutions	1,169	2.84	1,565	1.97	2,759	2.12
Federal government payments	405	0.98	429	0.54	733	0.56
State and local government payments	469	1.14	623	0.78	1,103	0.85
Business payments	295	0.72	513	0.65	923	0.71
Business payments to individuals	808	1.96	1,788	2.25	2,092	1.61

Source: http://www.bea.gov.

Transfer Payments, thousands of dollars and percent of total transfer payments **Pocahontas**

	1980		1990		1999	
	$ (000)	%	$ (000)	%	$ (000)	%
Total transfer payments	13,285	100.00	29,185	100.00	52,432	100.00
Government payments to individuals	12,590	94.77	28,061	96.15	50,829	96.94
Retirement & disability insur. benefit pymts.	7,336	55.22	13,141	45.03	19,639	37.46
Old age, survivors, & disability ins. pymts.	6,368	47.93	11,411	39.10	17,276	32.95
Railroad retirement and disability payments	181	1.36	239	0.82	280	0.53
Worker's compensation payments (Fed & State)	453	3.41	1,193	4.09	1,779	3.39
Other govt. disability ins. & ret. pymts.	334	2.51	298	1.02	304	0.58
Medical payments	1,685	12.68	10,280	35.22	25,161	47.99
Medicare payments	1,521	11.45	5,142	17.62	9,275	17.69
Public assistance medical care	136	1.02	5,059	17.33	15,814	30.16
Military medical insurance payments			79	0.27	72	0.14
Income maintenance benefit payments	1,522	11.46	2,020	6.92	3,295	6.28
Supplemental security income (SSI) payments	592	4.46	754	2.58	1,314	2.51
Family assistance	220	1.66	229	0.78	53	0.10
Food stamps	440	3.31	708	2.43	789	1.50
Other income maintenance	270	2.03	329	1.13	1,139	2.17
Unemployment insurance benefit payments	1,028	7.74	1,327	4.55	1,246	2.38
State unemployment insurance compensation	970	7.30	1,305	4.47	1,217	2.32
Unemp. comp. for Fed. civilian empl. (UCFE)						
Unemp. compensation for railroad employees					0	0.00
Unemployment compensation for veterans (UCX)						
Other unemployment compensation			0	0.00	0	0.00
Veterans benefit payments	963	7.25	1,202	4.12	1,348	2.57
Veterans pension and disability payments	841	6.33	1,105	3.79	1,334	2.54
Veterans readjustment payments	70	0.53				
Veterans life insurance benefit payments	52	0.39	59	0.20	0	0.00
Other assistance to veterans	0	0.00	0	0.00	0	0.00
Fed ed.& train. assist. paymts.(excl.vets)	55	0.41	85	0.29	121	0.23
Other payments to individuals						
Payments to nonprofit institutions	411	3.09	525	1.80	914	1.74
Federal government payments	142	1.07	144	0.49	241	0.46
State and local government payments	165	1.24	209	0.72	363	0.69
Business payments	104	0.78	172	0.59	310	0.59
Business payments to individuals	284	2.14	599	2.05	689	1.31

Source: http://www.bea.gov.

Transfer Payments, thousands of dollars and percent of total transfer payments						Raleigh
	1980		1990		1999	
	$ (000)	%	$ (000)	%	$ (000)	%
Total transfer payments	156,695	100.00	272,892	100.00	423,030	100.00
Government payments to individuals	150,607	96.11	263,288	96.48	409,154	96.72
Retirement & disability insur. benefit pymts.	102,630	65.50	157,996	57.90	207,155	48.97
Old age, survivors, & disability ins. pymts.	59,496	37.97	109,362	40.08	159,964	37.81
Railroad retirement and disability payments	1,912	1.22	3,433	1.26	4,629	1.09
Worker's compensation payments (Fed & State)	4,886	3.12	13,430	4.92	18,728	4.43
Other govt. disability ins. & ret. pymts.	36,336	23.19	31,771	11.64	23,834	5.63
Medical payments	16,647	10.62	62,381	22.86	140,038	33.10
Medicare payments	9,915	6.33	38,863	14.24	67,882	16.05
Public assistance medical care	6,530	4.17	22,920	8.40	71,655	16.94
Military medical insurance payments	202	0.13	598	0.22	501	0.12
Income maintenance benefit payments	9,883	6.31	24,852	9.11	35,751	8.45
Supplemental security income (SSI) payments	2,730	1.74	6,391	2.34	14,527	3.43
Family assistance	2,359	1.51	6,008	2.20	1,969	0.47
Food stamps	3,405	2.17	9,397	3.44	9,322	2.20
Other income maintenance	1,389	0.89	3,056	1.12	9,933	2.35
Unemployment insurance benefit payments	12,878	8.22	6,343	2.32	8,807	2.08
State unemployment insurance compensation	9,310	5.94	6,248	2.29	8,672	2.05
Unemp. comp. for Fed. civilian empl. (UCFE)	52	0.03				
Unemp. compensation for railroad employees	127	0.08				
Unemployment compensation for veterans (UCX)	101	0.06	57	0.02	83	0.02
Other unemployment compensation	3,288	2.10	0	0.00	0	0.00
Veterans benefit payments	7,610	4.86	9,892	3.62	14,715	3.48
Veterans pension and disability payments	6,584	4.20	9,054	3.32	13,439	3.18
Veterans readjustment payments	624	0.40	315	0.12	662	0.16
Veterans life insurance benefit payments	376	0.24	520	0.19	614	0.15
Other assistance to veterans					0	0.00
Fed ed.& train. assist. paymts.(excl.vets)	953	0.61	1,767	0.65	2,524	0.60
Other payments to individuals			57	0.02	164	0.04
Payments to nonprofit institutions	3,600	2.30	4,482	1.64	7,891	1.87
Federal government payments	1,247	0.80	1,228	0.45	2,096	0.50
State and local government payments	1,445	0.92	1,784	0.65	3,157	0.75
Business payments	908	0.58	1,470	0.54	2,638	0.62
Business payments to individuals	2,488	1.59	5,122	1.88	5,985	1.41

Source: http://www.bea.gov.

Transfer Payments, thousands of dollars and percent of total transfer payments **Summers**

	1980		1990		1999	
	$ (000)	%	$ (000)	%	$ (000)	%
Total transfer payments	25,687	100.00	47,200	100.00	78,679	100.00
Government payments to individuals	24,574	95.67	45,432	96.25	76,261	96.93
Retirement & disability insur. benefit pymts.	13,064	50.86	22,728	48.15	32,856	41.76
Old age, survivors, & disability ins. pymts.	7,083	27.57	12,440	26.36	21,350	27.14
Railroad retirement and disability payments	4,177	16.26	7,706	16.33	8,639	10.98
Worker's compensation payments (Fed & State)	507	1.97	1,399	2.96	1,867	2.37
Other govt. disability ins. & ret. pymts.	1,297	5.05	1,183	2.51	1,000	1.27
Medical payments	3,959	15.41	13,312	28.20	30,684	39.00
Medicare payments	2,337	9.10	7,192	15.24	11,847	15.06
Public assistance medical care	1,584	6.17	5,989	12.69	18,724	23.80
Military medical insurance payments			131	0.28	113	0.14
Income maintenance benefit payments	3,944	15.35	5,828	12.35	8,653	11.00
Supplemental security income (SSI) payments	1,295	5.04	1,990	4.22	3,455	4.39
Family assistance	825	3.21	1,014	2.15	401	0.51
Food stamps	1,291	5.03	2,042	4.33	1,932	2.46
Other income maintenance	533	2.07	782	1.66	2,865	3.64
Unemployment insurance benefit payments	1,935	7.53	1,039	2.20	1,246	1.58
State unemployment insurance compensation	1,488	5.79	917	1.94	1,130	1.44
Unemp. comp. for Fed. civilian empl. (UCFE)	0	0.00				
Unemp. compensation for railroad employees	212	0.83	95	0.20	72	0.09
Unemployment compensation for veterans (UCX)		0.00				
Other unemployment compensation	192	0.75	0	0.00	0	0.00
Veterans benefit payments	1,583	6.16	2,379	5.04	2,603	3.31
Veterans pension and disability payments	1,430	5.57	2,225	4.71	2,429	3.09
Veterans readjustment payments	88	0.34	61	0.13	78	0.10
Veterans life insurance benefit payments	65	0.25	93	0.20	96	0.12
Other assistance to veterans	0	0.00	0	0.00	0	0.00
Fed ed.& train. assist. paymts.(excl.vets)	88	0.34	135	0.29	190	0.24
Other payments to individuals						
Payments to nonprofit institutions	658	2.56	825	1.75	1,364	1.73
Federal government payments	228	0.89	226	0.48	369	0.47
State and local government payments	264	1.03	328	0.69	556	0.71
Business payments	166	0.65	271	0.57	439	0.56
Business payments to individuals	455	1.77	943	2.00	1,054	1.34

Source: http://www.bea.gov.

Transfer Payments, thousands of dollars and percent of total transfer payments **Webster**

	1980		1990		1999	
	$ (000)	%	$ (000)	%	$ (000)	%
Total transfer payments	21,660	100.00	33,521	100.00	50,950	100.00
Government payments to individuals	20,802	96.04	32,182	96.01	49,176	96.52
Retirement & disability insur. benefit pymts.	12,315	56.86	17,155	51.18	23,222	45.58
Old age, survivors, & disability ins. pymts.	7,668	35.40	11,788	35.17	18,634	36.57
Railroad retirement and disability payments	436	2.01	889	2.65	776	1.52
Worker's compensation payments (Fed & State)	424	1.96	1,036	3.09	1,300	2.55
Other govt. disability ins. & ret. pymts.	3,787	17.48	3,442	10.27	2,512	4.93
Medical payments	2,318	10.70	5,764	17.20	13,565	26.62
Medicare payments	1,579	7.29	4,108	12.26	8,550	16.78
Public assistance medical care	721	3.33	1,590	4.74	4,972	9.76
Military medical insurance payments			66	0.20		
Income maintenance benefit payments	3,579	16.52	6,317	18.84	9,275	18.20
Supplemental security income (SSI) payments	997	4.60	1,842	5.50	3,554	6.98
Family assistance	859	3.97	1,343	4.01	647	1.27
Food stamps	1,267	5.85	2,398	7.15	2,409	4.73
Other income maintenance	456	2.11	734	2.19	2,665	5.23
Unemployment insurance benefit payments	1,448	6.69	1,349	4.02	876	1.72
State unemployment insurance compensation	1,287	5.94	1,317	3.93	842	1.65
Unemp. comp. for Fed. civilian empl. (UCFE)						
Unemp. compensation for railroad employees	75	0.35				
Unemployment compensation for veterans (UCX)						
Other unemployment compensation	60	0.28			0	0.00
Veterans benefit payments	1,074	4.96	1,487	4.44	2,080	4.08
Veterans pension and disability payments	970	4.48	1,378	4.11	2,047	4.02
Veterans readjustment payments	64	0.30				
Veterans life insurance benefit payments			66	0.20		
Other assistance to veterans	0	0.00	0	0.00	0	0.00
Fed ed.& train. assist. paymts.(excl.vets)	67	0.31	103	0.31	137	0.27
Other payments to individuals						
Payments to nonprofit institutions	507	2.34	625	1.86	1,011	1.98
Federal government payments	176	0.81	171	0.51	267	0.52
State and local government payments	203	0.94	249	0.74	402	0.79
Business payments	128	0.59	205	0.61	342	0.67
Business payments to individuals	351	1.62	714	2.13	763	1.50

Source: http://www.bea.gov.

Transfer Payments, thousands of dollars and percent of total transfer payments **Wyoming**

	1980		1990		1999	
	$ (000)	%	$ (000)	%	$ (000)	%
Total transfer payments	54,064	100.00	90,886	100.00	141,805	100.00
Government payments to individuals	51,545	95.34	87,258	96.01	137,039	96.64
Retirement & disability insur. benefit pymts.	35,737	66.10	54,880	60.38	77,163	54.41
Old age, survivors, & disability ins. pymts.	19,752	36.53	36,815	40.51	60,026	42.33
Railroad retirement and disability payments	1,604	2.97	2,760	3.04	3,739	2.64
Worker's compensation payments (Fed & State)	1,902	3.52	4,132	4.55	4,481	3.16
Other govt. disability ins. & ret. pymts.	12,479	23.08	11,173	12.29	8,917	6.29
Medical payments	4,279	7.91	13,471	14.82	32,883	23.19
Medicare payments	3,452	6.39	10,228	11.25	22,974	16.20
Public assistance medical care	797	1.47	3,148	3.46	9,842	6.94
Military medical insurance payments			95	0.10	67	0.05
Income maintenance benefit payments	5,868	10.85	14,219	15.64	20,594	14.52
Supplemental security income (SSI) payments	1,354	2.50	3,380	3.72	8,607	6.07
Family assistance	1,685	3.12	3,631	4.00	1,229	0.87
Food stamps	2,134	3.95	5,541	6.10	4,847	3.42
Other income maintenance	695	1.29	1,667	1.83	5,911	4.17
Unemployment insurance benefit payments	3,466	6.41	2,027	2.23	2,271	1.60
State unemployment insurance compensation	3,237	5.99	1,886	2.08	2,220	1.57
Unemp. comp. for Fed. civilian empl. (UCFE)						
Unemp. compensation for railroad employees	106	0.20	115	0.13		
Unemployment compensation for veterans (UCX)						
Other unemployment compensation	98	0.18	0	0.00	0	0.00
Veterans benefit payments	1,993	3.69	2,364	2.60	3,703	2.61
Veterans pension and disability payments	1,628	3.01	2,090	2.30	3,496	2.47
Veterans readjustment payments	218	0.40	114	0.13	52	0.04
Veterans life insurance benefit payments	138	0.26	159	0.17	155	0.11
Other assistance to veterans					0	0.00
Fed ed.& train. assist. paymts.(excl.vets)	199	0.37	275	0.30	368	0.26
Other payments to individuals					57	0.04
Payments to nonprofit institutions	1,490	2.76	1,693	1.86	2,715	1.91
Federal government payments	516	0.95	464	0.51	718	0.51
State and local government payments	598	1.11	674	0.74	1,081	0.76
Business payments	376	0.70	555	0.61	916	0.65
Business payments to individuals	1,029	1.90	1,935	2.13	2,051	1.45

Source: http://www.bea.gov.

Transfer Payments, thousands of dollars and percent of total transfer payments **Alleghany**

	1980		1990		1999	
	$ (000)	%	$ (000)	%	$ (000)	%
Total transfer payments	40,939	100.00	74,929	100.00	109,091	100.00
Government payments to individuals	38,894	95.00	71,637	95.61	104,643	95.92
Retirement & disability insur. benefit pymts.	22,094	53.97	43,402	57.92	56,690	51.97
Old age, survivors, & disability ins. pymts.	15,946	38.95	32,420	43.27	43,925	40.26
Railroad retirement and disability payments	5,965	14.57	10,704	14.29	12,378	11.35
Worker's compensation payments (Fed & State)						
Other govt. disability ins. & ret. pymts.	171	0.42	254	0.34	349	0.32
Medical payments	7,270	17.76	17,826	23.79	33,464	30.68
Medicare payments	5,731	14.00	12,196	16.28	21,915	20.09
Public assistance medical care	1,476	3.61	5,456	7.28	11,459	10.50
Military medical insurance payments	63	0.15	174	0.23	90	0.08
Income maintenance benefit payments	2,988	7.30	4,947	6.60	8,617	7.90
Supplemental security income (SSI) payments	713	1.74	1,688	2.25	2,812	2.58
Family assistance	534	1.30	691	0.92	566	0.52
Food stamps	1,172	2.86	1,630	2.18	1,599	1.47
Other income maintenance	569	1.39	938	1.25	3,640	3.34
Unemployment insurance benefit payments	3,146	7.68	1,338	1.79	1,418	1.30
State unemployment insurance compensation	2,510	6.13	1,126	1.50	1,062	0.97
Unemp. comp. for Fed. civilian empl. (UCFE)						
Unemp. compensation for railroad employees	263	0.64	109	0.15	79	0.07
Unemployment compensation for veterans (UCX)						
Other unemployment compensation	326	0.80	82	0.11	233	0.21
Veterans benefit payments	3,051	7.45	3,495	4.66	3,485	3.19
Veterans pension and disability payments	2,725	6.66	3,248	4.33	3,184	2.92
Veterans readjustment payments	140	0.34		0.00	73	0.07
Veterans life insurance benefit payments	186	0.45	235	0.31	228	0.21
Other assistance to veterans	0	0.00	0	0.00	0	0.00
Fed ed.& train. assist. paymts.(excl.vets)	341	0.83	615	0.82	937	0.86
Other payments to individuals						
Payments to nonprofit institutions	1,232	3.01	1,634	2.18	2,682	2.46
Federal government payments	408	1.00	398	0.53	618	0.57
State and local government payments	527	1.29	760	1.01	1,270	1.16
Business payments	297	0.73	476	0.64	794	0.73
Business payments to individuals	813	1.99	1,658	2.21	1,766	1.62

Source: http://www.bea.gov.

Transfer Payments, thousands of dollars and percent of total transfer payments **Giles**

	1980		1990		1999	
	$ (000)	%	$ (000)	%	$ (000)	%
Total transfer payments	22,515	100.00	43,798	100.00	70,056	100.00
Government payments to individuals	21,231	94.30	41,626	95.04	66,934	95.54
Retirement & disability insur. benefit pymts.	13,200	58.63	24,826	56.68	35,668	50.91
Old age, survivors, & disability ins. pymts.	12,017	53.37	23,360	53.34	33,973	48.49
Railroad retirement and disability payments	680	3.02	882	2.01	1,182	1.69
Worker's compensation payments (Fed & State)						
Other govt. disability ins. & ret. pymts.	494	2.19	563	1.29	485	0.69
Medical payments	3,454	15.34	10,847	24.77	22,646	32.33
Medicare payments	2,336	10.38	7,310	16.69	14,888	21.25
Public assistance medical care	1,067	4.74	3,412	7.79	7,677	10.96
Military medical insurance payments	51	0.23	125	0.29	81	0.12
Income maintenance benefit payments	1,769	7.86	3,003	6.86	5,485	7.83
Supplemental security income (SSI) payments	592	2.63	1,398	3.19	2,131	3.04
Family assistance	252	1.12	267	0.61	156	0.22
Food stamps	566	2.51	709	1.62	590	0.84
Other income maintenance	359	1.59	629	1.44	2,608	3.72
Unemployment insurance benefit payments	977	4.34	1,025	2.34	974	1.39
State unemployment insurance compensation	896	3.98	994	2.27	925	1.32
Unemp. comp. for Fed. civilian empl. (UCFE)						
Unemp. compensation for railroad employees						
Unemployment compensation for veterans (UCX)						
Other unemployment compensation			0	0.00	0	0.00
Veterans benefit payments	1,710	7.59	1,733	3.96	1,902	2.71
Veterans pension and disability payments	1,390	6.17	1,566	3.58	1,857	2.65
Veterans readjustment payments	211	0.94				
Veterans life insurance benefit payments	109	0.48	142	0.32	0	0.00
Other assistance to veterans	0	0.00	0	0.00	0	0.00
Fed ed.& train. assist. paymts.(excl.vets)	119	0.53	183	0.42	236	0.34
Other payments to individuals						
Payments to nonprofit institutions	773	3.43	1,078	2.46	1,880	2.68
Federal government payments	256	1.14	262	0.60	435	0.62
State and local government payments	331	1.47	502	1.15	893	1.27
Business payments	186	0.83	314	0.72	552	0.79
Business payments to individuals	511	2.27	1,094	2.50	1,242	1.77

Source: http://www.bea.gov.

Transfer Payments, thousands of dollars and percent of total transfer payments **Tazewell**

	1980		1990		1999	
	$ (000)	%	$ (000)	%	$ (000)	%
Total transfer payments	75,060	100.00	141,579	100.00	230,739	100.00
Government payments to individuals	71,414	95.14	135,462	95.68	221,850	96.15
Retirement & disability insur. benefit pymts.	48,325	64.38	83,198	58.76	108,349	46.96
Old age, survivors, & disability ins. pymts.	28,550	38.04	61,009	43.09	87,162	37.78
Railroad retirement and disability payments	2,065	2.75	3,701	2.61	5,735	2.49
Worker's compensation payments (Fed & State)					50	0.02
Other govt. disability ins. & ret. pymts.	17,685	23.56	18,450	13.03	15,402	6.68
Medical payments	10,074	13.42	30,875	21.81	75,460	32.70
Medicare payments	7,381	9.83	20,659	14.59	47,300	20.50
Public assistance medical care	2,625	3.50	9,997	7.06	28,047	12.16
Military medical insurance payments	68	0.09	219	0.15	113	0.05
Income maintenance benefit payments	5,754	7.67	11,713	8.27	23,743	10.29
Supplemental security income (SSI) payments	1,510	2.01	4,080	2.88	9,338	4.05
Family assistance	995	1.33	1,543	1.09	1,590	0.69
Food stamps	2,260	3.01	3,941	2.78	3,647	1.58
Other income maintenance	989	1.32	2,149	1.52	9,168	3.97
Unemployment insurance benefit payments	1,631	2.17	1,704	1.20	1,868	0.81
State unemployment insurance compensation	1,376	1.83	1,651	1.17	1,713	0.74
Unemp. comp. for Fed. civilian empl. (UCFE)						
Unemp. compensation for railroad employees	112	0.15			60	0.03
Unemployment compensation for veterans (UCX)						
Other unemployment compensation	94	0.13				
Veterans benefit payments	4,753	6.33	5,247	3.71	7,825	3.39
Veterans pension and disability payments	3,958	5.27	4,800	3.39	6,904	2.99
Veterans readjustment payments	546	0.73	69	0.05	255	0.11
Veterans life insurance benefit payments	246	0.33	377	0.27	666	0.29
Other assistance to veterans					0	0.00
Fed ed.& train. assist. paymts.(excl.vets)	870	1.16	2,700	1.91	4,539	1.97
Other payments to individuals					66	0.03
Payments to nonprofit institutions	2,195	2.92	3,036	2.14	5,362	2.32
Federal government payments	727	0.97	739	0.52	1,235	0.54
State and local government payments	939	1.25	1,413	1.00	2,537	1.10
Business payments	529	0.70	884	0.62	1,590	0.69
Business payments to individuals	1,451	1.93	3,081	2.18	3,527	1.53

Source: http://www.bea.gov.

Transfer Payments, thousands of dollars and percent of total transfer payments **WEST VIRGINIA**

	1980		1990		1999		2000	
	$ (000)	%	$ (000)	%	$ (000)	%	$ (000)	%
Total transfer payments	2,825,910	100.00	5,349,706	100.00	8,605,406	100.00	8,973,516	100.00
Government payments to individuals	2,689,098	95.16	5,125,217	95.80	8,282,096	96.24	8,627,125	96.14
Retirement & disability insur. benefit pymts.	1,674,120	59.24	2,963,504	55.40	4,154,233	48.27	4,317,873	48.12
Old age, survivors, & disability ins. pymts.	1,174,638	41.57	2,245,062	41.97	3,342,079	38.84	3,492,647	38.92
Railroad retirement and disability payments	83,083	2.94	135,361	2.53	152,936	1.78	153,200	1.71
Worker's compensation payments (Fed & State)	115,390	4.08	326,941	6.11	475,772	5.53	498,667	5.56
Other govt. disability ins. & ret. pymts.	301,009	10.65	256,140	4.79	183,446	2.13	173,359	1.93
Medical payments	375,735	13.30	1,273,816	23.81	2,857,587	33.21	3,012,421	33.57
Medicare payments	259,542	9.18	828,659	15.49	1,507,929	17.52	1,564,234	17.43
Public assistance medical care	112,435	3.98	431,969	8.07	1,338,388	15.55	1,436,724	16.01
Military medical insurance payments	3,758	0.13	13,188	0.25	11,270	0.13	11,463	0.13
Income maintenance benefit payments	261,603	9.26	525,620	9.83	792,162	9.21	828,885	9.24
Supplemental security income (SSI) payments	72,573	2.57	145,953	2.73	315,743	3.67	318,197	3.55
Family assistance	60,664	2.15	112,387	2.10	36,428	0.42	82,631	0.92
Food stamps	91,280	3.23	197,882	3.70	202,553	2.35	182,116	2.03
Other income maintenance	37,086	1.31	69,398	1.30	237,438	2.76	245,941	2.74
Unemployment insurance benefit payments	197,130	6.98	117,480	2.20	136,925	1.59	119,795	1.33
State unemployment insurance compensation	173,213	6.13	112,375	2.10	131,229	1.52	113,496	1.26
Unemp. comp. for Fed. civilian empl. (UCFE)	670	0.02	456	0.01	661	0.01	651	0.01
Unemp. compensation for railroad employees	4,586	0.16	2,298	0.04	1,234	0.01	1,613	0.02
Unemployment compensation for veterans (UCX)	3,008	0.11	1,710	0.03	2,183	0.03	1,654	0.02
Other unemployment compensation	15,653	0.55	641	0.01	1,618	0.02	2,381	0.03
Veterans benefit payments	151,310	5.35	187,499	3.50	257,759	3.00	267,697	2.98
Veterans pension and disability payments	125,770	4.45	167,724	3.14	237,084	2.76	246,742	2.75
Veterans readjustment payments	15,040	0.53	7,356	0.14	10,779	0.13	11,619	0.13
Veterans life insurance benefit payments	9,849	0.35	12,350	0.23	9,860	0.11	9,294	0.10
Other assistance to veterans	651	0.02	69	0.00				
Fed ed.& train. assist. paymts.(excl.vets)	28,940	1.02	55,839	1.04	80,017	0.93	77,353	0.86
Other payments to individuals	260	0.01	1,459	0.03	3,413	0.04	3,101	0.03
Payments to nonprofit institutions	80,899	2.86	104,778	1.96	186,410	2.17	202,193	2.25
Federal government payments	28,030	0.99	28,702	0.54	45,533	0.53	49,512	0.55
State and local government payments	32,461	1.15	41,712	0.78	70,667	0.82	76,856	0.86
Business payments	20,408	0.72	34,364	0.64	70,210	0.82	75,825	0.84
Business payments to individuals	55,913	1.98	119,711	2.24	136,900	1.59	144,198	1.61

Source: http://www.bea.gov.

Transfer Payments, thousands of dollars and percent of total transfer payments **UNITED STATES**

	1980		1990		1999		2000	
	$ (000)	%	$ (000)	%	$ (000)	%	$ (000)	%
Total transfer payments	279,790,000	100.00	594,761,000	100.00	1,018,184,000	100.00	1,070,231,000	100.00
Government payments to individuals	262,732,000	93.90	561,399,000	94.39	965,206,000	94.80	1,013,424,000	94.69
Retirement & disability insur. benefit pymts.	128,802,000	46.04	263,854,000	44.36	402,990,000	39.58	425,333,000	39.74
Old age, survivors, & disability ins. pymts.	118,586,000	42.38	244,135,000	41.05	379,895,000	37.31	401,408,000	37.51
Railroad retirement and disability payments	4,812,000	1.72	7,221,000	1.21	8,203,000	0.81	8,265,000	0.77
Worker's compensation payments (Fed & State)	2,848,000	1.02	8,618,000	1.45	10,560,000	1.04	11,111,000	1.04
Other govt. disability ins. & ret. pymts.	2,556,000	0.91	3,880,000	0.65	4,332,000	0.43	4,549,000	0.43
Medical payments	62,005,000	22.16	189,099,000	31.79	399,597,000	39.25	423,180,000	39.54
Medicare payments	35,582,000	12.72	107,929,000	18.15	208,126,000	20.44	215,882,000	20.17
Public assistance medical care	25,659,000	9.17	78,176,000	13.14	189,464,000	18.61	205,281,000	19.18
Military medical insurance payments	764,000	0.27	2,994,000	0.50	2,007,000	0.20	2,017,000	0.19
Income maintenance benefit payments	34,276,000	12.25	63,481,000	10.67	104,421,000	10.26	106,421,000	9.94
Supplemental security income (SSI) payments	7,941,000	2.84	16,670,000	2.80	31,023,000	3.05	31,675,000	2.96
Family assistance	12,516,000	4.47	19,187,000	3.23	17,683,000	1.74	18,277,000	1.71
Food stamps	8,214,000	2.94	14,741,000	2.48	15,473,000	1.52	14,939,000	1.40
Other income maintenance	5,605,000	2.00	12,883,000	2.17	40,242,000	3.95	41,530,000	3.88
Unemployment insurance benefit payments	18,662,000	6.67	18,208,000	3.06	20,724,000	2.04	20,707,000	1.93
State unemployment insurance compensation	15,331,000	5.48	17,644,000	2.97	20,010,000	1.97	19,938,000	1.86
Unemp. comp. for Fed. civilian empl. (UCFE)	177,000	0.06	215,000	0.04	206,000	0.02	227,000	0.02
Unemp. compensation for railroad employees	238,000	0.09	89,000	0.01	65,000	0.01	81,000	0.01
Unemployment compensation for veterans (UCX)	351,000	0.13	144,000	0.02	201,000	0.02	182,000	0.02
Other unemployment compensation	2,565,000	0.92	116,000	0.02	242,000	0.02	279,000	0.03
Veterans benefit payments	14,660,000	5.24	17,687,000	2.97	24,058,000	2.36	24,939,000	2.33
Veterans pension and disability payments	11,372,000	4.06	15,550,000	2.61	20,904,000	2.05	21,885,000	2.04
Veterans readjustment payments	2,042,000	0.73	257,000	0.04	1,323,000	0.13	1,331,000	0.12
Veterans life insurance benefit payments	1,222,000	0.44	1,868,000	0.31	1,823,000	0.18	1,714,000	0.16
Other assistance to veterans	24,000	0.01	12,000	0.00	8,000	0.00	9,000	0.00
Fed ed.& train. assist. paymts.(excl.vets)	4,106,000	1.47	7,300,000	1.23	11,366,000	1.12	10,729,000	1.00
Other payments to individuals	221,000	0.08	1,770,000	0.30	2,050,000	0.20	2,115,000	0.20
Payments to nonprofit institutions	10,595,000	3.79	16,808,000	2.83	32,401,000	3.18	35,133,000	3.28
Federal government payments	3,240,000	1.16	3,969,000	0.67	6,844,000	0.67	7,442,000	0.70
State and local government payments	4,996,000	1.79	8,087,000	1.36	15,004,000	1.47	16,294,000	1.52
Business payments	2,359,000	0.84	4,752,000	0.80	10,553,000	1.04	11,397,000	1.06
Business payments to individuals	6,463,000	2.31	16,554,000	2.78	20,577,000	2.02	21,674,000	2.03

Source: http://www.bea.gov.

APPENDIX C

EMPLOYMENT, TOTAL WAGES, AND AVERAGE ANNUAL WAGE, 2000

Fayette - Employment & Wages 2000				
INDUSTRY	UNITS	EMPLOYMENT	TOTAL WAGES	AVERAGE ANNUAL WAGE
TOTAL, ALL INDUSTRIES	961	12,059	278,287,953	23,077
MINING	11	196	10,798,385	55,093
12 Coal Mining	9	187	10,629,020	56,839
CONSTRUCTION	126	578	12,339,138	21,347
15 General Building Contractors	54	140	2,356,108	16,829
16 Heavy Construction, exc. Building	15	203	5,431,347	26,755
17 Special Trade Contractors	57	235	4,551,683	19,368
MANUFACTURING	48	1,010	39,704,177	39,311
24 Lumber and Wood Products	17	282	10,066,336	35,696
30 Rubber and Misc. Plastics Products	3	38	989,793	26,047
35 Industrial Machinery and Equipment	16	176	5,738,352	32,604
TRANSPORTATION AND PUBLIC UTILITIES	64	559	14,667,900	26,239
41 Local and Interurban Passenger	4	121	2,463,835	20,362
42 Trucking and Warehousing	40	194	4,091,142	21,088
48 Communications	11	119	3,694,029	31,042
49 Electric, Gas, and Sanitary Services	7	110	3,890,852	35,371
WHOLESALE TRADE	37	371	11,095,518	29,907
50 Wholesale Trade-Durable Goods	21	252	7,636,257	30,302
51 Wholesale Trade-Nondurable Goods	16	119	3,459,261	29,069
RETAIL TRADE	259	2,570	35,485,007	13,807
52 Building Materials & Garden Supplies	15	94	1,967,841	20,934
53 General Merchandise Stores	10	378	4,917,524	13,009
54 Food Stores	51	585	7,806,991	13,345
55 Automotive Dealers & Service Stations	44	361	7,823,756	21,672
56 Apparel and Accessory Stores	9	48	466,210	9,712
57 Furniture & Homefurnishings Stores	13	64	1,111,720	17,370
58 Eating and Drinking Places	69	768	6,768,188	8,812
59 Miscellaneous Retail	49	273	4,622,777	16,933
FINANCE, INSURANCE, AND REAL ESTATE	66	355	7,995,969	22,523
60 Depository Institutions	20	213	4,782,270	22,451
64 Insurance Agents, Brokers, & Service	18	79	1,969,196	24,926
65 Real Estate	21	46	662,376	14,399
SERVICES	273	3,276	61,899,164	18,894
70 Hotels and Other Lodging Places	9	101	1,070,860	10,602
72 Personal Services	23	69	1,124,296	16,294
73 Business Services	25	173	2,241,201	12,954
75 Auto Repair, Services, and Parking	24	59	932,560	15,806
76 Miscellaneous Repair Services	9	52	1,244,119	23,925
79 Amusement & Recreation Services	31	696	7,281,375	10,461
80 Health Services	76	1,667	38,849,489	23,305
81 Legal Services	16	61	1,289,665	21,142
83 Social Services	11	79	1,030,009	13,038
86 Membership Organizations	13	48	277,088	5,772
87 Engineering & Management Services	21	226	6,030,388	26,683
GOVERNMENT	70	3,123	83,786,743	26,828
Federal Government	23	313	12,117,635	38,714
State Government	19	1,130	30,167,646	26,697
Local Government	28	1,680	41,501,462	24,703

http://www.state.wv.us/scripts/bep/lmi/cntydata.cfm.

Greenbrier - Employment & Wages 2000				
INDUSTRY	**UNITS**	**EMPLOYMENT**	**TOTAL WAGES**	**AVERAGE ANNUAL WAGE**
TOTAL, ALL INDUSTRIES	1,047	12,559	293,287,130	23,352
AGRICULTURE	33	261	7,397,317	28,342
07 Agricultural Services	12	60	1,078,314	17,971
MINING	12	181	6,927,261	38,272
12 Coal Mining	4	103	4,843,009	47,019
14 Nonmetallic Minerals, except Fuels	4	61	1,659,315	27,201
CONSTRUCTION	128	368	6,768,149	18,391
15 General Building Contractors	62	184	3,184,052	17,304
16 Heavy Construction, exc. Building	5	25	523,239	20,929
17 Special Trade Contractors	62	159	3,060,858	19,250
MANUFACTURING	58	1,103	32,533,326	29,495
24 Lumber and Wood Products	31	433	12,876,588	29,738
27 Printing and Publishing	5	47	868,106	18,470
30 Rubber and Misc. Plastics Products	4	92	1,546,319	16,807
TRANSPORTATION AND PUBLIC UTILITIES	59	427	14,124,268	33,077
42 Trucking and Warehousing	32	175	4,185,071	23,914
48 Communications	15	69	2,624,221	38,032
49 Electric, Gas, and Sanitary Services	4	72	4,070,343	56,532
WHOLESALE TRADE	49	387	8,781,424	22,691
50 Wholesale Trade-Durable Goods	29	191	4,234,600	22,170
51 Wholesale Trade-Nondurable Goods	20	196	4,546,824	23,198
RETAIL TRADE	253	2,747	37,374,754	13,605
52 Building Materials & Garden Supplies	14	141	2,629,007	18,645
53 General Merchandise Stores	16	571	7,875,011	13,791
54 Food Stores	25	351	5,112,701	14,566
55 Automotive Dealers & Service Stations	60	515	8,294,253	16,105
56 Apparel and Accessory Stores	10	64	830,541	12,977
57 Furniture & Homefurnishings Stores	18	74	1,121,451	15,154
58 Eating and Drinking Places	62	830	7,594,087	9,149
59 Miscellaneous Retail	50	203	3,917,703	19,299
FINANCE, INSURANCE, AND REAL ESTATE	62	293	7,638,886	26,071
60 Depository Institutions	15	192	5,192,170	27,042
64 Insurance Agents, Brokers, & Service	16	30	725,829	24,194
SERVICES	323	4,540	110,877,646	24,422
72 Personal Services	24	102	1,420,679	13,928
73 Business Services	24	93	1,906,897	20,504
75 Auto Repair, Services, and Parking	25	64	787,433	12,303
76 Miscellaneous Repair Services	11	26	840,357	32,321
78 Motion Pictures	7	26	180,903	6,957
79 Amusement & Recreation Services	14	110	1,364,945	12,408
80 Health Services	82	1,610	45,040,460	27,975
81 Legal Services	22	59	1,331,278	22,564
83 Social Services	27	512	7,856,779	15,345
86 Membership Organizations	11	56	664,421	11,864
87 Engineering & Management Services	21	98	2,547,164	25,991
88 Private Households	37	81	854,501	10,549
GOVERNMENT	64	2,233	60,438,555	27,066
Federal Government	18	146	4,763,189	32,624
State Government	24	772	24,298,486	31,474
Local Government	22	1,316	31,376,880	23,842

http://www.state.wv.us/scripts/bep/lmi/cntydata.cfm.

McDowell - Employment & Wages 2000				
INDUSTRY	**UNITS**	**EMPLOYMENT**	**TOTAL WAGES**	**AVERAGE ANNUAL WAGE**
TOTAL, ALL INDUSTRIES	464	5,005	117,282,271	23,433
MINING	53	696	30,182,481	43,365
12 Coal Mining	52	695	30,150,297	43,381
CONSTRUCTION	18	64	1,757,488	27,460
16 Heavy Construction, exc. Building	8	48	1,560,181	32,503
MANUFACTURING	18	108	1,851,221	17,140
TRANSPORTATION AND PUBLIC UTILITIES	67	242	5,816,987	24,037
41 Local and Interurban Passenger	3	33	685,835	20,782
42 Trucking and Warehousing	49	117	2,590,289	22,139
48 Communications	6	33	1,196,325	36,252
49 Electric, Gas, and Sanitary Services	8	55	1,166,726	21,213
WHOLESALE TRADE	12	71	1,504,876	21,195
50 Wholesale Trade-Durable Goods	9	31	553,368	17,850
51 Wholesale Trade-Nondurable Goods	3	40	951,508	23,787
RETAIL TRADE	94	889	11,431,713	12,859
52 Building Materials & Garden Supplies	7	50	797,823	15,956
53 General Merchandise Stores	10	180	2,152,178	11,956
54 Food Stores	23	268	3,411,856	12,730
55 Automotive Dealers & Service Stations	18	82	1,118,755	13,643
57 Furniture & Homefurnishings Stores	8	47	810,093	17,236
58 Eating and Drinking Places	17	169	1,556,293	9,208
59 Miscellaneous Retail	10	89	1,550,994	17,426
FINANCE, INSURANCE, AND REAL ESTATE	31	223	4,759,074	21,341
60 Depository Institutions	7	128	2,915,922	22,780
64 Insurance Agents, Brokers, & Service	6	23	289,477	12,585
SERVICES	114	719	13,820,716	19,222
73 Business Services	11	71	1,721,064	24,240
80 Health Services	24	260	5,420,998	20,849
83 Social Services	17	182	2,660,381	14,617
86 Membership Organizations	10	41	90,582	2,209
87 Engineering & Management Services	13	67	1,916,535	28,605
GOVERNMENT	54	1,984	46,017,000	23,194
Federal Government	9	104	2,850,608	27,409
State Government	19	533	13,088,172	24,555
Local Government	27	1,346	30,078,220	22,346

http://www.state.wv.us/scripts/bep/lmi/cntydata.cfm.

Mercer - Employment & Wages 2000				
INDUSTRY	**UNITS**	**EMPLOYMENT**	**TOTAL WAGES**	**AVERAGE ANNUAL WAGE**
TOTAL, ALL INDUSTRIES	1,516	22,537	548,586,582	24,341
AGRICULTURE	15	61	897,912	14,719
07 Agricultural Services	12	50	705,069	14,101
MINING	4	46	1,354,750	29,451
14 Nonmetallic Minerals, except Fuels	3	41	1,287,072	31,392
CONSTRUCTION	149	987	23,421,770	23,730
15 General Building Contractors	60	340	6,366,485	18,724
16 Heavy Construction, exc. Building	10	226	8,569,667	37,918
17 Special Trade Contractors	79	421	8,485,618	20,155
MANUFACTURING	58	1,724	52,910,303	30,690
24 Lumber and Wood Products	14	401	10,173,481	25,370
32 Stone, Clay, and Glass Products	5	119	3,088,282	25,951
35 Industrial Machinery and Equipment	18	528	18,151,455	34,377
TRANSPORTATION AND PUBLIC UTILITIES	66	1,182	33,748,497	28,552
41 Local and Interurban Passenger	4	111	1,962,017	17,675
42 Trucking and Warehousing	31	156	3,712,232	23,796
48 Communications	17	627	13,686,811	21,829
49 Electric, Gas, and Sanitary Services	10	242	12,928,170	53,422
WHOLESALE TRADE	93	967	29,652,947	30,664
50 Wholesale Trade-Durable Goods	65	607	18,652,396	30,728
51 Wholesale Trade-Nondurable Goods	28	360	11,000,551	30,557
RETAIL TRADE	387	5,469	80,387,806	14,698
52 Building Materials & Garden Supplies	18	263	5,287,441	20,104
53 General Merchandise Stores	18	890	11,565,250	12,994
54 Food Stores	47	633	8,312,859	13,132
55 Automotive Dealers & Service Stations	74	921	21,537,933	23,385
56 Apparel and Accessory Stores	33	169	1,860,537	11,009
57 Furniture & Homefurnishings Stores	40	230	3,866,177	16,809
58 Eating and Drinking Places	86	1,802	18,472,176	10,250
59 Miscellaneous Retail	71	562	9,485,433	16,877
FINANCE, INSURANCE, AND REAL ESTATE	111	818	23,691,071	28,962
60 Depository Institutions	22	414	10,411,198	25,147
61 Nondepository Institutions	9	41	1,160,315	28,300
62 Security and Commodity Brokers	6	43	2,593,734	60,319
63 Insurance Carriers	4	35	1,198,371	34,239
64 Insurance Agents, Brokers, & Service	32	126	3,580,862	28,419
65 Real Estate	36	141	4,236,280	30,044

Mercer - Employment & Wages 2000				
INDUSTRY	**UNITS**	**EMPLOYMENT**	**TOTAL WAGES**	**AVERAGE ANNUAL WAGE**
SERVICES	559	6,630	164,874,370	24,867
70 Hotels and Other Lodging Places	17	290	3,136,837	10,816
72 Personal Services	38	252	4,190,489	16,628
73 Business Services	54	741	10,438,301	14,086
75 Auto Repair, Services, and Parking	36	188	3,977,107	21,154
76 Miscellaneous Repair Services	29	613	18,878,836	30,797
79 Amusement & Recreation Services	17	192	1,893,470	9,861
80 Health Services	173	2,863	91,008,759	31,787
81 Legal Services	37	184	4,007,205	21,778
83 Social Services	46	558	8,694,982	15,582
86 Membership Organizations	16	168	2,075,799	12,355
87 Engineering & Management Services	41	360	12,552,178	34,867
88 Private Households	45	59	719,780	12,199
GOVERNMENT	68	4,646	137,553,956	29,606
Federal Government	21	329	12,971,729	39,427
State Government	23	1,153	35,927,736	31,160
Local Government	24	3,164	88,654,491	28,019

http://www.state.wv.us/scripts/bep/lmi/cntydata.cfm.

Monroe - Employment & Wages 2000				
INDUSTRY	**UNITS**	**EMPLOYMENT**	**TOTAL WAGES**	**AVERAGE ANNUAL WAGE**
TOTAL, ALL INDUSTRIES	244	2,011	47,351,866	23,546
CONSTRUCTION	45	102	1,556,974	15,264
15 General Building Contractors	22	49	714,469	14,581
17 Special Trade Contractors	22	46	689,945	14,998
MANUFACTURING	16	368	11,491,251	31,226
24 Lumber and Wood Products	11	68	1,418,977	20,867
TRANSPORTATION AND PUBLIC UTILITIES	23	88	2,093,487	23,789
42 Trucking and Warehousing	16	74	1,516,311	20,490
WHOLESALE TRADE	15	82	1,323,776	16,143
50 Wholesale Trade-Durable Goods	7	26	592,497	22,788
51 Wholesale Trade-Nondurable Goods	8	56	731,279	13,058
RETAIL TRADE	49	224	2,337,536	10,435
54 Food Stores	5	49	467,548	9,541
55 Automotive Dealers & Service Stations	10	34	486,500	14,308
58 Eating and Drinking Places	15	73	553,692	7,584
59 Miscellaneous Retail	12	43	564,326	13,123
FINANCE, INSURANCE, AND REAL ESTATE	13	64	1,413,852	22,091
60 Depository Institutions	4	50	1,265,881	25,317
SERVICES	42	270	3,931,736	14,561
GOVERNMENT	32	761	22,225,162	29,205
Federal Government	13	233	10,277,941	44,111
State Government	7	58	1,535,493	26,474
Local Government	12	469	10,411,728	22,199

http://www.state.wv.us/scripts/bep/lmi/cntydata.cfm.

Nicholas - Employment & Wages 2000				
INDUSTRY	**UNITS**	**EMPLOYMENT**	**TOTAL WAGES**	**AVERAGE ANNUAL WAGE**
TOTAL, ALL INDUSTRIES	680	8,649	198,055,673	22,899
MINING	22	604	27,792,750	46,014
12 Coal Mining	22	604	27,792,750	46,014
CONSTRUCTION	60	393	13,566,484	34,520
15 General Building Contractors	26	132	4,429,037	33,553
17 Special Trade Contractors	26	104	2,243,927	21,576
MANUFACTURING	52	1,116	26,933,387	24,133
24 Lumber and Wood Products	33	640	15,457,224	24,151
35 Industrial Machinery and Equipment	8	133	4,177,878	31,412
TRANSPORTATION AND PUBLIC UTILITIES	67	576	15,686,104	27,232
42 Trucking and Warehousing	55	457	11,577,356	25,333
48 Communications	5	28	1,147,773	40,991
49 Electric, Gas, and Sanitary Services	4	40	1,754,881	43,872
WHOLESALE TRADE	35	207	6,155,116	29,734
51 Wholesale Trade-Nondurable Goods	13	92	2,282,792	24,812
RETAIL TRADE	155	2,178	29,270,715	13,439
52 Building Materials & Garden Supplies	13	165	3,252,326	19,711
54 Food Stores	18	385	5,066,099	13,158
55 Automotive Dealers & Service Stations	35	318	5,555,181	17,469
57 Furniture & Homefurnishings Stores	13	46	665,520	14,467
58 Eating and Drinking Places	40	589	5,012,835	8,510
59 Miscellaneous Retail	22	147	2,679,713	18,229
FINANCE, INSURANCE, AND REAL ESTATE	45	209	4,194,968	20,071
60 Depository Institutions	10	115	2,658,943	23,121
64 Insurance Agents, Brokers, & Service	11	27	532,079	19,706
65 Real Estate	21	62	900,131	14,518
SERVICES	182	1,461	27,445,640	18,785
70 Hotels and Other Lodging Places	13	164	1,512,579	9,223
72 Personal Services	10	42	667,793	15,899
73 Business Services	16	80	1,542,059	19,275
75 Auto Repair, Services, and Parking	21	78	1,264,333	16,209
76 Miscellaneous Repair Services	9	66	1,577,578	23,902
80 Health Services	36	411	8,662,669	21,077
81 Legal Services	14	54	1,177,473	21,805
83 Social Services	13	271	3,754,567	13,854
86 Membership Organizations	9	27	96,508	3,574
87 Engineering & Management Services	22	209	6,517,042	31,182
88 Private Households	13	36	395,634	10,989
GOVERNMENT	53	1,877	46,694,973	24,877
Federal Government	17	134	4,155,332	31,009
State Government	15	217	4,791,055	22,078
Local Government	21	1,526	37,748,586	24,736

http://www.state.wv.us/scripts/bep/lmi/cntydata.cfm.

Pocahontas - Employment & Wages 2000				
INDUSTRY	**UNITS**	**EMPLOYMENT**	**TOTAL WAGES**	**AVERAGE ANNUAL WAGE**
TOTAL, ALL INDUSTRIES	293	3,641	74,932,850	20,580
CONSTRUCTION	37	163	5,634,057	34,564
15 General Building Contractors	17	48	886,498	18,468
17 Special Trade Contractors	15	40	696,223	17,405
MANUFACTURING	34	503	11,338,465	22,541
24 Lumber and Wood Products	29	461	10,654,289	23,111
TRANSPORTATION AND PUBLIC UTILITIES	21	202	5,270,250	26,090
42 Trucking and Warehousing	16	162	4,078,432	25,175
48 Communications	3	27	753,839	27,919
WHOLESALE TRADE	8	42	656,769	15,637
51 Wholesale Trade-Nondurable Goods	7	41	636,769	15,530
RETAIL TRADE	64	455	5,953,551	13,084
54 Food Stores	16	117	1,416,332	12,105
55 Automotive Dealers & Service Stations	12	80	1,199,871	14,998
59 Miscellaneous Retail	12	54	1,065,466	19,730
FINANCE, INSURANCE, AND REAL ESTATE	16	65	1,318,534	20,285
60 Depository Institutions	3	39	955,991	24,512
SERVICES	76	1,377	26,699,721	19,389
80 Health Services	17	140	2,438,703	17,419
83 Social Services	5	75	765,750	10,210
86 Membership Organizations	5	69	977,045	14,160
88 Private Households	5	22	151,822	6,901
GOVERNMENT	32	810	17,549,964	21,666
Federal Government	9	86	2,436,259	28,328
State Government	11	247	5,188,025	21,004
Local Government	12	477	9,925,680	20,808

http://www.state.wv.us/scripts/bep/lmi/cntydata.cfm.

Raleigh - Employment & Wages 2000				
INDUSTRY	**UNITS**	**EMPLOYMENT**	**TOTAL WAGES**	**AVERAGE ANNUAL WAGE**
TOTAL, ALL INDUSTRIES	2,137	29,888	769,331,787	25,740
AGRICULTURE	31	180	3,931,527	21,841
07 Agricultural Services	25	153	3,532,551	23,088
MINING	41	1,350	71,784,913	53,174
12 Coal Mining	38	1,302	69,640,206	53,487
CONSTRUCTION	254	1,846	54,213,510	29,368
15 General Building Contractors	99	456	11,215,075	24,594
16 Heavy Construction, exc. Building	23	581	23,263,319	40,040
17 Special Trade Contractors	132	810	19,735,116	24,364
MANUFACTURING	76	1,072	29,858,537	27,853
24 Lumber and Wood Products	27	210	4,792,261	22,820
27 Printing and Publishing	6	294	6,458,798	21,968
32 Stone, Clay, and Glass Products	5	42	1,041,714	24,802
35 Industrial Machinery and Equipment	19	255	10,580,925	41,493
36 Electronic & other Electric Equipment	4	126	4,066,572	32,274
39 Miscellaneous Manufacturing Industries	7	39	465,253	11,929
TRANSPORTATION AND PUBLIC UTILITIES	105	1,249	41,997,068	33,624
41 Local and Interurban Passenger	9	219	5,013,698	22,893
42 Trucking and Warehousing	57	304	9,504,357	31,264
45 Transportation By Air	6	127	3,804,713	29,958
48 Communications	20	413	15,286,128	37,012
49 Electric, Gas, and Sanitary Services	10	183	8,347,345	45,613
WHOLESALE TRADE	178	1,602	49,731,500	31,043
50 Wholesale Trade-Durable Goods	132	1,015	33,584,140	33,087
51 Wholesale Trade-Nondurable Goods	47	587	16,147,360	27,508
RETAIL TRADE	504	7,474	115,037,167	15,391
52 Building Materials & Garden Supplies	25	456	11,176,490	24,509
53 General Merchandise Stores	26	1,420	20,318,061	14,308
54 Food Stores	69	856	12,075,975	14,107
55 Automotive Dealers & Service Stations	96	1,057	26,230,791	24,816
56 Apparel and Accessory Stores	24	244	2,638,839	10,814
57 Furniture & Homefurnishings Stores	45	248	4,874,786	19,656
58 Eating and Drinking Places	123	2,459	25,352,692	10,310
59 Miscellaneous Retail	97	735	12,369,533	16,829
FINANCE, INSURANCE, AND REAL ESTATE	150	976	28,898,090	29,608
60 Depository Institutions	28	349	8,274,442	23,709
61 Nondepository Institutions	13	58	1,693,284	29,194
63 Insurance Carriers	8	107	5,140,180	48,039
64 Insurance Agents, Brokers, & Service	41	154	4,861,738	31,569
65 Real Estate	53	273	6,760,198	24,762

Raleigh - Employment & Wages 2000				
INDUSTRY	**UNITS**	**EMPLOYMENT**	**TOTAL WAGES**	**AVERAGE ANNUAL WAGE**
SERVICES	691	8,881	209,916,863	23,636
70 Hotels and Other Lodging Places	21	473	6,065,473	12,823
72 Personal Services	44	236	3,484,677	14,765
73 Business Services	74	1,234	23,042,382	18,672
75 Auto Repair, Services, and Parking	56	253	4,915,375	19,428
76 Miscellaneous Repair Services	27	216	6,219,592	28,794
78 Motion Pictures	11	62	833,984	13,451
80 Health Services	181	3,323	106,745,183	32,123
81 Legal Services	36	153	3,291,300	21,511
83 Social Services	44	1,057	14,158,514	13,395
86 Membership Organizations	34	294	2,243,613	7,631
87 Engineering & Management Services	89	728	25,224,005	34,648
88 Private Households	44	68	792,513	11,654
GOVERNMENT	96	5,246	163,859,789	31,235
Federal Government	42	1,596	66,247,796	41,508
State Government	26	1,029	26,184,071	25,446
Local Government	28	2,621	71,427,922	27,252

http://www.state.wv.us/scripts/bep/lmi/cntydata.cfm.

Summers - Employment & Wages 2000				
INDUSTRY	**UNITS**	**EMPLOYMENT**	**TOTAL WAGES**	**AVERAGE ANNUAL WAGE**
TOTAL, ALL INDUSTRIES	223	2,268	42,514,333	18,745
CONSTRUCTION	29	51	841,210	16,494
17 Special Trade Contractors	14	31	537,973	17,353
MANUFACTURING	13	80	1,137,384	14,217
TRANSPORTATION AND PUBLIC UTILITIES	18	67	2,335,443	34,857
42 Trucking and Warehousing	7	25	431,907	17,276
49 Electric, Gas, and Sanitary Services	4	21	1,019,403	48,543
WHOLESALE TRADE	13	138	3,283,215	23,791
50 Wholesale Trade-Durable Goods	9	93	2,128,955	22,891
RETAIL TRADE	55	533	6,467,883	12,134
54 Food Stores	19	141	1,856,355	13,165
55 Automotive Dealers & Service Stations	8	30	380,364	12,678
58 Eating and Drinking Places	13	233	1,973,259	8,468
59 Miscellaneous Retail	6	39	938,265	24,058
FINANCE, INSURANCE, AND REAL ESTATE	11	74	1,721,972	23,269
60 Depository Institutions	4	44	1,145,418	26,032
SERVICES	49	490	10,168,517	20,752
72 Personal Services	7	35	574,407	16,411
80 Health Services	12	316	7,761,109	24,560
GOVERNMENT	28	797	16,054,053	20,143
Federal Government	7	46	1,409,896	30,649
State Government	9	290	5,066,092	17,469
Local Government	11	461	9,578,065	20,776

http://www.state.wv.us/scripts/bep/lmi/cntydata.cfm.

Webster - Employment & Wages 2000				
INDUSTRY	**UNITS**	**EMPLOYMENT**	**TOTAL WAGES**	**AVERAGE ANNUAL WAGE**
TOTAL, ALL INDUSTRIES	208	2,185	51,836,279	23,723
CONSTRUCTION	13	81	1,986,991	24,530
MANUFACTURING	40	360	6,805,855	18,905
24 Lumber and Wood Products	38	349	6,740,543	19,313
TRANSPORTATION AND PUBLIC UTILITIES	26	90	2,181,679	24,240
42 Trucking and Warehousing	22	66	1,153,297	17,474
WHOLESALE TRADE	4	55	1,891,170	34,384
RETAIL TRADE	42	262	3,124,011	11,923
54 Food Stores	11	110	1,174,705	10,679
55 Automotive Dealers & Service Stations	9	44	750,929	17,066
58 Eating and Drinking Places	10	55	359,082	6,528
59 Miscellaneous Retail	6	34	643,068	18,913
FINANCE, INSURANCE, AND REAL ESTATE	9	53	1,434,865	27,072
SERVICES	37	346	4,734,830	13,684
80 Health Services	6	164	2,747,570	16,753
83 Social Services	9	95	1,021,171	10,749
GOVERNMENT	32	657	15,476,845	23,556
Federal Government	5	27	633,513	23,463
State Government	10	86	1,945,893	22,626
Local Government	17	544	12,897,439	23,708

http://www.state.wv.us/scripts/bep/lmi/cntydata.cfm.

Wyoming - Employment & Wages 2000				
INDUSTRY	UNITS	EMPLOYMENT	TOTAL WAGES	AVERAGE ANNUAL WAGE
TOTAL, ALL INDUSTRIES	463	5,319	139,198,783	26,170
MINING	30	978	49,105,296	50,209
13 Oil and Gas Extraction	7	92	3,754,978	40,814
CONSTRUCTION	39	264	6,440,074	24,394
15 General Building Contractors	15	45	780,020	17,333
16 Heavy Construction, exc. Building	11	159	4,814,028	30,276
17 Special Trade Contractors	13	61	846,026	13,869
MANUFACTURING	32	235	4,750,469	20,214
24 Lumber and Wood Products	16	52	709,182	13,638
35 Industrial Machinery and Equipment	8	101	2,594,785	25,690
TRANSPORTATION AND PUBLIC UTILITIES	63	388	11,630,230	29,974
41 Local and Interurban Passenger	3	39	569,546	14,603
42 Trucking and Warehousing	44	252	7,512,942	29,813
48 Communications	5	23	757,954	32,954
49 Electric, Gas, and Sanitary Services	12	75	2,789,788	37,197
WHOLESALE TRADE	12	77	2,416,987	31,389
50 Wholesale Trade-Durable Goods	10	76	2,408,587	31,691
RETAIL TRADE	120	964	12,782,342	13,259
52 Building Materials & Garden Supplies	11	63	1,173,278	18,623
53 General Merchandise Stores	10	130	1,590,262	12,232
54 Food Stores	24	295	3,639,774	12,338
55 Automotive Dealers & Service Stations	31	135	2,007,424	14,869
57 Furniture & Homefurnishings Stores	5	27	561,700	20,803
58 Eating and Drinking Places	26	224	1,937,812	8,650
59 Miscellaneous Retail	11	76	1,781,137	23,436
FINANCE, INSURANCE, AND REAL ESTATE	26	126	2,517,636	19,981
60 Depository Institutions	7	82	1,789,612	21,824
65 Real Estate	8	26	462,385	17,784
SERVICES	100	1,001	16,356,408	16,340
72 Personal Services	7	21	258,063	12,288
73 Business Services	16	190	3,256,997	17,142
80 Health Services	21	237	4,971,461	20,976
81 Legal Services	9	43	1,046,221	24,330
83 Social Services	9	385	4,946,684	12,848
86 Membership Organizations	5	26	146,947	5,651
87 Engineering & Management Services	11	49	944,375	19,272
GOVERNMENT	38	1,279	33,080,744	25,864
Federal Government	12	102	3,384,068	33,177
State Government	13	207	4,852,605	23,442
Local Government	13	970	24,844,071	25,612

http://www.state.wv.us/scripts/bep/lmi/cntydata.cfm.

Workforce Investment Area 1 - Employment & Wages 2000				
INDUSTRY	**UNITS**	**EMPLOYMENT**	**TOTAL WAGES**	**AVERAGE ANNUAL WAGE**
Total, All Industries	8,237	106,122	2,560,665,507	24,129
AGRICULTURE	113	648	14,619,423	22,560
01 Agricultural Production-Crops	13	65	904,865	13,921
02 Agricultural Production-Livestock	26	206	5,379,338	26,113
07 Agricultural Services	66	335	6,372,899	19,023
MINING	179	4,345	212,498,912	48,906
12 Coal Mining	154	4,049	202,274,623	49,956
13 Oil and Gas Extraction	13	128	5,392,694	42,130
14 Nonmetallic Minerals, except Fuels	11	164	4,743,828	28,925
CONSTRUCTION	898	4,897	128,525,845	26,245
15 General Building Contractors	377	1,434	30,664,367	21,383
16 Heavy Construction, exc. Building	92	1,510	55,876,939	37,004
17 Special Trade Contractors	430	1,953	41,984,539	21,497
MANUFACTURING	445	7,679	219,314,375	28,560
20 Food and Kindred Products	11	205	8,260,056	40,292
24 Lumber and Wood Products	232	3,010	74,631,652	24,794
25 Furniture and Fixtures	5	68	980,114	14,413
27 Printing and Publishing	29	577	11,262,212	19,518
29 Petroleum and Coal Products	3	79	2,960,212	37,471
30 Rubber and Misc. Plastics Products	12	311	7,367,121	23,688
32 Stone, Clay, and Glass Products	22	271	6,936,121	25,594
34 Fabricated Metal Products	13	307	9,726,554	31,682
35 Industrial Machinery and Equipment	74	1,208	41,555,105	34,399
36 Electronic & other Electric Equipment	9	265	6,627,773	25,010
TRANSPORTATION AND PUBLIC UTILITIES	578	5,070	149,551,913	29,497
41 Local and Interurban Passenger	29	613	12,277,830	20,029
42 Trucking and Warehousing	368	1,981	50,353,336	25,418
45 Transportation By Air	15	252	8,167,843	32,412
47 Transportation Services	10	30	926,672	30,889
48 Communications	91	1,369	40,668,762	29,706
49 Electric, Gas, and Sanitary Services	65	824	37,130,863	45,061
WHOLESALE TRADE	455	3,997	116,493,298	29,145
50 Wholesale Trade-Durable Goods	307	2,461	75,574,294	30,708
51 Wholesale Trade-Nondurable Goods	148	1,536	40,919,004	26,639
RETAIL TRADE	1,981	23,765	339,652,485	14,292
52 Building Materials & Garden Supplies	113	1,289	27,361,612	21,227
53 General Merchandise Stores	109	4,130	55,943,025	13,545
54 Food Stores	307	3,788	50,341,195	13,289
55 Automotive Dealers & Service Stations	396	3,576	75,385,757	21,081
56 Apparel and Accessory Stores	89	604	6,446,292	10,672
57 Furniture & Homefurnishings Stores	146	759	13,384,993	17,635
58 Eating and Drinking Places	477	7,366	71,171,196	9,662
59 Miscellaneous Retail	344	2,254	39,618,415	17,576

Workforce Investment Area 1 - Employment & Wages 2000				
INDUSTRY	**UNITS**	**EMPLOYMENT**	**TOTAL WAGES**	**AVERAGE ANNUAL WAGE**
FINANCE, INSURANCE, AND REAL ESTATE	540	3,257	85,584,917	26,277
60 Depository Institutions	122	1,651	39,793,856	24,102
61 Nondepository Institutions	30	123	3,493,209	28,400
62 Security and Commodity Brokers	13	58	3,704,312	63,867
63 Insurance Carriers	21	167	6,890,530	41,260
64 Insurance Agents, Brokers, & Service	154	515	13,098,920	25,434
65 Real Estate	193	697	16,751,122	24,033
67 Holding and other Investment Offices	9	48	1,852,968	38,603
SERVICES	2,446	28,992	650,725,611	22,445
70 Hotels and Other Lodging Places	96	3,632	73,636,554	20,274
72 Personal Services	171	818	12,928,724	15,805
73 Business Services	227	2,640	45,461,348	17,220
75 Auto Repair, Services, and Parking	190	710	13,022,281	18,341
76 Miscellaneous Repair Services	102	999	29,257,849	29,287
78 Motion Pictures	36	274	4,387,937	16,014
79 Amusement & Recreation Services	108	1,526	16,432,607	10,768
80 Health Services	635	11,119	316,029,871	28,422
81 Legal Services	162	622	13,297,560	21,378
83 Social Services	191	3,292	45,726,733	13,890
86 Membership Organizations	106	750	6,651,872	8,869
87 Engineering & Management Services	232	1,892	61,565,328	32,539
88 Private Households	171	313	3,440,390	10,991
9999 Nonclassifiable Establishments	37	63	960,944	15,253
99 Nonclassifiable Establishments	37	63	960,944	15,253
GOVERNMENT	564	23,411	642,737,784	27,454
91 Federal Government	174	3,115	121,247,966	38,923
92 State Government	176	5,723	153,045,274	26,742
93 Local Government	215	14,573	368,444,544	25,282

Source: http://www.state.wv.us/bep/lmi/ew2000/ew00wi1.htm.

West Virginia - Employment & Wages 2000				
INDUSTRY	**UNITS**	**EMPLOYMENT**	**TOTAL WAGES**	**AVERAGE ANNUAL WAGE**
TOTAL, ALL INDUSTRIES	46,827	686,664	18,464,578,396	26,890
AGRICULTURE	654	4,332	78,815,414	18,193
01 Agricultural Production-Crops	73	702	10,019,690	14,273
02 Agricultural Production-Livestock	58	342	7,908,339	23,123
07 Agricultural Services	485	3,169	57,032,145	17,996
08 Forestry	34	106	3,605,301	34,012
MINING	867	20,447	1,002,674,986	49,037
10 Metal Mining	4	63	2,039,541	32,373
12 Coal Mining	414	15,747	825,377,618	52,414
13 Oil and Gas Extraction	403	3,702	134,388,721	36,301
14 Nonmetallic Minerals, except Fuels	47	935	40,869,106	43,710
CONSTRUCTION	5,623	33,577	992,063,322	29,545
15 General Building Contractors	2,207	9,811	239,609,393	24,422
16 Heavy Construction, exc. Building	532	7,355	281,898,566	38,327
17 Special Trade Contractors	2,885	16,411	470,555,363	28,673
MANUFACTURING	2,094	80,675	3,025,281,622	37,499
20 Food and Kindred Products	57	4,588	114,617,198	24,981
22 Textile Mill Products	7	828	17,985,818	21,722
23 Apparel and Other Textile Products	43	1,037	16,315,908	15,733
24 Lumber and Wood Products	772	11,282	261,653,624	23,192
25 Furniture and Fixtures	32	639	13,557,025	21,216
26 Paper and Allied Products	18	1,217	39,248,785	32,250
27 Printing and Publishing	232	5,779	139,845,077	24,198
28 Chemicals and Allied Products	73	14,179	888,654,428	62,673
29 Petroleum and Coal Products	26	690	31,430,344	45,551
30 Rubber and Misc. Plastics Products	49	3,717	104,065,251	27,997
32 Stone, Clay, and Glass Products	147	6,387	193,084,518	30,230
33 Primary Metal Industries	41	10,681	519,736,853	48,659
34 Fabricated Metal Products	131	6,010	219,978,069	36,602
35 Industrial Machinery and Equipment	289	5,290	166,660,766	31,504
36 Electronic & other Electric Equipment	31	1,671	59,657,147	35,701
37 Transportation Equipment	39	3,906	160,861,426	41,183
38 Instruments and Related Products	40	1,504	45,268,381	30,098
39 Miscellaneous Manufacturing Industries	66	1,005	21,621,408	21,513
TRANSPORTATION AND PUBLIC UTILITIES	2,581	34,191	1,293,284,154	37,825
41 Local and Interurban Passenger	106	1,566	26,013,336	16,611
42 Trucking and Warehousing	1,396	11,122	307,478,791	27,646
44 Water Transportation	54	1,137	42,376,173	37,270
45 Transportation By Air	92	2,178	68,263,726	31,342
47 Transportation Services	106	644	17,171,534	26,663
48 Communications	451	8,046	311,090,760	38,664
49 Electric, Gas, and Sanitary Services	376	9,463	519,609,255	54,909
WHOLESALE TRADE	3,512	30,578	1,015,619,603	33,214
50 Wholesale Trade-Durable Goods	2,327	18,833	645,460,626	34,272
51 Wholesale Trade-Nondurable Goods	1,185	11,745	370,158,977	31,516

West Virginia - Employment & Wages 2000				
INDUSTRY	**UNITS**	**EMPLOYMENT**	**TOTAL WAGES**	**AVERAGE ANNUAL WAGE**
RETAIL TRADE	10,243	133,757	1,909,252,123	14,274
52 Building Materials & Garden Supplies	556	6,249	131,603,724	21,059
53 General Merchandise Stores	447	20,282	287,707,378	14,185
54 Food Stores	1,410	21,171	278,142,725	13,137
55 Automotive Dealers & Service Stations	1,729	16,978	368,488,879	21,703
56 Apparel and Accessory Stores	524	5,009	59,153,608	11,809
57 Furniture & Homefurnishings Stores	721	4,716	90,881,068	19,270
58 Eating and Drinking Places	2,964	44,476	429,618,923	9,659
59 Miscellaneous Retail	1,893	14,876	263,655,818	17,723
FINANCE, INSURANCE, AND REAL ESTATE	3,484	26,770	787,496,427	29,417
60 Depository Institutions	733	11,248	300,433,877	26,709
61 Nondepository Institutions	218	1,783	53,001,403	29,725
62 Security and Commodity Brokers	116	779	66,876,345	85,848
63 Insurance Carriers	226	3,101	115,976,360	37,399
64 Insurance Agents, Brokers, & Service	815	4,419	121,872,545	27,579
65 Real Estate	1,282	4,889	97,765,962	19,997
67 Holding and other Investment Offices	95	551	31,569,935	57,295
SERVICES	14,836	186,493	4,377,385,383	23,472
70 Hotels and Other Lodging Places	387	9,755	151,133,849	15,492
72 Personal Services	1,043	6,242	96,869,359	15,518
73 Business Services	2,147	31,323	567,149,015	18,106
75 Auto Repair, Services, and Parking	1,161	5,143	98,943,224	19,238
76 Miscellaneous Repair Services	436	2,933	84,088,443	28,669
78 Motion Pictures	215	1,578	17,334,872	10,985
79 Amusement & Recreation Services	521	8,505	112,916,253	13,276
80 Health Services	3,234	72,662	2,190,044,643	30,140
81 Legal Services	1,009	5,424	170,550,481	31,443
82 Educational Services	152	4,109	100,673,173	24,500
83 Social Services	1,091	19,129	285,964,037	14,949
84 Museums, Botanical, Zoological Gardens	14	168	2,771,710	16,498
86 Membership Organizations	801	5,552	77,519,904	13,962
87 Engineering & Management Services	1,605	12,177	399,628,942	32,818
88 Private Households	997	1,681	19,690,194	11,713
89 Services, n.e.c.	24	115	2,107,284	18,324
NONCLASSIFIABLE ESTABLISHMENTS	353	604	17,459,921	28,907
99 Nonclassifiable Establishments	353	604	17,459,921	28,907
GOVERNMENT	2,581	135,240	3,965,245,441	29,320
Federal Government	782	22,463	972,069,159	43,274
State Government	855	40,214	1,174,536,078	29,207
Local Government	944	72,562	1,818,640,204	25,063

http://www.state.wv.us/scripts/bep/lmi/cntydata.cfm.

APPENDIX D

WORKFORCE INVESTMENT AREA 1

COMPARATIVE OCCUPATIONAL WAGES, 2001

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
TOTAL ALL OCCUPATIONS	119,930	26,391	13,608	32,781	21,544
		12.69	6.54	15.76	10.36

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC001.htm.

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
MANAGEMENT OCCUPATIONS		45,538	24,157	56,228	40,324
		21.89	11.62	27.03	19.39
Administrative Services Managers	230	43,731	23,047	54,073	40,112
		21.02	11.08	26	19.28
Advertising and Promotions Managers	70	31,787	22,619	36,370	32,083
		15.28	10.87	17.48	15.42
Chief Executives	340	66,623	36,167	81,851	60,085
		32.03	17.39	39.35	28.89
Computer and Information Systems Managers	80	54,460	29,069	67,155	54,054
		26.19	13.97	32.28	25.99
Construction Managers		29,258	26,443	30,665	27,088
		14.06	12.71	14.74	13.02
Education Administrators, Elementary and Secondary School	400	52,772	47,888	55,214	53,125
Education Administrators, Postsecondary	60	60,078	38,803	70,714	54,991
		28.89	18.66	34	26.44
Engineering Managers	140	59,424	38,349	69,961	47,123
		28.57	18.43	33.63	22.66
Financial Managers	370	54,859	34,575	65,001	55,190
		26.37	16.62	31.25	26.53
Food Service Managers	220	32,366	24,507	36,295	29,655
		15.56	11.78	17.45	14.26
General and Operations Managers	2,450	49,634	24,431	62,236	42,532
		23.86	11.74	29.92	20.45
Human Resources Managers	100	43,861	29,548	51,018	39,840
		21.09	14.21	24.53	19.16
Industrial Production Managers	100	38,360	27,031	44,026	35,707
		18.44	12.99	21.16	17.16
Legislators		27,044	12,550	34,292	14,185
		13	6.03	16.49	6.82
Lodging Managers		26,817	25,588	27,431	26,002
		12.89	12.31	13.18	12.5
Managers, All Other	230	48,473	24,296	60,561	45,551
		23.3	11.68	29.12	21.9
Marketing Managers	60	45,170	26,559	54,476	39,287
		21.72	12.77	26.19	18.89
Medical and Health Services Managers	330	44,355	27,195	52,935	41,243
		21.33	13.07	25.45	19.83
Postmasters and Mail Superintendents	230	40,532	33,715	43,941	40,767
		19.49	16.21	21.12	19.6
Property, Real Estate, and Community Association Managers	90	36,048	20,973	43,585	23,614
		17.33	10.09	20.96	11.35
Public Relations Managers	20	38,815	26,485	44,980	33,020
		18.66	12.73	21.62	15.88
Purchasing Managers	100	37,987	23,345	45,307	36,028
		18.26	11.22	21.79	17.32
Sales Managers	180	44,609	25,582	54,121	32,449
		21.45	12.29	26.02	15.6
Social and Community Service Managers	190	31,423	18,764	37,752	30,476
		15.11	9.02	18.15	14.65
Transportation, Storage, and Distribution Managers	60	44,571	31,262	51,225	43,120
		21.43	15.03	24.63	20.73

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC001.htm.

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
BUSINESS AND FINANCIAL OPERATIONS OCCUPATIONS		35,454	21,458	42,451	33,075
		17.04	10.32	20.41	15.9
Accountants and Auditors	520	30,538	22,993	34,310	28,211
		14.68	11.06	16.5	13.56
Appraisers and Assessors of Real Estate		26,344	13,361	32,835	19,573
		12.66	6.42	15.78	9.41
Budget Analysts	20	43,697	35,758	47,666	41,399
		21.01	17.19	22.91	19.91
Business Operations Specialists, All Other	200	46,887	33,791	53,434	45,929
		22.54	16.24	25.68	22.08
Claims Adjusters, Examiners, and Investigators	90	50,799	35,954	58,221	50,580
		24.43	17.28	27.99	24.31
Compensation, Benefits, and Job Analysis Specialists	20	29,292	23,859	32,009	28,736
		14.09	11.47	15.38	13.82
Cost Estimators	80	34,899	21,127	41,786	28,251
		16.78	10.16	20.09	13.59
Employment, Recruitment, and Placement Specialists	50	24,187	15,835	28,363	24,195
		11.63	7.61	13.63	11.63
Financial Specialists, All Other	70	34,327	22,851	40,065	31,329
		16.5	10.99	19.26	15.07
Loan Officers	120	46,767	40,490	49,905	43,907
		22.48	19.47	24	21.11
Management Analysts	40	43,064	23,507	52,843	40,524
		20.7	11.3	25.41	19.49
Purchasing Agents and Buyers, Farm Products	10	35,092	28,974	38,151	32,965
		16.87	13.93	18.34	15.84
Purchasing Agents, Except Wholesale, Retail, and Farm Products	190	25,407	15,875	30,173	21,369
		12.21	7.63	14.5	10.27
Training and Development Specialists	90	32,633	20,219	38,840	29,612
		15.69	9.72	18.68	14.24
Wholesale and Retail Buyers, Except Farm Products	40	34,075	21,861	40,183	30,208
		16.39	10.5	19.32	14.52

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC001.htm.

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
COMPUTER AND MATHEMATICAL OCCUPATIONS		37,756	26,379	43,444	35,734
		18.15	12.68	20.88	17.18
Computer Software Engineers, Applications	10	61,292	55,119	64,380	62,954
		29.47	26.5	30.96	30.26
Computer Support Specialists	80	28,956	20,765	33,052	27,110
		13.92	9.99	15.89	13.04
Computer Systems Analysts	50	45,750	35,594	50,828	45,173
		21.99	17.12	24.44	21.72
Database Administrators		35,562	31,086	37,801	35,207
		17.09	14.94	18.18	16.93
Network and Computer Systems Administrators	20	45,498	31,052	52,720	44,056
		21.88	14.93	25.35	21.18

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC001.htm.

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
ARCHITECTURE AND ENGINEERING OCCUPATIONS		36,401	22,637	43,283	34,467
		17.5	10.88	20.81	16.57
Architectural and Civil Drafters		28,219	21,030	31,812	22,262
		13.57	10.11	15.29	10.7
Electrical Engineers	30	53,052	36,783	61,186	51,461
		25.51	17.69	29.42	24.74
Electrical and Electronic Engineering Technicians	70	42,082	27,379	49,433	44,296
		20.24	13.17	23.77	21.3
Electrical and Electronics Drafters	30	26,539	14,231	32,693	21,915
		12.76	6.84	15.72	10.54
Environmental Engineers		44,642	42,591	45,667	43,370
		21.46	20.48	21.96	20.85
Mechanical Drafters	20	32,972	20,254	39,330	33,243
		15.85	9.74	18.91	15.98
Mechanical Engineers	30	42,038	29,068	48,523	36,508
		20.22	13.97	23.33	17.55
Mining and Geological Engineers, Including Mining Safety Engineers	90	50,820	40,132	56,165	44,424
		24.43	19.3	27	21.36
Surveying and Mapping Technicians	60	31,717	23,237	35,956	30,746
		15.25	11.17	17.29	14.78
Surveyors		19,389	16,623	20,771	18,097
		9.32	8	9.99	8.7

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC001.htm.

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
LIFE, PHYSICAL, AND SOCIAL SCIENCE OCCUPATIONS		34,863	21,347	41,622	33,286
		16.77	10.27	20.01	16
Agricultural and Food Scientists	20	60,836	49,226	66,642	60,696
		29.25	23.66	32.04	29.18
Biological Technicians	60	29,504	20,226	34,143	27,498
		14.19	9.72	16.41	13.22
Chemical Technicians	60	27,438	20,688	30,813	26,576
		13.19	9.94	14.81	12.78
Chemists	20	39,468	30,531	43,935	38,675
		18.97	14.68	21.12	18.59
Clinical, Counseling, and School Psychologists		33,197	13,650	42,970	26,365
		15.96	6.56	20.65	12.68
Conservation Scientists	40	48,663	40,207	52,892	45,288
		23.4	19.33	25.43	21.78
Environmental Science and Protection Technicians, Including Health	80	23,193	20,592	24,493	21,950
		11.15	9.9	11.77	10.56
Forest and Conservation Technicians	20	32,192	24,532	36,022	32,354
		15.47	11.79	17.32	15.55
Foresters	90	36,846	23,790	43,372	35,089
		17.72	11.43	20.85	16.87
Geological and Petroleum Technicians		30,057	17,381	36,394	28,867
		14.45	8.35	17.49	13.88
Geoscientists, Except Hydrologists and Geographers		40,935	36,618	43,093	41,860
		19.68	17.6	20.72	20.12
Life, Physical, and Social Science Technicians, All Other		29,231	25,235	31,229	29,204
		14.06	12.13	15.01	14.05

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC001.htm.

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
COMMUNITY AND SOCIAL SERVICES OCCUPATIONS		26,617	15,714	32,069	24,187
		12.8	7.55	15.42	11.63
Clergy	10	45,340	28,171	53,924	49,112
		21.8	13.55	25.93	23.61
Educational, Vocational, and School Counselors	480	40,569	35,672	43,019	41,141
		19.5	17.15	20.69	19.78
Health Educators		24,615	16,247	28,798	23,750
		11.83	7.81	13.84	11.41
Medical and Public Health Social Workers	80	30,540	21,316	35,151	27,130
		14.69	10.25	16.9	13.05
Mental Health Counselors	70	23,278	15,101	27,366	22,598
		11.19	7.26	13.16	10.86
Social and Human Service Assistants	260	15,835	12,518	17,495	15,162
		7.61	6.02	8.41	7.29
Substance Abuse and Behavioral Disorder Counselors	40	33,169	24,036	37,736	33,775
		15.94	11.56	18.15	16.24

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC001.htm.

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
LEGAL OCCUPATIONS					
Lawyers	70	66,133	32,565	82,918	52,671
		31.79	15.66	39.86	25.33

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC001.htm.

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
EDUCATION, TRAINING, AND LIBRARY OCCUPATIONS		33,709	22,951	39,088	34,626
		16.2	11.03	18.79	16.64
Adult Literacy, Remedial Education, and GED Teachers and Instructors	210	36,049	29,175	39,486	36,753
		17.33	14.02	18.98	17.67
All Other Teachers, Primary, Secondary, and Adult	60	36,485	25,354	42,050	36,829
Art, Drama, and Music Teachers, Postsecondary	40	47,101	35,490	52,907	48,104
Business Teachers, Postsecondary	40	57,291	36,537	67,668	52,341
Communications Teachers, Postsecondary	10	44,954	34,866	49,999	44,698
Education Teachers, Postsecondary	30	48,307	30,531	57,196	48,119
Elementary School Teachers, Except Special Education	2,230	35,698	30,741	38,177	35,609
English Language and Literature Teachers, Postsecondary	70	47,367	38,088	52,005	46,729
Foreign Language and Literature Teachers, Postsecondary	20	45,792	33,552	51,912	43,945
Instructional Coordinators	70	45,001	31,239	51,883	47,550
		21.63	15.01	24.95	22.86
Kindergarten Teachers, Except Special Education	340	36,411	31,552	38,841	36,473
Librarians	130	36,508	29,610	39,957	37,048
		17.55	14.24	19.21	17.81
Library Technicians	30	20,159	12,679	23,898	19,652
		9.69	6.1	11.48	9.44
Mathematical Science Teachers, Postsecondary	40	44,521	37,527	48,017	44,134
Middle School Teachers, Except Special and Vocational Education	840	36,371	31,259	38,927	36,168
Postsecondary Teachers, All Other	10	56,084	34,578	66,838	57,723
Preschool Teachers, Except Special Education	370	17,557	12,552	20,059	15,085
		8.45	6.04	9.65	7.25
Psychology Teachers, Postsecondary	10	48,419	38,074	53,591	45,579
Recreation and Fitness Studies Teachers, Postsecondary	30	49,584	38,791	54,982	49,284
Secondary School Teachers, Except Special and Vocational Education	1,120	36,520	30,720	39,421	37,011
Self-Enrichment Education Teachers	100	18,028	12,393	20,846	13,364
		8.67	5.96	10.03	6.43
Special Education Teachers, Middle School	340	35,177	29,466	38,032	35,259
Special Education Teachers, Preschool, Kindergarten, and Elementary School	440	35,653	30,146	38,407	35,636
Special Education Teachers, Secondary School	330	35,286	29,432	38,212	35,410
Teacher Assistants	930	19,374	15,464	21,329	19,411
Vocational Education Teachers, Secondary School	420	36,944	30,292	40,271	37,094

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC001.htm.

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
ARTS, DESIGN, ENTERTAINMENT, SPORTS, AND		26,673	13,466	33,277	21,317
MEDIA OCCUPATIONS		12.82	6.48	16	10.25
	110	14,739	12,611	15,803	13,636
Announcers		7.09	6.06	7.6	6.56
	40	36,681	19,408	45,317	34,771
Coaches and Scouts					
		49,671	26,829	61,090	40,894
Editors		23.88	12.9	29.38	19.67
	70	16,837	12,530	18,989	15,679
Floral Designers		8.1	6.03	9.13	7.54
	60	26,135	18,828	29,789	22,521
Graphic Designers		12.57	9.05	14.32	10.83
		27,839	16,390	33,564	25,835
Media and Communication Workers, All Other		13.38	7.88	16.14	12.42
	30	19,712	12,356	23,389	13,949
Merchandise Displayers and Window Trimmers		9.48	5.94	11.24	6.71
		38,034	18,390	47,856	28,975
News Analysts, Reporters and Correspondents		18.29	8.84	23.01	13.93
	50	28,080	16,191	34,025	24,099
Photographers		13.5	7.78	16.36	11.59
	30	47,404	24,756	58,728	37,691
Producers and Directors					
	40	29,409	12,561	37,833	25,896
Public Relations Specialists		14.14	6.04	18.19	12.45
		38,025	27,277	43,399	38,509
Writers and Authors		18.28	13.12	20.87	18.51

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC001.htm.

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
HEALTHCARE PRACTITIONERS AND TECHNICAL OCCUPATIONS		43,972	21,343	55,287	33,635
		21.14	10.26	26.58	16.17
Cardiovascular Technologists and Technicians	80	34,668	21,898	41,052	33,742
		16.67	10.53	19.74	16.22
Dental Hygienists		25,965	25,516	26,191	25,897
		12.48	12.27	12.6	12.45
Dentists		99,011	87,447	104,793	103,275
		47.6	42.04	50.38	49.65
Diagnostic Medical Sonographers	60	41,187	32,855	45,352	40,341
		19.8	15.8	21.81	19.39
Dietitians and Nutritionists	50	40,068	29,573	45,314	35,194
		19.27	14.22	21.79	16.92
Emergency Medical Technicians and Paramedics	420	19,437	15,482	21,414	18,350
		9.34	7.45	10.29	8.82
Family and General Practitioners	320	133,122	110,584	144,390	>$145,600
		64	53.16	69.42	>$70
Internists, General	90	136,878	130,547	140,044	122,746
		65.81	62.76	67.33	59.02
Licensed Practical and Licensed Vocational Nurses	1,670	24,961	19,328	27,777	24,300
		12.01	9.29	13.35	11.68
Medical Records and Health Information Technicians	290	19,458	15,774	21,301	17,768
		9.35	7.58	10.24	8.55
Medical and Clinical Laboratory Technicians	230	24,536	18,862	27,373	23,986
		11.8	9.07	13.16	11.54
Medical and Clinical Laboratory Technologists	220	36,750	29,815	40,218	34,779
		17.67	14.33	19.34	16.72
Nuclear Medicine Technologists	20	44,325	36,811	48,082	43,546
		21.31	17.7	23.11	20.94
Occupational Health and Safety Specialists and Technicians	110	56,764	40,134	65,079	61,965
		27.29	19.3	31.29	29.79
Occupational Therapists	40	45,064	27,320	53,936	47,410
		21.66	13.14	25.93	22.8
Opticians, Dispensing	40	23,862	15,960	27,814	24,186
		11.47	7.67	13.37	11.63
Optometrists		59,972	25,516	77,201	74,652
		28.83	12.27	37.12	35.89
Pharmacists	180	76,664	59,409	85,291	73,801
		36.86	28.56	41	35.48
Pharmacy Technicians	170	20,028	14,235	22,925	20,151
		9.63	6.84	11.03	9.69
Physical Therapists	120	65,972	50,101	73,907	62,273
		31.72	24.09	35.54	29.94
Physician Assistants	100	61,615	51,364	66,740	59,421
		29.62	24.69	32.09	28.57
Physicians and Surgeons, All Other	40	118,274	81,221	136,801	>$145,600
		56.86	39.04	65.77	>$70
Radiologic Technologists and Technicians	330	29,037	24,744	31,183	28,992
		13.96	11.89	14.99	13.94
Recreational Therapists	40	25,923	21,979	27,894	26,131
		12.46	10.57	13.41	12.57
Registered Nurses	3,010	39,297	31,208	43,341	38,332
		18.89	15	20.84	18.43
Respiratory Therapists	130	31,977	26,526	34,702	32,140
		15.37	12.75	16.69	15.45
Respiratory Therapy Technicians	60	32,121	24,144	36,109	27,977
		15.44	11.61	17.36	13.45

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
Speech-Language Pathologists	40	47,410	31,110	55,560	46,225
		22.8	14.95	26.71	22.23
Surgeons	150	134,520	106,573	>$145,600	>$145,600
		64.68	51.23	>$70	>$70
Surgical Technologists	120	28,740	21,483	32,368	30,314
		13.82	10.33	15.56	14.58
Veterinarians	40	81,643	51,417	96,756	81,003
		39.25	24.72	46.52	38.94
Veterinary Technologists and Technicians	60	18,482	15,798	19,823	18,783
		8.88	7.6	9.53	9.03

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC001.htm.

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
HEALTHCARE SUPPORT OCCUPATIONS		16,335	12,568	18,218	14,769
		7.86	6.04	8.76	7.1
Dental Assistants		18,680	15,549	20,247	19,725
		8.98	7.47	9.73	9.49
Healthcare Support Workers, All Other	110	18,513	14,105	20,718	17,592
		8.9	6.78	9.96	8.46
Home Health Aides	720	13,314	12,503	13,718	13,213
		6.4	6.02	6.6	6.35
Medical Assistants	510	15,352	12,587	16,734	14,168
		7.38	6.05	8.04	6.81
Medical Transcriptionists	260	22,998	16,402	26,296	23,551
		11.05	7.89	12.64	11.32
Nursing Aides, Orderlies, and Attendants	1,970	15,761	12,519	17,381	15,040
		7.57	6.02	8.36	7.23
Pharmacy Aides	10	17,416	12,331	19,958	13,629
		8.38	5.92	9.6	6.56
Physical Therapist Aides	100	17,976	14,315	19,805	17,148
		8.64	6.88	9.52	8.25
Physical Therapist Assistants	60	30,580	26,944	32,398	31,629
		14.7	12.96	15.57	15.21
Veterinary Assistants and Laboratory Animal Caretakers	60	13,088	12,487	13,387	13,193
		6.29	6.01	6.43	6.34

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC001.htm.

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
PROTECTIVE SERVICE OCCUPATIONS		23,931	14,013	28,891	22,261
		11.5	6.73	13.89	10.71
Crossing Guards		16,743	12,657	18,786	16,500
		8.05	6.09	9.03	7.93
Fire Fighters	150	27,361	15,808	33,138	28,778
		13.15	7.6	15.93	13.83
First-Line Supervisors/Managers of Correctional Officers	30	39,669	25,759	46,625	42,245
		19.08	12.39	22.42	20.31
First-Line Supervisors/Managers of Police and Detectives	60	36,931	23,559	43,616	34,673
		17.75	11.33	20.97	16.67
First-Line Supervisors/Managers, Protective Service Workers, All Other	50	36,592	19,667	45,055	27,603
		17.59	9.46	21.66	13.27
Parking Enforcement Workers	30	15,061	12,494	16,345	14,996
		7.24	6.01	7.86	7.21
Police and Sheriff's Patrol Officers	650	28,301	19,527	32,688	28,877
		13.61	9.39	15.72	13.88
Protective Service Workers, All Other	70	29,774	17,396	35,964	26,960
		14.31	8.37	17.29	12.96
Security Guards	800	14,410	12,378	15,426	13,259

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC001.htm.

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
FOOD PREPARATION AND SERVING-RELATED OCCUPATIONS		14,259	12,448	15,165	13,505
		6.86	5.99	7.29	6.5
Bartenders	330	13,518	12,447	14,055	13,219
		6.49	5.99	6.76	6.35
Chefs and Head Cooks	310	19,250	14,814	21,467	16,359
		9.25	7.13	10.32	7.87
Combined Food Preparation and Serving Workers, Including Fast Food	1,590	13,540	12,350	14,134	13,277
		6.5	5.93	6.8	6.38
Cooks, Institution and Cafeteria	1,080	17,180	13,666	18,937	17,119
		8.26	6.57	9.1	8.22
Cooks, Restaurant	950	13,725	12,389	14,394	13,256
		6.6	5.95	6.92	6.37
Cooks, Short Order		12,798	12,337	13,028	12,846
		6.15	5.93	6.26	6.18
Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	190	12,781	12,424	12,959	12,946
		6.15	5.98	6.23	6.22
Dining Room and Cafeteria Attendants and Bartender Helpers	200	12,726	12,472	12,854	12,946
		6.12	6	6.18	6.22
Dishwashers	290	12,499	12,367	12,565	12,723
		6.01	5.94	6.04	6.12
First-Line Supervisors/Managers of Food Preparation and Serving Workers	480	18,685	12,905	21,575	18,529
		8.99	6.21	10.37	8.91
Food Preparation Workers	640	15,238	12,498	16,607	14,155
		7.33	6.01	7.98	6.81
Food Preparation and Serving Related Workers, All Other	80	14,729	12,629	15,779	14,007
		7.08	6.07	7.58	6.74
Food Servers, Nonrestaurant	150	15,577	12,617	17,056	14,857
		7.49	6.07	8.2	7.15
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	300	13,073	12,496	13,363	13,099
		6.28	6.01	6.42	6.3
Waiters and Waitresses	2,190	12,765	12,421	12,938	12,872
		6.14	5.98	6.22	6.19

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC001.htm.

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
BUILDING AND GROUNDS CLEANING AND MAINTENANCE OCCUPATIONS		16,661	12,498	18,743	15,286
		8.01	6.01	9.01	7.35
All Other Building and Grounds Cleaning and Maintenance Workers	120	20,402	13,269	23,969	17,138
		9.81	6.38	11.53	8.24
First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	100	20,290	15,871	22,500	19,919
		9.75	7.63	10.82	9.58
First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	90	20,647	12,507	24,717	16,623
		9.93	6.01	11.89	7.99
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	1,900	17,981	12,583	20,680	17,175
		8.64	6.05	9.95	8.26
Landscaping and Groundskeeping Workers	650	16,409	12,593	18,317	15,264
		7.89	6.06	8.8	7.34
Maids and Housekeeping Cleaners	1,430	14,015	12,416	14,815	13,715
		6.74	5.97	7.13	6.6

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC001.htm.

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
PERSONAL CARE AND SERVICE OCCUPATIONS		17,352	12,581	19,738	14,560
		8.35	6.05	9.49	7
Amusement and Recreation Attendants	490	15,746	12,604	17,316	14,415
		7.57	6.06	8.33	6.93
Child Care Workers	320	16,239	13,737	17,490	16,106
		7.81	6.61	8.41	7.75
First-Line Supervisors/Managers of Personal Service Workers	140	21,112	14,192	24,572	21,131
		10.15	6.82	11.82	10.16
Hairdressers, Hairstylists, and Cosmetologists	210	12,755	12,470	12,897	12,957
		6.13	6	6.2	6.23
Nonfarm Animal Caretakers	40	14,795	12,612	15,886	13,776
		7.11	6.07	7.63	6.62
Personal Care and Service Workers, All Other	30	13,890	12,479	14,596	13,178
		6.68	6	7.01	6.33
Personal and Home Care Aides		13,752	12,397	14,430	13,560
		6.62	5.97	6.94	6.51
Recreation Workers	140	18,724	12,963	21,604	17,496
		9.01	6.23	10.38	8.41
Tour Guides and Escorts	290	15,167	12,377	16,563	13,631
		7.29	5.95	7.96	6.56
Ushers, Lobby Attendants, and Ticket Takers	40	14,741	12,545	15,838	15,190
		7.08	6.03	7.61	7.3

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC001.htm.

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
SALES AND RELATED OCCUPATIONS		19,929	12,485	23,651	15,548
		9.58	6.01	11.37	7.48
Advertising Sales Agents		24,395	12,729	30,228	20,548
		11.73	6.12	14.53	9.88
Cashiers	3,850	14,326	12,424	15,276	13,436
		6.89	5.97	7.35	6.46
Counter and Rental Clerks	280	18,961	12,555	22,165	16,834
		9.12	6.03	10.66	8.09
Door-to-Door Sales Workers, News and Street Vendors, and Related Workers	40	36,748	26,059	42,093	38,320
		17.67	12.53	20.23	18.42
First-Line Supervisors/Managers of Non-Retail Sales Workers	70	51,088	38,764	57,250	46,381
		24.56	18.63	27.53	22.3
First-Line Supervisors/Managers of Retail Sales Workers	1,950	26,572	15,105	32,306	20,739
		12.78	7.26	15.53	9.97
Insurance Sales Agents		58,412	29,277	72,978	73,446
		28.08	14.08	35.09	35.31
Parts Salespersons	450	20,040	13,312	23,405	17,319
		9.64	6.4	11.25	8.32
Retail Salespersons	4,260	17,609	12,467	20,181	14,114
		8.47	5.99	9.7	6.79
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	440	33,178	21,751	38,892	30,628
		15.95	10.45	18.7	14.72
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	80	37,117	23,696	43,827	33,834
		17.84	11.39	21.07	16.27
Sales and Related Workers, All Other	260	23,295	13,263	28,310	17,277
		11.2	6.38	13.61	8.3
Securities, Commodities, and Financial Services Sales Agents	20	58,858	30,013	73,280	51,455
		28.29	14.43	35.23	24.74

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC001.htm.

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
OFFICE AND ADMINISTRATIVE SUPPORT OCCUPATIONS		20,991	13,791	24,590	19,324
		10.09	6.63	11.82	9.29
All Other Financial, Information, and Record Clerks	120	22,544	17,367	25,133	21,205
		10.84	8.35	12.09	10.19
All Other Secretaries, Administrative Assistants, and Other Office Support	60	23,560	16,218	27,230	20,733
		11.33	7.8	13.09	9.97
Bill and Account Collectors	290	17,140	12,486	19,467	16,618
		8.24	6.01	9.36	7.99
Billing and Posting Clerks and Machine Operators	710	17,221	14,296	18,685	17,084
		8.28	6.88	8.98	8.22
Bookkeeping, Accounting, and Auditing Clerks	1,560	22,728	16,719	25,732	21,753
		10.93	8.03	12.37	10.46
Cargo and Freight Agents		16,899	13,553	18,572	16,985
		8.13	6.52	8.93	8.17
Computer Operators	80	23,248	18,961	25,391	22,011
		11.17	9.12	12.21	10.58
Couriers and Messengers		15,630	12,657	17,117	15,607
		7.51	6.09	8.23	7.5
Customer Service Representatives	590	18,256	13,688	20,541	17,622
		8.78	6.58	9.88	8.47
Data Entry Keyers	240	17,964	15,647	19,123	17,353
		8.64	7.52	9.19	8.34
Dispatchers, Except Police, Fire, and Ambulance	130	21,884	14,125	25,762	18,927
		10.52	6.79	12.38	9.1
Executive Secretaries and Administrative Assistants	1,090	24,628	19,111	27,387	22,169
		11.84	9.19	13.17	10.66
File Clerks	210	16,283	12,466	18,190	14,205
		7.83	6	8.75	6.83
First-Line Supervisors/Managers of Office and Administrative Support Workers	940	28,884	18,570	34,041	26,245
		13.89	8.92	16.36	12.62
Hotel, Motel, and Resort Desk Clerks	480	13,243	12,415	13,657	12,975
		6.37	5.97	6.57	6.24
Human Resources Assistants, Except Payroll and Timekeeping	90	24,881	14,967	29,838	24,740
		11.96	7.19	14.35	11.89
Insurance Claims and Policy Processing Clerks	70	31,920	21,098	37,332	28,997
		15.35	10.14	17.95	13.94
Interviewers, Except Eligibility and Loan	90	22,454	17,600	24,880	22,359
		10.8	8.46	11.96	10.74
Library Assistants, Clerical		12,923	12,396	13,186	12,851
		6.21	5.96	6.34	6.18
Mail Clerks and Mail Machine Operators, Except Postal Service	40	18,377	12,751	21,189	18,666
		8.83	6.13	10.19	8.97
Medical Secretaries	210	16,991	12,758	19,107	18,134
		8.17	6.13	9.19	8.72
Meter Readers, Utilities	60	31,104	16,664	38,324	25,455
		14.95	8.01	18.43	12.24
New Accounts Clerks	100	23,563	20,278	25,205	23,994
		11.33	9.75	12.12	11.53
Office Clerks, General	2,750	17,847	12,830	20,355	16,859
		8.58	6.17	9.78	8.1
Order Clerks	150	23,946	14,027	28,906	21,697
		11.51	6.74	13.9	10.43
Payroll and Timekeeping Clerks	110	22,975	15,663	26,630	22,519
		11.04	7.53	12.8	10.83
Police, Fire, and Ambulance Dispatchers	170	16,515	12,690	18,429	16,171
		7.94	6.1	8.86	7.78

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
Postal Service Clerks	120	36,849	32,153	39,196	37,241
		17.71	15.46	18.84	17.91
Postal Service Mail Carriers	230	36,948	27,717	41,564	38,709
		17.76	13.32	19.99	18.61
Postal Service Mail Sorters, Processors, and Processing Machine Operators	220	22,851	17,279	25,636	22,371
		10.99	8.31	12.32	10.76
Procurement Clerks	30	24,914	18,871	27,936	25,144
		11.97	9.08	13.43	12.09
Production, Planning, and Expediting Clerks	190	37,623	26,165	43,353	34,108
		18.09	12.58	20.84	16.39
Receptionists and Information Clerks	830	17,232	13,028	19,334	16,171
		8.29	6.26	9.29	7.78
Reservation and Transportation Ticket Agents and Travel Clerks	20	16,909	16,034	17,346	16,695
		8.13	7.71	8.34	8.02
Secretaries, Except Legal, Medical, and Executive	1,670	20,935	14,140	24,332	20,702
		10.07	6.79	11.7	9.96
Shipping, Receiving, and Traffic Clerks	440	20,484	12,971	24,240	18,631
		9.84	6.23	11.66	8.95
Stock Clerks and Order Fillers	1,190	19,452	12,511	22,923	16,863
		9.35	6.02	11.02	8.1
Switchboard Operators, Including Answering Service		16,217	12,523	18,063	15,161
		7.8	6.02	8.69	7.29
Tellers	280	18,298	13,981	20,457	18,183
		8.8	6.72	9.83	8.74
Weighers, Measurers, Checkers, and Samplers, Recordkeeping		22,215	18,361	24,142	21,165
		10.68	8.83	11.6	10.17
Word Processors and Typists	260	19,320	12,674	22,644	16,398
		9.29	6.09	10.89	7.88

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC001.htm.

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
FARMING, FISHING, AND FORESTRY OCCUPATIONS		22,132	16,636	24,881	21,204
		10.65	8	11.96	10.2
Fallers	390	23,467	20,304	25,049	21,531
		11.28	9.76	12.04	10.35
Farming, Fishing, and Forestry Workers, All Other	60	24,183	13,365	29,593	18,769
		11.63	6.42	14.23	9.03
First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	30	27,985	16,614	33,670	26,252
		13.45	7.99	16.19	12.62
Log Graders and Scalers	80	23,629	16,492	27,197	24,110
		11.36	7.93	13.07	11.59
Logging Equipment Operators	330	21,435	17,132	23,587	21,527
		10.31	8.24	11.34	10.35

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC001.htm.

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
CONSTRUCTION AND EXTRACTION OCCUPATIONS		31,615	19,274	37,787	28,306
		15.2	9.27	18.17	13.61
Brickmasons and Blockmasons	40	33,192	29,168	35,204	33,109
		15.96	14.02	16.93	15.92
Carpenters	560	25,111	17,091	29,121	21,335
		12.07	8.21	14	10.25
Cement Masons and Concrete Finishers	130	30,171	20,612	34,950	29,634
		14.51	9.91	16.8	14.24
Construction Laborers		26,174	18,770	29,876	21,443
		12.58	9.03	14.37	10.31
Construction and Building Inspectors	90	35,582	20,674	43,035	28,262
		17.1	9.94	20.69	13.58
Continuous Mining Machine Operators	260	38,397	30,378	42,407	38,080
		18.46	14.6	20.39	18.3
Earth Drillers, Except Oil and Gas		38,221	30,849	41,907	33,950
		18.38	14.84	20.15	16.32
Electricians	400	35,647	25,993	40,473	38,389
		17.14	12.5	19.46	18.46
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	660	49,725	35,880	56,646	50,319
		23.91	17.25	27.23	24.19
Glaziers		23,317	14,221	27,866	20,061
		11.21	6.84	13.4	9.64
Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	30	18,612	14,704	20,566	19,306
		8.94	7.07	9.89	9.28
Helpers--Carpenters		18,136	12,668	20,870	16,035
		8.72	6.09	10.03	7.71
Helpers--Extraction Workers	80	36,120	27,290	40,535	39,082
		17.37	13.12	19.49	18.79
Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	90	27,481	16,087	33,178	21,538
		13.21	7.74	15.95	10.36
Helpers--Roofers		17,326	15,443	18,268	17,092
		8.33	7.43	8.78	8.22
Mine Cutting and Channeling Machine Operators		31,953	27,815	34,022	31,831
		15.37	13.38	16.36	15.3
Painters, Construction and Maintenance	80	19,654	13,381	22,790	19,542
		9.45	6.44	10.96	9.4
Paving, Surfacing, and Tamping Equipment Operators		24,510	19,448	27,040	21,306
		11.78	9.35	13	10.24
Plumbers, Pipefitters, and Steamfitters	460	36,130	22,179	43,105	33,340
		17.37	10.66	20.72	16.03
Rail-Track Laying and Maintenance Equipment Operators	30	49,016	41,637	52,705	50,272
		23.57	20.02	25.34	24.17
Roof Bolters, Mining	290	40,022	37,330	41,367	40,956
		19.24	17.95	19.89	19.69
Roofers		20,052	16,131	22,013	19,750
		9.64	7.75	10.58	9.5
Sheet Metal Workers		40,428	23,185	49,049	44,638
		19.44	11.14	23.58	21.46

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC001.htm.

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
INSTALLATION, MAINTENANCE, AND REPAIR OCCUPATIONS		30,146	17,905	36,268	27,390
		14.5	8.61	17.44	13.17
All Other Electrical and Electronic Equipment Mechanics, Installers, and Repairers	20	28,231	20,561	32,065	29,386
		13.57	9.89	15.42	14.13
Automotive Service Technicians and Mechanics	1,260	28,832	17,729	34,383	28,894
		13.87	8.52	16.53	13.89
Bus and Truck Mechanics and Diesel Engine Specialists	260	27,669	20,901	31,053	26,870
		13.3	10.05	14.93	12.92
Computer, Automated Teller, and Office Machine Repairers	50	31,289	18,125	37,871	31,655
		15.04	8.71	18.2	15.22
Electric Motor, Power Tool, and Related Repairers		26,142	22,718	27,854	26,489
		12.57	10.92	13.39	12.73
Electrical and Electronics Repairers, Commercial and Industrial Equipment	40	26,068	19,106	29,548	23,987
		12.53	9.18	14.2	11.53
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	420	33,225	20,479	39,599	28,294
		15.98	9.85	19.04	13.6
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	90	26,634	21,464	29,220	25,815
		12.8	10.32	14.05	12.41
Helpers--Installation, Maintenance, and Repair Workers	60	14,054	12,469	14,847	13,102
		6.75	5.99	7.14	6.3
Home Appliance Repairers	20	23,440	18,716	25,801	22,965
		11.26	9	12.41	11.04
Industrial Machinery Mechanics	180	33,348	24,281	37,881	29,208
		16.03	11.67	18.21	14.04
Installation, Maintenance, and Repair Workers, All Other	60	34,173	13,920	44,300	24,352
		16.43	6.69	21.29	11.7
Maintenance Workers, Machinery	70	31,100	23,503	34,898	31,705
		14.95	11.29	16.77	15.24
Maintenance and Repair Workers, General	1,120	23,796	14,866	28,260	21,632
		11.44	7.14	13.59	10.4
Medical Equipment Repairers	10	36,958	25,904	42,485	37,006
		17.76	12.46	20.43	17.79
Millwrights	60	32,236	26,013	35,348	31,948
		15.5	12.51	17	15.36
Mobile Heavy Equipment Mechanics, Except Engines	440	40,254	25,190	47,786	38,331
		19.36	12.11	22.98	18.43
Telecommunications Equipment Installers and Repairers, Except Line Installers	360	49,208	35,319	56,153	51,195
		23.66	16.98	27	24.61
Telecommunications Line Installers and Repairers	160	21,945	16,765	24,534	21,424
		10.55	8.06	11.79	10.31
Tire Repairers and Changers		19,029	16,254	20,416	19,226
		9.15	7.82	9.82	9.24

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC001.htm.

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
PRODUCTION OCCUPATIONS		24,480	14,887	29,278	22,295
		11.77	7.16	14.08	10.72
Assemblers and Fabricators, All Other	100	21,736	14,583	25,313	20,973
		10.45	7.01	12.16	10.08
Bindery Workers		15,359	12,402	16,838	14,599
		7.38	5.96	8.1	7.02
Butchers and Meat Cutters	80	25,972	24,706	26,605	26,390
		12.49	11.88	12.79	12.69
Cabinetmakers and Bench Carpenters		25,507	17,819	29,350	26,843
		12.26	8.57	14.11	12.91
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	60	24,340	18,521	27,250	24,241
		11.7	8.9	13.11	11.65
Computer-Controlled Machine Tool Operators, Metal and Plastic		22,145	19,059	23,688	22,152
		10.64	9.16	11.39	10.65
Cutting and Slicing Machine Setters, Operators, and Tenders	70	22,476	18,289	24,568	21,788
		10.81	8.79	11.81	10.48
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	160	18,977	14,421	21,255	19,787
		9.12	6.93	10.22	9.52
Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	30	26,210	19,091	29,769	25,624
		12.6	9.18	14.31	12.32
Electrical and Electronic Equipment Assemblers	90	15,291	12,360	16,757	14,713
		7.36	5.94	8.06	7.07
First-Line Supervisors/Managers of Production and Operating Workers	370	38,121	26,456	43,954	38,363
		18.32	12.72	21.13	18.45
Grinding, Lapping, Polishing, & Buffing Machine Tool Setters, Operators, & Tenders, Metal and Plastic	70	15,879	12,384	17,626	13,736
		7.64	5.95	8.47	6.6
Helpers--Production Workers	630	20,241	12,952	23,886	16,471
		9.73	6.23	11.49	7.92
Inspectors, Testers, Sorters, Samplers, and Weighers	290	27,577	19,278	31,726	25,929
		13.25	9.26	15.25	12.47
Jewelers and Precious Stone and Metal Workers	10	17,119	12,673	19,341	14,047
		8.23	6.09	9.3	6.75
Laundry and Dry-Cleaning Workers	130	16,622	12,721	18,573	16,184
		7.99	6.11	8.92	7.78
Machinists	690	23,365	14,905	27,595	22,571
		11.23	7.16	13.26	10.86
Metal Workers and Plastic Workers, All Other	30	27,159	17,622	31,926	23,196
		13.05	8.47	15.34	11.15
Mixing and Blending Machine Setters, Operators, and Tenders	20	18,584	14,492	20,630	17,302
		8.93	6.97	9.92	8.32
Packaging and Filling Machine Operators and Tenders		18,744	15,302	20,465	18,309
		9.02	7.36	9.83	8.8
Painting, Coating, and Decorating Workers		15,508	12,384	17,071	13,946
		7.45	5.95	8.21	6.71
Photographic Process Workers	20	17,076	12,673	19,277	14,551
		8.21	6.09	9.26	7
Printing Machine Operators	50	19,062	15,289	20,949	18,277
		9.17	7.35	10.07	8.79
Production Workers, All Other	560	37,065	25,236	42,979	40,991
		17.81	12.13	20.66	19.71
Sawing Machine Setters, Operators, and Tenders, Wood	110	23,202	16,043	26,782	22,171
		11.15	7.72	12.88	10.66
Sewing Machine Operators	90	16,057	12,389	17,891	13,486
		7.72	5.96	8.6	6.48
Stationary Engineers and Boiler Operators	60	29,376	21,481	33,323	26,263
		14.12	10.33	16.02	12.62

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
Structural Metal Fabricators and Fitters	20	25,951	25,840	26,005	26,183
		12.48	12.43	12.5	12.59
Team Assemblers	430	19,951	14,919	22,466	18,792
		9.59	7.18	10.81	9.04
Tool Grinders, Filers, and Sharpeners	20	22,800	18,794	24,803	22,022
		10.96	9.04	11.93	10.59
Water and Liquid Waste Treatment Plant and System Operators	180	22,298	18,302	24,297	21,666
		10.72	8.8	11.68	10.42
Welders, Cutters, Solderers, and Brazers	440	26,157	17,289	30,591	24,601
		12.57	8.31	14.71	11.83
Woodworkers, All Other	100	16,124	12,693	17,839	16,340
		7.75	6.1	8.58	7.86
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	40	21,349	16,519	23,764	21,310
		10.26	7.94	11.43	10.24

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC001.htm.

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
TRANSPORTATION AND MATERIAL MOVING OCCUPATIONS		22,889	13,271	27,698	19,757
		11	6.39	13.31	9.5
Bus Drivers, School	990	18,913	15,870	20,434	19,081
		9.09	7.63	9.83	9.17
Bus Drivers, Transit and Intercity	100	15,161	12,464	16,510	14,763
		7.29	5.99	7.93	7.1
Cleaners of Vehicles and Equipment	270	14,360	12,545	15,268	14,048
		6.91	6.04	7.34	6.75
Conveyor Operators and Tenders		34,894	19,724	42,479	37,933
		16.78	9.48	20.42	18.24
Driver/Sales Workers	190	28,369	20,889	32,109	30,458
		13.64	10.04	15.44	14.64
Excavating and Loading Machine and Dragline Operators		40,235	33,514	43,596	40,942
		19.35	16.12	20.96	19.68
First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	110	42,086	20,615	52,822	36,396
		20.24	9.91	25.39	17.5
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	440	35,857	25,966	40,803	32,317
		17.24	12.49	19.61	15.53
Hoist and Winch Operators	10	24,354	17,680	27,690	21,333
		11.71	8.5	13.31	10.26
Industrial Truck and Tractor Operators		24,808	19,575	27,424	24,969
		11.92	9.41	13.18	12
Laborers and Freight, Stock, and Material Movers, Hand	2,240	16,112	12,662	17,837	14,209
		7.75	6.09	8.58	6.83
Loading Machine Operators, Underground Mining		40,175	38,335	41,095	40,749
		19.32	18.43	19.76	19.59
Machine Feeders and Offbearers	310	17,026	16,052	17,514	16,932
		8.19	7.72	8.42	8.14
Material Moving Workers, All Other		37,747	23,033	45,104	40,856
		18.15	11.07	21.69	19.64
Motor Vehicle Operators, All Other		20,711	12,681	24,726	14,756
		9.96	6.09	11.89	7.1
Packers and Packagers, Hand	320	13,374	12,656	13,734	13,234
		6.43	6.09	6.6	6.36
Pump Operators, Except Wellhead Pumpers		40,264	28,690	46,052	41,428
		19.36	13.79	22.14	19.92
Refuse and Recyclable Material Collectors	210	17,182	13,015	19,265	16,983
		8.26	6.26	9.26	8.17
Service Station Attendants	50	15,242	12,437	16,645	14,080
		7.33	5.98	8	6.77
Shuttle Car Operators		40,438	39,282	41,017	41,060
		19.44	18.89	19.71	19.75
Taxi Drivers and Chauffeurs		12,417	12,387	12,431	12,668
		5.97	5.95	5.97	6.09
Truck Drivers, Heavy and Tractor-Trailer	1,650	29,164	17,964	34,764	25,846
		14.02	8.64	16.71	12.42
Truck Drivers, Light or Delivery Services	1,040	19,612	12,456	23,191	16,411
		9.43	5.99	11.15	7.89

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC001.htm.

APPENDIX E

WORKFORCE INVESTMENT AREA 1

OCCUPATIONAL PROJECTIONS, 1998-2008

Workforce Investment Area 1

Occupational Projections, 1998-2008

	Occupation	Employment		Average Annual Openings			Growth Rate
		1998	*2008*	Growth	Replacement	Total	
0	TOTAL, ALL OCCUPATIONS	115,480	131,480	1,609	2,813	4,422	1.39%
10000	Exec, Admin, Managerial Occs	7,820	8,710	90	140	230	1.14%
11000	Managerial & Administrative Occs	7,820	8,710	90	140	230	1.14%
13000	Administrative Specialty Mgrs	1,190	1,350	15	21	36	1.29%
13002	Financial Managers	450	530	7	7	14	1.59%
13005	Human Resources Managers	100	120	2	2	4	1.94%
13008	Purchasing Managers	170	180	1	4	5	0.71%
13011	Adver/Mrkt/Promo/PR/Sales Mgrs	140	160	2	2	4	1.55%
13014	Administrative Services Managers	190	200	1	3	4	0.64%
13017	Engr/Nat Sci/Comp/Info Sys Mgrs	140	160	2	3	5	1.18%
15000	Line & Middle Managers	2,090	2,310	23	38	61	1.07%
15002	Postmasters/Mail Superintendents	240	260	2	4	6	0.80%
15005	Education Administrators	410	420	1	10	11	0.15%
15008	Medical/Health Service Managers	290	350	6	5	11	2.21%
15011	Prprty/Real Est/Comm Assoc Mgrs	30	40	1	0	1	2.35%
15014	Industrial Production Managers	100	110	1	2	3	0.49%
15017	Construction Managers	240	300	6	4	10	2.37%
15021	Mining & Related Managers	70	50	-2	1	1	-2.43%
15023	Communication/Transp/Util Mgrs	190	190	0	3	3	-0.11%
15026	Food Service & Lodging Managers	520	600	8	9	17	1.62%
19000	Managers & Administrators, NEC	4,540	5,050	52	81	133	1.13%
19002	Govt Chief Execs & Legislators	220	180	-3	5	5	-1.57%
19005	General Managers & Top Execs	3,100	3,640	55	54	109	1.77%
19999	Managers & Administrators, NEC	1,230	1,230	0	22	22	0.00%
21000	Management Support Occupations	2,590	3,020	46	50	96	1.69%
21102	Insurance Underwriters	30	40	1	1	2	2.73%
21105	Credit Analysts	40	50	1	1	2	2.05%
21108	Loan Counselors & Officers	150	200	5	3	8	3.07%
21111	Tax Preparers	220	300	8	5	13	3.68%
21114	Accountants & Auditors	680	790	11	11	22	1.61%
21117	Budget Analysts	10	20	0	0	0	1.43%
21199	Financial Specialists, NEC	70	80	1	1	2	1.19%
21302	Wholesale/Retail Buyers, Ex Farm	80	90	1	2	3	1.11%
21305	Purchasing Agents & Buyers, Farm	20	20	0	0	0	1.76%
21308	Purchasing Agts, Ex Whl/Ret/Farm	110	120	1	3	4	0.75%
21502	Claims Takers, Unemploy Benefits	20	20	0	0	0	-1.67%
21505	Special Agents, Insurance	30	40	1	1	2	2.00%
21508	Employment Interviewers	30	30	0	1	1	0.00%
21511	Human Res/Training/Lab Rel Specs	180	200	2	5	7	0.89%
21902	Cost Estimators	80	100	2	1	3	1.98%
21905	Management Analysts	70	80	0	1	1	0.56%
21908	Construction, Bldg Inspectors	30	30	0	1	1	1.60%
21911	Inspectors & Compliance Officers	300	350	6	5	11	1.86%
21914	Tax Examiners/Colltrs/Rev Agts	60	70	1	1	2	0.94%
21917	Assessors	10	10	0	0	0	0.91%
21921	Claims Examiners Prop/Casual Ins	50	60	1	1	2	1.96%
21999	Management Support Workers, NEC	320	360	4	6	10	1.15%

Workforce Investment Area 1

Occupational Projections, 1998-2008

	Occupation	Employment 1998	Employment 2008	Average Annual Openings Growth	Average Annual Openings Replacement	Average Annual Openings Total	Growth Rate
22000	Engineers & Related Occupations	1,450	1,690	23	32	55	1.64%
22108	Mining Engineers, Inc Safety	150	150	0	3	3	-0.20%
22121	Civil Engineers	120	150	3	2	5	2.50%
22126	Electrical & Electronics Engis	80	100	2	2	4	2.50%
22127	Computer Engineers	10	10	0	0	0	0.00%
22128	Industrial Engineers, Ex Safety	30	30	1	0	1	2.80%
22135	Mechanical Engineers	40	50	1	1	2	1.71%
22199	Engineers, NEC	60	70	1	2	3	2.14%
22302	Architects, Ex Landscape/Naval	70	80	2	1	3	2.73%
22311	Surveyrs/Cartographrs/Photogrmts	80	90	1	2	3	0.73%
22502	Civil Engineering Techns/Technls	120	150	3	3	6	2.83%
22505	Elect & Electronic Techns/Tehnls	180	200	2	4	6	1.18%
22511	Mechnl Engineering Techns/Tehnls	40	50	1	1	2	3.33%
22514	Drafters	180	190	1	4	5	0.66%
22521	Surveying/Mapping Techicians	90	110	2	2	4	2.39%
22599	Engineering Techns/Technls, NEC	190	220	3	5	8	1.77%
24000	Natural Scientists, Related Occs	390	460	8	10	18	1.79%
24102	Physicists & Astronomers	20	30	1	1	2	2.38%
24105	Chemists	30	40	1	1	2	1.82%
24111	Geologsts/Geophysts/Oceanogrphrs	10	20	1	0	1	5.38%
24199	Physical Scientists, NEC	10	10	0	0	0	0.91%
24302	Conservation Scientists/Forestrs	70	90	1	2	3	1.92%
24305	Agricultural/Food Scientists	30	30	0	1	1	0.40%
24308	Biological Scientists	30	40	1	1	2	2.73%
24399	Life Scientists, NEC	10	10	0	0	0	0.77%
24502	Biological/Agric Techns/Technols	40	40	0	1	1	-0.48%
24505	Chemical Techns/Thnls, Ex Health	80	110	3	2	5	3.25%
24599	Physicl/Life Science Techns, NEC	50	50	0	1	1	0.43%
25000	Computer & Math Occupations	340	520	19	3	22	5.38%
25102	Systems Analysts	150	290	14	1	15	9.53%
25103	Database Administrators	10	20	1	0	1	3.85%
25104	Computer Support Specialists	60	100	4	0	4	5.65%
25105	Computer Programmers	70	70	0	2	2	-0.14%
25108	Computer Programmer Aides	10	10	0	0	0	-1.67%
25199	Computer Scientists, NEC	20	20	0	0	0	1.88%
27000	Social Scients/Rec/Religous Occs	1,860	2,370	50	35	85	2.71%
27105	Urban & Regional Planners	10	20	0	0	0	0.71%
27108	Psychologists	140	150	1	3	4	0.63%
27199	Social Scientists, NEC	70	80	1	1	2	1.13%
27302	Social Workers, Med/Psychiatric	460	570	11	6	17	2.37%
27305	Social Workers, Ex Med/Psychtric	370	470	10	5	15	2.73%
27307	Residential Counselors	70	80	1	1	2	1.85%
27308	Social/Human Service Assistants	610	850	24	16	40	3.96%
27311	Recreation Workers	110	130	2	3	5	2.06%
28000	Law & Related Occupations	310	390	8	3	11	2.50%
28102	Judges & Magistrates	30	30	0	0	0	-0.31%
28105	Adjudicators & Hearing Officers	50	50	1	1	2	1.04%

Workforce Investment Area 1

Occupational Projections, 1998-2008

	Occupation	Employment		Average Annual Openings			Growth Rate
		1998	*2008*	Growth	Replacement	Total	
28108	Lawyers	170	200	3	2	5	2.00%
28305	Paralegals & Legal Assistants	50	90	4	0	4	8.48%
28399	Legal Assistants, NEC	10	10	0	0	0	0.91%
31000	Teachers/Librarians/Counselors	6,820	7,500	67	136	203	1.00%
31114	Nursing Instructors	40	50	1	1	2	1.14%
31202	Life Sciences Teachers, Postsec	30	40	1	1	2	2.12%
31204	Chemistry Teachrs, Postsecondary	10	20	0	0	0	1.54%
31212	Health Specialties Teachrs, Post	40	60	1	1	2	3.18%
31214	English Lng/Lit Teachrs, Postsec	50	60	1	1	2	1.18%
31215	Foreign Lng/Lit Teachrs, Postsec	20	20	0	0	0	1.11%
31218	Art/Drama/Music Teachrs, Postsec	20	20	0	0	0	1.11%
31222	Engineering Teachers, Postsec	30	40	0	1	1	1.21%
31224	Math/Science Teachers, Postsec	40	50	1	1	2	1.19%
31226	Computer Science Teachers, Post	20	20	1	0	1	4.00%
31231	Anthrop/Sociol Teachers, Postsec	10	10	0	0	0	2.00%
31232	Area/Ethnic/Cultrl Stds Teachers	10	10	0	0	0	1.67%
31235	History Teachers, Postsecondary	10	20	0	0	0	1.54%
31237	Psycholgy Teachrs, Postsecondary	10	10	0	0	0	1.67%
31242	Business Teachers, Postsecondary	50	60	1	1	2	1.18%
31247	Social Work Teachers, Postsec	10	10	0	0	0	2.00%
31252	Education Teachrs, Postsecondary	20	30	0	1	1	1.25%
31299	Postsecondary Teachers, NEC	150	170	2	4	6	1.17%
31303	Teachers, Preschool	160	170	1	3	4	0.68%
31304	Teachers, Kindergarten	240	250	0	5	5	0.16%
31305	Teachers, Elementary School	1,790	1,820	3	41	44	0.16%
31308	Teachers, Secondary School	1,450	1,620	17	46	63	1.18%
31311	Teachers, Special Education	870	1,060	19	7	26	2.20%
31314	Teachers/ Instructors, VocED/Tr	600	600	1	6	7	0.10%
31317	Instructors, Adult (Non-VocEd)	30	40	0	0	0	0.94%
31321	Instructors/Coaches, Sports/Phy	90	130	4	1	5	3.89%
31399	Teachers & Instructors, NEC	30	30	0	0	0	1.48%
31502	Librarians	110	100	-1	3	3	-0.56%
31505	Library Technicians	30	30	0	1	1	1.11%
31514	Counselors, Vocation/Education	170	190	2	4	6	1.16%
31517	Instructional Coordinators	70	70	1	1	2	1.23%
31521	Teacher Aides, Paraprofessional	510	620	11	6	17	2.16%
32000	Health Practitioners/Techns/Rel	7,660	8,630	99	144	243	1.27%
32102	Physicians and Surgeons	370	420	5	6	11	1.29%
32105	Dentists	60	60	0	1	1	-0.63%
32113	Chiropractors	110	120	1	2	3	1.21%
32114	Veterinarians	30	40	1	1	2	2.00%
32302	Respiratory Therapists	140	190	4	2	6	3.08%
32305	Occupational Therapists	10	20	0	0	0	2.31%
32308	Physical Therapists	210	260	5	3	8	2.27%
32314	Speech Pathologts/Audiologists	80	100	2	1	3	2.69%
32317	Recreational Therapists	60	60	0	1	1	0.00%
32399	Therapists, NEC	30	40	1	0	1	1.94%

Workforce Investment Area 1

Occupational Projections, 1998-2008

	Occupation	Employment 1998	Employment *2008*	Average Annual Openings Growth	Average Annual Openings Replacement	Average Annual Openings Total	Growth Rate
32502	Registered Nurses	2,290	2,550	26	38	64	1.14%
32505	Licensed Practical/Voc Nurses	1,640	1,790	15	35	50	0.90%
32508	Emergency Medical Techns/Paramds	380	380	0	9	9	0.08%
32511	Physician Assistants	70	90	2	1	3	3.33%
32514	Opticians, Dispensing	20	20	0	0	0	2.00%
32517	Pharmacists	250	260	1	7	8	0.57%
32518	Pharmacy Technicians	230	260	3	6	9	1.29%
32521	Dietitians & Nutritionists	40	50	1	1	2	1.19%
32523	Dietetic Technicians	20	30	1	0	1	3.64%
32902	Med/Clinical Lab Technologists	160	170	1	2	3	0.75%
32905	Med/Clinical Lab Technicians	170	190	1	2	3	0.69%
32908	Dental Hygienists	150	190	4	3	7	2.80%
32911	Med Records/Health Info Techns	210	280	7	5	12	3.40%
32913	Radiation Therapists	20	20	0	0	0	0.67%
32914	Nuclear Medical Technologists	60	60	0	1	1	0.18%
32919	Radiologic Techns/Technologists	290	320	3	4	7	0.90%
32925	Cardiology Technologists/Techns	30	30	1	1	2	2.59%
32926	EKG Technicians	30	20	-1	1	1	-2.81%
32928	Surgical Technologists	80	100	3	2	5	3.21%
32931	Psychiatric Technicians	10	10	0	0	0	-0.77%
32951	Veterinary Technologists/Techns	10	10	0	0	0	0.77%
32999	Health Professionls/Parapro, NEC	370	480	11	9	20	2.82%
34000	Writers/Edtrs/Artrs/Entrs/Athlts	570	690	12	10	22	2.12%
34002	Writers & Editors	130	180	5	3	8	4.00%
34008	Public Relations Specialists	40	50	1	1	2	1.25%
34011	Reporters & Correspondents	30	30	0	1	1	0.63%
34017	Announcers, Radio & TV	60	50	-1	1	1	-2.30%
34023	Photographers	50	70	2	1	3	2.78%
34028	Broadcast & Sound Technicians	30	30	0	1	1	0.36%
34035	Artists & Commercial Artists	10	10	0	0	0	1.82%
34038	Designers, Ex Interior	150	200	5	2	7	3.36%
34044	Merch Displayers/Window Dressers	30	30	0	0	0	1.43%
34053	Dancers & Choreographers	10	10	0	0	0	1.82%
34056	Actors/Directors/Producers	20	20	0	0	0	0.67%
39000	Professionl/Paraprof/Techns, NEC	530	600	8	13	21	1.29%
39011	Funeral Directors & Morticians	50	70	2	1	3	3.54%
39014	Embalmers	20	30	1	1	2	2.50%
39999	Professionl/Paraprof/Techns, NEC	450	490	5	11	16	1.01%
40000	Marketing & Sales Occupations	15,250	18,560	330	460	790	2.17%
41000	Marketing/Sales Supervisors	2,130	2,530	40	28	68	1.86%
41002	Marketing/Sales Supervisors	2,130	2,530	40	28	68	1.86%
43000	Marketing & Sales, Service	1,240	1,450	20	26	46	1.69%
43002	Insurance Sales Agents	270	300	3	6	9	1.28%
43008	Sales Agents, Real Estate	730	840	11	15	26	1.51%
43011	Real Estate Appraisers	20	20	0	0	0	0.00%
43014	Secrts/Comdts/Fin Ser Sales Agts	20	30	1	0	1	3.18%
43017	Sales Agents, Business Services	80	110	2	2	4	2.80%

Workforce Investment Area 1

Occupational Projections, 1998-2008

	Occupation	Employment 1998	Employment 2008	Average Annual Openings Growth	Average Annual Openings Replacement	Average Annual Openings Total	Growth Rate
43023	Sales Agents, Advertising	100	130	3	3	6	2.86%
43099	Sales Rps/Salespersons, Serv NEC	10	10	0	0	0	2.73%
49000	Sales Workers, NEC	11,880	14,580	270	406	676	2.27%
49002	Sales Engineers	20	20	0	0	0	-0.56%
49005	Sales Rprs, Scientfic Prods/Scie	260	300	4	6	10	1.52%
49008	Sales Rprs, Mfg and Wholesale	710	810	10	17	27	1.47%
49011	Retail Salespersons	3,930	4,860	93	133	226	2.38%
49014	Parts Salespersons	300	340	3	9	12	1.05%
49017	Counter & Rental Clerks	270	380	11	12	23	4.12%
49021	Stock Clerks, Sales Floor	1,280	1,380	10	19	29	0.78%
49023	Cashiers	4,320	5,480	116	189	305	2.68%
49026	Telmktrs/Door Sales/Related Wkrs	540	730	20	14	34	3.67%
49999	Sales & Related Workers, NEC	250	270	3	8	11	1.09%
50000	Admin Support & Clerical Occs	16,030	17,830	180	335	515	1.12%
51000	Admin Support Supervisors	850	1,010	16	19	35	1.81%
51002	Office/Admin Support Supvrs/Mgrs	850	1,010	16	19	35	1.81%
53000	Industry Specific Support Occs	3,030	3,730	69	72	141	2.28%
53102	Bank Tellers	650	720	7	28	35	1.04%
53105	New Accounts Clerks, Banking	120	160	4	4	8	3.50%
53108	Transit Clerks	20	20	0	1	1	-1.25%
53111	Loan Interviewers	20	20	0	0	0	-1.05%
53117	Credit Checkers	20	20	0	0	0	-0.48%
53121	Loan & Credit Clerks	130	160	3	1	4	2.38%
53123	Adjustment Clerks	510	840	33	3	36	6.44%
53126	Statement Clerks	10	10	0	0	0	-2.00%
53302	Ins Adjustrs/Examiners/Investgrs	60	70	2	1	3	3.21%
53311	Insurance Claims Clerks	120	150	2	2	4	1.69%
53314	Insurance Policy Process Clerks	80	90	1	1	2	1.79%
53502	Welfare Eligibility Workers	100	90	-1	2	2	-0.99%
53508	Bill & Account Collectors	150	190	4	4	8	2.62%
53702	Court Clerks	70	70	1	1	2	0.74%
53705	Municipal Clerks	20	20	0	0	0	0.91%
53708	License Clerks	30	30	0	0	0	0.97%
53805	Reservation & Trans Ticket Agts	220	220	0	5	5	0.00%
53808	Hotel/Motel/Resort Desk Clerks	320	410	9	12	21	2.80%
53902	Library Assists/Bkmobile Drivers	90	100	1	4	5	1.51%
53905	Teacher Aides/Educational Assts	270	310	3	3	6	1.21%
53908	Advertising Clerks	10	20	0	0	0	2.31%
55000	General Office/Secretarial Wkrs	8,770	9,550	78	185	263	0.88%
55102	Legal Secretaries	420	530	11	7	18	2.55%
55105	Medical Secretaries	160	170	0	3	3	0.25%
55108	Secretaries, Ex Legal or Medical	2,040	2,050	1	33	34	0.05%
55302	Court Reporters/Med Trans/Stenos	50	50	0	1	1	0.20%
55305	Reception & Information Clerks	950	1,120	18	18	36	1.85%
55307	Word Processors & Typists	290	230	-6	6	6	-2.09%
55314	Human Res Assists, Ex Payrl/Time	60	60	0	1	1	-0.16%
55317	Correspondence Clerks	60	110	5	1	6	8.14%

Workforce Investment Area 1

Occupational Projections, 1998-2008

	Occupation	Employment 1998	Employment 2008	Average Annual Openings Growth	Average Annual Openings Replacement	Average Annual Openings Total	Growth Rate
55321	File Clerks	120	140	2	4	6	1.39%
55323	Order Clerks	200	210	1	5	6	0.56%
55326	Procurement Clerks	40	40	0	1	1	-0.70%
55328	Statistical Clerks	40	40	0	1	1	-0.49%
55332	Interview Clks, Ex Personnel/Soc	120	130	1	4	5	0.78%
55335	Customer Service Reprs, Util	130	120	-1	3	3	-0.39%
55338	Bookkpng/Accntng/Auditng Clerks	1,460	1,470	1	27	28	0.06%
55341	Payroll & Timekeeping Clerks	130	120	-1	3	3	-0.39%
55344	Billing/Cost/Rate Clerks	290	340	5	6	11	1.76%
55347	Office Clerks, General	2,220	2,630	41	61	102	1.85%
56000	Elec Data Proc/Office Mach Wkrs	500	500	1	7	8	0.14%
56002	Billing/Posting Clerks/Mach Oprs	160	170	1	3	4	0.31%
56011	Computer Oprs, Ex Peripheral Eq	110	80	-2	2	2	-2.15%
56017	Data Entry Keyers, Ex Composing	180	210	3	1	4	1.89%
56099	Office Machine Operators, NEC	20	20	-1	1	1	-2.08%
57102	Switchboard Operators	180	180	0	4	4	0.00%
57105	Directory Assistance Operators	100	50	-5	2	2	-4.75%
57302	Mail Clks, Ex Mail Mach/Post Srv	80	80	1	2	3	0.80%
57305	Postal Mail Carriers	210	230	2	6	8	0.81%
57311	Couriers & Messengers	60	60	1	1	2	1.43%
58000	Mtrl Rec/Sched/Disp/Distr Occs	1,570	1,699	12	26	38	0.82%
58002	Dispatchers: Police/Fire/Amblnce	60	70	0	1	1	0.48%
58005	Dispatchers, Ex Police/Fire/Ambl	140	130	0	2	2	-0.29%
58008	Production/Planning/Expdtng Clks	140	150	1	2	3	0.86%
58014	Meter Readers, Utilities	170	170	1	4	5	0.30%
58017	Weighers/Measurers/Checkers	10	10	0	0	0	1.67%
58021	Marking Clerks	20	10	0	0	0	-0.67%
58023	Stock Clks: Stockrm/Warehouse/Yd	500	570	6	8	14	1.27%
58026	Order Fillers, Wholesale/Retail	20	30	0	1	1	1.25%
58028	Shipping/Receiving/Traffic Clks	490	530	4	8	12	0.84%
58099	Mtrl Rec/Sched/Distr Wkrs, NEC	20	20	0	0	0	2.35%
59000	Admin Support/Clerical Occs, NEC	670	720	5	11	16	0.74%
59999	Admin Support/Clerical Occs, NEC	670	720	5	11	16	0.74%
60000	Service Occupations	22,510	26,960	448	680	1,128	1.97%
61000	First Line Supervisors, Srv Wkrs	1,000	1,250	25	23	48	2.54%
61005	Police/Detective Supervrs	100	110	1	3	4	1.29%
61008	Institution Cleaning Supervrs	100	100	1	2	3	0.84%
61099	Service Supervrs/Mgrs Super, NEC	800	1,030	23	18	41	2.93%
62000	Private Household Workers	310	420	11	9	20	3.44%
62041	Child Care Wkrs, Prvt Household	100	120	1	5	6	1.17%
62061	Cleanrs/Servants, Prvt Household	200	300	10	4	14	4.80%
63000	Protective Service Occupations	2,090	2,810	73	55	128	3.44%
63008	Fire Fighters	80	90	0	2	2	0.24%
63011	Police Detectives	30	40	1	1	2	1.94%
63014	Police Patrol Officers	360	460	10	9	19	2.87%
63017	Correctional Officers	580	770	19	16	35	3.20%
63023	Bailiffs	20	20	0	0	0	0.00%

Workforce Investment Area 1

Occupational Projections, 1998-2008

	Occupation	Employment 1998	Employment 2008	Average Annual Openings: Growth	Replacement	Total	Growth Rate
63032	Sheriffs & Deputy Sheriffs	150	200	5	1	6	3.24%
63035	Private Detectives/Investigators	40	50	1	1	2	1.19%
63041	Fish & Game Wardens	10	10	0	0	0	0.91%
63047	Guards	680	1,020	34	17	51	5.01%
63099	Protective Service Workers, NEC	120	150	3	8	11	2.48%
65000	Food/Beverage Prep/Service Occs	8,690	9,940	126	388	514	1.44%
65002	Hosts/Hostesses: Rest/Lnge/Cf Sh	210	260	5	6	11	2.33%
65005	Bartenders	190	220	3	8	11	1.44%
65008	Waiters & Waitresses	1,330	1,580	25	73	98	1.85%
65014	Dining Rm/Cafe Attds/Bar Helpers	300	310	2	9	11	0.54%
65017	Counter Attendants/Lunchrm/Cftra	230	270	5	19	24	1.99%
65021	Bakers, Bread & Pastry	90	120	3	2	5	2.86%
65023	Butchers & Meatcutters, Retail	130	130	0	3	3	0.08%
65026	Cooks, Restaurant	570	700	13	15	28	2.19%
65028	Cooks, Institution/Cafeteria	790	710	-8	21	21	-1.03%
65032	Cooks, Fast Food	950	1,150	20	25	45	2.11%
65035	Cooks, Short Order	160	210	4	4	8	2.58%
65038	Food Preparation Workers	1,500	1,750	25	83	108	1.67%
65041	Fd Prep/Service Wkrs, Fast Food	2,020	2,320	29	111	140	1.45%
65099	Food Service Workers, NEC	210	210	0	8	8	0.19%
66000	Health Service Occupations	3,270	3,950	68	52	120	2.07%
66002	Dental Assistants	190	250	6	3	9	3.04%
66005	Medical Assistants	90	140	4	2	6	4.36%
66008	Nursing Aides/Orderlies/Attends	1,800	2,040	24	25	49	1.32%
66011	Home Health Aides	580	830	25	8	33	4.32%
66014	Psychiatric Aides	110	120	1	2	3	0.70%
66017	Physical Therapy Assists/Aides	130	180	4	3	7	3.16%
66023	Amblnce Drivers/Attends, Ex EMTs	40	40	0	1	1	0.27%
66026	Pharmacy Aides	110	120	1	3	4	0.85%
66099	Health Service Workers, NEC	210	230	3	5	8	1.36%
67000	Cleaning/Bldg Serv Occs, Ex Prvt	3,430	3,850	43	71	114	1.23%
67002	Maids & Housekeeping Cleaners	1,270	1,520	25	24	49	1.93%
67005	Janitors & Cleaners	1,800	1,950	15	39	54	0.84%
67008	Pest Controllers Workers	30	50	2	1	3	5.00%
67011	Elevator Operators	10	10	0	0	0	-1.54%
67099	Cleaning/Bldg Serv Workers, NEC	310	320	1	7	8	0.35%
68000	Selected Personal Service Occs	2,890	3,620	74	59	133	2.56%
68005	Hairdressrs/Hairstylsts/Cosmtgts	630	800	17	16	33	2.76%
68008	Manicurists	10	20	1	0	1	5.00%
68014	Amusement/Recreation Attendants	300	400	10	5	15	3.32%
68017	Guides	490	650	15	9	24	3.14%
68021	Ushers/Lobby Atts/Ticket Takers	20	30	1	0	1	4.09%
68023	Baggage Porters/Bellhops	70	90	2	1	3	3.13%
68035	Personal/Home Care Aides	790	990	20	21	41	2.47%
68038	Child Care Workers	510	570	6	5	11	1.15%
68041	Funeral Attendants	60	80	2	2	4	3.45%
69000	Service Occupations, NEC	828	1,106	28	23	51	3.36%

Workforce Investment Area 1

Occupational Projections, 1998-2008

	Occupation	Employment 1998	Employment 2008	Average Annual Openings Growth	Average Annual Openings Replacement	Average Annual Openings Total	Growth Rate
69999	Service Workers, NEC	830	1,110	28	23	51	3.36%
70000	Agri/Forestry/Fishing/Rel Occs	2,470	2,990	53	66	119	2.08%
71000	Farm Operators & Managers	60	60	1	0	1	0.17%
71005	Farm Managers	20	20	0	0	0	-0.87%
72002	First Line Suprvs: Ag/Forest/Fis	30	30	1	0	1	2.22%
73000	Forestry/Conservation/Log Occs	760	1,010	25	19	44	3.26%
73002	Fallers & Buckers	300	350	5	8	13	1.68%
73005	Choke Setters	30	30	1	1	2	2.40%
73008	Log Handling Equipment Operators	370	530	16	9	25	4.38%
73011	Logging Tractor Operators	70	100	3	1	4	4.43%
79000	Agri/Forestry/Fishing Occs, NEC	1,650	1,910	27	47	74	1.60%
79002	Forest & Conservation Workers	40	40	1	1	2	1.28%
79008	Log Graders & Scalers	50	60	1	1	2	2.34%
79011	Graders/Sorters, Agri Products	40	40	0	1	1	1.11%
79017	Animal Caretakers, Ex Farm	60	80	2	1	3	2.34%
79021	Farm Equipment Operators	70	50	-1	2	2	-2.06%
79041	Laborers, Ldscpng/Groundskpng	1,100	1,350	25	33	58	2.31%
79801	Farm Workers	40	30	-1	1	1	-2.29%
79806	Veterinary Assistants	40	50	1	1	2	2.33%
79858	Farm Wkrs, Farm/Ranch Animals	90	90	0	3	3	0.00%
79999	Agric/Forestry/Fishing Wkrs, NEC	100	90	-1	3	3	-1.25%
81000	Blue-Collar Worker Supervisors	2,290	2,200	-9	64	64	-0.39%
81002	First Line Supervs: Mechs/Rprs	600	590	-1	18	18	-0.15%
81005	First Line Supervs: Const/Extrac	1,130	1,010	-12	30	30	-1.09%
81008	First Line Supervs: Prod/Opertng	290	320	3	8	11	1.08%
81011	First Line Supervs: Transport	70	70	0	2	2	-0.28%
81017	First Line Supervs: Helprs/Labrs	60	70	1	2	3	1.56%
81099	Blue-Collar Worker Supervs, NEC	140	150	0	4	4	0.28%
83000	Inspectors/Testers/Graders, Prec	290	330	4	7	11	1.46%
83002	Inspectors/Testers/Graders, Prec	80	80	0	2	2	0.38%
83005	Insptrs/Tstrs/Grdrs/Smplrs/Wghrs	160	190	3	4	7	1.84%
83099	Inspectors/Testers/Related, NEC	50	50	1	1	2	2.00%
85000	Mechanics, Installers, Repairers	5,570	5,990	40	141	181	0.74%
85110	Industrial Machinery Mechanics	180	220	4	4	8	2.13%
85117	Mine Machinery Mechanics	350	260	-9	9	9	-2.61%
85118	Mach Maint Mechns: Water/Power	60	50	-1	1	1	-1.05%
85119	Machinery Maint Mechanics, NEC	70	70	0	2	2	0.14%
85123	Millwrights	70	90	2	2	4	2.05%
85128	Machinery Maintenance Workers	60	60	0	1	1	0.00%
85132	Maintenance Repairers, Gen Util	1,280	1,370	9	29	38	0.68%
85302	Automotive Mechns/Service Techns	630	720	9	16	25	1.46%
85305	Automotive Body & Rel Repairers	230	270	4	7	11	1.89%
85308	Motorcycle Mechanics	10	10	0	0	0	0.77%
85311	Bus/Truck/Diesel Engine Mechns	300	340	3	7	10	1.13%
85314	Mobile Heavy Equipment Mechns	170	190	2	4	6	1.17%
85328	Small Engine Mechanics	50	60	2	1	3	3.06%
85502	Central Office/PBX Instllrs/Rprs	50	60	1	2	3	1.13%

Workforce Investment Area 1

Occupational Projections, 1998-2008

	Occupation	Employment 1998	Employment 2008	Average Annual Openings Growth	Average Annual Openings Replacement	Average Annual Openings Total	Growth Rate
85505	Frame Wirers, Central Office	30	30	0	1	1	-0.65%
85702	Telephone/Cable TV Instlrs/Rprs	500	510	1	16	17	0.26%
85708	Elec Home Entertain Equip Rprs	50	60	0	1	1	0.57%
85711	Elec Home Appl/Power Tool Rprs	20	30	1	1	2	3.33%
85714	Electric Motor/Transform Rprs	270	280	1	7	8	0.38%
85717	Electronics Rprs, Comm/Ind Eq	90	120	2	3	5	2.55%
85721	Power/Substation/Relay Electrcns	40	30	-1	1	1	-1.32%
85723	Electric Powerline Instllrs/Rprs	80	90	1	2	3	0.83%
85726	Station Instllrs/Rprs, Telephone	120	60	-6	4	4	-4.83%
85799	Electric/Electro Eq Mechns, NEC	20	20	0	1	1	1.05%
85902	Heat/AC/Refrig Mechns/Instllrs	120	140	2	2	4	2.00%
85905	Precision Instrument Repairers	50	90	3	1	4	6.42%
85917	Watch Repairers	10	10	0	0	0	-3.64%
85938	Mobile Home Repairers	200	260	6	5	11	2.94%
85947	Coin/Vending/Amuse Mach Servrs	50	50	0	1	1	0.63%
85953	Tire Repairers & Changers	180	210	3	8	11	1.48%
85999	Mechanics/Installers/Rprs, NEC	180	180	1	3	4	0.34%
87000	Constr Trades/Extractive Occs	6,290	6,120	-16	146	146	-0.27%
87102	Carpenters	950	1,090	14	25	39	1.52%
87108	Drywall Installers	50	60	1	1	2	1.60%
87111	Tapers	40	40	1	0	1	1.89%
87202	Electricians	570	570	1	12	13	0.09%
87302	Brickmasons/Blockmasons	340	410	7	7	14	2.14%
87311	Cncrt Fnshrs/Cmnt Msns/Trzo Wkrs	110	100	-1	1	1	-0.47%
87317	Plasterers & Stucco Masons	20	20	0	0	0	1.18%
87402	Painters & Paperhangers	250	300	5	6	11	2.06%
87502	Plumbers/Pipefittrs/Steamfitrs	430	480	5	5	10	1.14%
87508	Pipelayers	10	10	0	0	0	0.83%
87602	Carpet Installers	90	100	1	2	3	0.97%
87708	Paving/Surfacing/Tamping Opers	180	210	3	5	8	1.86%
87711	Highway Maintenance Workers	90	100	1	2	3	0.99%
87714	Rail-Track Laying/Maint Eq Opers	20	10	-1	0	0	-2.78%
87803	Hazardous Materials Removel Wkrs	50	70	2	1	3	2.78%
87805	Sheet Metal Duct Installers	20	20	1	0	1	2.94%
87808	Roofers	90	100	2	3	5	1.84%
87811	Glaziers	30	30	0	1	1	1.43%
87902	Earth Drillers, Ex Oil & Gas	60	60	0	2	2	-0.17%
87908	Rock Splitters, Quarry	30	20	-1	1	1	-2.40%
87911	Rotary Drill Operators, Oil/Gas	30	20	0	1	1	-1.20%
87914	Derrick Operators, Oil/Gas	20	20	0	1	1	-1.30%
87921	Roustabouts, Oil/Gas	40	30	-1	1	1	-3.26%
87923	Roof Bolters, Mining	140	90	-6	4	4	-4.03%
87941	Continuous Mining Mach Opers	750	670	-7	19	19	-0.98%
87943	Mine Cutting/Channeling Mach Ops	40	30	-1	1	1	-2.43%
87949	Mining Mach Operators, NEC	1,170	880	-29	29	29	-2.49%
87989	Extraction Wkrs, Ex Helpers, NEC	610	480	-13	15	15	-2.10%
87999	Constr/Extractive Wkrs, NEC	50	50	0	1	1	-0.21%

Workforce Investment Area 1

Occupational Projections, 1998-2008

	Occupation	Employment 1998	Employment 2008	Average Annual Openings Growth	Average Annual Openings Replacement	Average Annual Openings Total	Growth Rate
89000	Precision Production Occupations	850	1,000	16	14	30	1.82%
89108	Machinists	500	610	11	10	21	2.17%
89111	Tool Grinders/Filers/Sharpeners	60	80	2	2	4	2.66%
89132	Sheet Metal Workers	20	30	0	1	1	1.36%
89311	Cabinetmakers/Bench Carpentrs	40	50	1	0	1	1.22%
89505	Custom Tailors & Sewers	10	10	0	0	0	2.73%
89511	Shoe/Leathr Wkrs/Rprs, Precision	20	20	0	0	0	-0.63%
89517	Pressers, Delicate Fabric	20	20	1	0	1	3.33%
89702	Compositors/Typesetters, Pre	10	10	0	0	0	-1.00%
89706	Paste-Up Workers	10	10	-1	0	0	-4.29%
89718	Platemakers	10	10	0	0	0	2.00%
89805	Bakers, Manufacturing	40	40	1	0	1	1.35%
89808	Food Batchmakers	30	30	0	1	1	1.11%
90000	Operators/Fabricators/Laborers	13,600	14,940	133	324	457	0.98%
91000	Mach Strs/Set-Up Oprs/Oprs/Tndr	2,110	2,310	19	52	71	0.94%
91105	Lathe/Turng Mach Sttrs/Oprs, M/P	20	20	0	1	1	-0.83%
91111	Millng/Plan Mach Sttrs/Oprs, M/P	10	10	0	0	0	0.00%
91305	Press Mach Settrs/Opers, M/P	10	10	0	0	0	0.00%
91317	Forging Machine Sttrs/Oprs, M/P	10	10	0	0	0	0.00%
91321	Machine Forming Oprs/Tndrs, M/P	10	10	0	0	0	-1.82%
91502	Numerical Control Mach Oprs, M/P	10	20	1	0	1	5.83%
91705	Welding Machine Opers/Tenders	60	70	1	2	3	1.94%
91714	Metal Fabricators, Structral Met	40	40	1	1	2	2.00%
91908	Metal Mold/Core/Cast Mach Sttrs	40	30	-1	1	1	-1.28%
91911	Met Mold/Core/Cast Mach Ops/Tdrs	30	30	0	1	1	0.71%
91935	Furnace Operators & Tenders	50	40	0	1	1	-0.67%
92302	Sawing Mach Sttrs/Set-Up Opers	20	20	0	0	0	2.35%
92305	Head Sawyer	40	60	1	1	2	2.79%
92308	Sawing Machine Opers/Tenders	200	250	5	6	11	2.74%
92311	Woodworking Mach Sttrs, Ex Sawng	20	20	1	0	1	2.63%
92314	Woodwrkng Mach Ops/Tndrs, Ex Swg	60	70	1	1	2	2.11%
92541	Typesetting/Composing Mach Oprs	30	10	-2	0	0	-5.17%
92543	Printing Press Mach Opers/Tndrs	40	50	1	1	2	1.95%
92717	Sewing Machine Opers, Garment	50	40	-2	1	1	-3.52%
92721	Sewing Mach Opers, Non-Garment	10	20	1	0	1	6.15%
92726	Laundry/Drycleaning Mach Opers	180	210	4	4	8	2.03%
92728	Pressing Mach Oprs/Tndrs, Txtles	20	10	0	0	0	-1.88%
92905	Motion Picture Projectionists	20	20	0	0	0	-0.56%
92908	Photographic Process Mach Opers	520	560	4	21	25	0.75%
92923	Furn/Kiln/Oven/Drier/Kettle Oprs	20	30	1	0	1	2.92%
92926	Boiler Opers/Tndrs, Low Pressure	30	30	0	1	1	-0.74%
92944	Cutng/Slicng Machine Opers/Tndrs	40	50	1	1	2	3.25%
92947	Painters, Transportation Equip	20	20	0	0	0	2.11%
92951	Coat/Paint/Spray Mach Sttrs/Oprs	20	30	0	1	1	1.74%
92953	Coat/Paint/Spray Mach Oprs/Tndrs	50	60	1	1	2	1.80%
92958	Cleang/Wash/Picklg Eq Oprs/Tndrs	20	20	-1	0	0	-2.50%
92965	Crush/Grd/Mix Mach Opers/Tndrs	130	110	-2	3	3	-1.26%

Workforce Investment Area 1

Occupational Projections, 1998-2008

	Occupation	Employment		Average Annual Openings			Growth Rate
		1998	*2008*	Growth	Replacement	Total	
92968	Extrud/Form/Pres Mach Sttrs/Oprs	30	30	0	1	1	-1.03%
92971	Extrud/Form/Pres Mach Oprs/Tndrs	10	10	0	0	0	0.00%
92974	Packaging/Fillng Mach Oprs/Tndrs	50	60	1	1	2	1.37%
92997	Machine Settrs/Setup Opers, NEC	20	20	0	0	0	-1.05%
92998	Machine Operators/Tenders, NEC	70	80	2	1	3	2.58%
93000	Handwork Occs, Inc Assmblrs/Fabr	1,210	1,340	14	27	41	1.07%
93105	Mach Builder Assemblers, Prec	20	20	0	1	1	0.43%
93114	Elec/Electronic Equip Assem, Prc	50	50	0	1	1	0.43%
93197	Precision Assemblers, Metal, NEC	40	40	0	1	1	-0.93%
93902	Machine Assemblers	10	10	0	0	0	0.83%
93905	Electrical/Electronic Assemblers	140	120	-1	2	2	-0.89%
93908	Coil Winders/Tapers/Finishers	20	20	0	0	0	-0.63%
93914	Welders & Cutters	520	590	7	13	20	1.29%
93938	Meat/Poultry/Fish Cutters, Hand	20	20	0	0	0	2.50%
93953	Grinders & Polishers, Hand	30	30	0	1	1	-0.37%
93956	Assemblers/Fab, Ex Mach/Elec/Pre	260	300	5	5	10	1.80%
93999	Hand Workers, NEC	100	130	3	3	6	2.63%
95000	Plant & System Occupations	290	320	2	7	9	1.12%
95002	Water & Waste Treat Plant Opers	110	120	1	2	3	1.32%
95032	Stationary Engineers	20	20	-1	0	0	-2.50%
95099	Plant & System Operators, NEC	160	180	2	5	7	1.47%
97000	Motor Vehicle Operators	4,380	4,700	33	69	102	0.74%
97102	Truck Drivers, Heavy	1,920	2,020	10	28	38	0.54%
97105	Truck Drivers, Light	1,130	1,290	16	16	32	1.43%
97108	Bus Drviers, Transit/Intercity	120	140	2	2	4	1.67%
97111	Bus Drivers, School	710	720	2	13	15	0.23%
97114	Taxi Drivers & Chauffeurs	110	100	-1	2	2	-1.17%
97117	Driver/Sales Workers	360	400	4	7	11	1.09%
97199	Motor Vehicle Operators, NEC	30	30	0	1	1	-0.97%
97805	Service Station Attendants	280	220	-6	12	12	-2.06%
97899	Transportation Workers, NEC	30	30	1	0	1	2.14%
97921	Gas Compressor Operators	20	20	0	0	0	0.00%
97923	Excavation/Loading Mach Opers	160	210	5	3	8	3.23%
97928	Dredge Operators/Dipper Tndrs	10	10	0	0	0	-3.08%
97932	Loading Mach Oprs, Mining	30	20	-1	1	1	-2.67%
97935	Shuttle Car Operators	100	70	-3	2	2	-2.86%
97938	Grader/Bulldozer/Scraper Opers	250	280	3	2	5	0.98%
97941	Hoist & Winch Operators	10	10	0	0	0	2.73%
97944	Crane & Tower Operators	40	30	-1	1	1	-2.05%
97947	Industrial Truck & Tractor Opers	310	330	1	4	5	0.38%
97951	Conveyor Operators/Tenders	30	30	0	1	1	-0.69%
97953	Pump Operators	20	10	-1	0	0	-3.81%
97956	Operating Engineers	120	140	2	2	4	1.71%
97989	Material Moving Eq Opers, NEC	50	70	2	1	3	2.94%
97999	Transp/Materl Moving Eq Ops, NEC	50	40	-1	1	1	-2.80%
98000	Helpers/Labors/Mtrl Movers, Hand	4,080	4,740	64	139	203	1.60%
98102	Mechanic & Repairer Helpers	200	240	4	9	13	1.99%

Workforce Investment Area 1

Occupational Projections, 1998-2008

	Occupation	Employment		Average Annual Openings			Growth Rate
		1998	*2008*	Growth	Replacement	Total	
98311	Brick/Stone Mason Helpers	80	100	1	4	5	1.31%
98312	Carpenters/Related Helpers	360	420	6	16	22	1.76%
98314	Painters/Paperhangers Helpers	10	10	0	1	1	1.67%
98315	Plumbers/Related Helpers	120	130	2	5	7	1.28%
98316	Roofers Helpers	20	30	0	1	1	1.30%
98319	Construction Trades Helpers, NEC	70	80	1	3	4	2.00%
98502	Machine Feeders & Offbearers	340	420	8	10	18	2.29%
98705	Refuse/Recyclable Mtrl Collectrs	290	290	-1	11	11	-0.24%
98799	Freight/Stock/Movers, Hand, NEC	390	480	9	14	23	2.32%
98902	Hand Packers & Packagers	410	490	8	10	18	2.06%
98905	Cleaners of Vechicles/Equipment	160	210	4	5	9	2.68%
98999	Helpers/Laborers/Movers, NEC	1,620	1,830	22	50	72	1.33%

Source: http://www.state.wv.us/bep/lmi/occproj/wia1proj98.htm.

APPENDIX F

WORKFORCE INVESTMENT AREA 1

OCCUPATIONAL PROJECTIONS BY TOTAL GROWTH, 1998-2008

Workforce Investment Area 1

Occupational Projections, 1998-2008

	Occupation	Total Growth
49023	Cashiers	1,157
49011	Retail Salespersons	934
19005	General Managers & Top Execs	547
55347	Office Clerks, General	410
41002	Marketing/Sales Supervisors	396
63047	Guards	339
53123	Adjustment Clerks	329
65041	Fd Prep/Service Wkrs, Fast Food	294
69999	Service Workers, NEC	278
32502	Registered Nurses	260
79041	Laborers, Ldscpng/Groundskpng	254
65038	Food Preparation Workers	251
66011	Home Health Aides	249
65008	Waiters & Waitresses	247
67002	Maids & Housekeeping Cleaners	246
27308	Social/Human Service Assistants	242
66008	Nursing Aides/Orderlies/Attends	238
61099	Service Supervrs/Mgrs Super, NEC	233
98999	Helpers/Laborers/Movers, NEC	215
65032	Cooks, Fast Food	200
49026	Telmktrs/Door Sales/Related Wkrs	197
68035	Personal/Home Care Aides	195
31311	Teachers, Special Education	191
63017	Correctional Officers	186
55305	Reception & Information Clerks	175
68005	Hairdressrs/Hairstylsts/Cosmtgts	173
31308	Teachers, Secondary School	171
73008	Log Handling Equipment Operators	162
97105	Truck Drivers, Light	162
51002	Office/Admin Support Supvrs/Mgrs	155
68017	Guides	154
67005	Janitors & Cleaners	151
32505	Licensed Practical/Voc Nurses	148
87102	Carpenters	144
25102	Systems Analysts	142
65026	Cooks, Restaurant	125
31521	Teacher Aides, Paraprofessional	111
43008	Sales Agents, Real Estate	111
49017	Counter & Rental Clerks	110
27302	Social Workers, Med/Psychiatric	110
21114	Accountants & Auditors	109
89108	Machinists	108
55102	Legal Secretaries	107
32999	Health Professionls/Parapro, NEC	105
49008	Sales Rprs, Mfg and Wholesale	104
97102	Truck Drivers, Heavy	103
63014	Police Patrol Officers	102
27305	Social Workers, Ex Med/Psychtric	100

Workforce Investment Area 1

Occupational Projections, 1998-2008

	Occupation	Total Growth
49021	Stock Clerks, Sales Floor	100
68014	Amusement/Recreation Attendants	99
62061	Cleanrs/Servants, Prvt Household	98
85302	Automotive Mechns/Service Techns	92
98799	Freight/Stock/Movers, Hand, NEC	91
53808	Hotel/Motel/Resort Desk Clerks	89
85132	Maintenance Repairers, Gen Util	87
98902	Hand Packers & Packagers	84
15026	Food Service & Lodging Managers	84
21111	Tax Preparers	81
98502	Machine Feeders & Offbearers	78
87302	Brickmasons/Blockmasons	72
13002	Financial Managers	72
32911	Med Records/Health Info Techns	71
53102	Bank Tellers	68
93914	Welders & Cutters	67
58023	Stock Clks: Stockrm/Warehouse/Yd	64
98312	Carpenters/Related Helpers	63
15008	Medical/Health Service Managers	63
66002	Dental Assistants	59
85938	Mobile Home Repairers	59
68038	Child Care Workers	59
15017	Construction Managers	57
21911	Inspectors & Compliance Officers	55
92308	Sawing Machine Opers/Tenders	54
34002	Writers & Editors	52
87402	Painters & Paperhangers	52
55344	Billing/Cost/Rate Clerks	51
97923	Excavation/Loading Mach Opers	50
73002	Fallers & Buckers	50
59999	Admin Support/Clerical Occs, NEC	50
65002	Hosts/Hostesses: Rest/Lnge/Cf Sh	49
34038	Designers, Ex Interior	49
87502	Plumbers/Pipefittrs/Steamfitrs	49
55317	Correspondence Clerks	48
63032	Sheriffs & Deputy Sheriffs	48
32102	Physicians and Surgeons	48
32308	Physical Therapists	48
21108	Loan Counselors & Officers	47
93956	Assemblers/Fab, Ex Mach/Elec/Pre	46
65017	Counter Attendants/Lunchrm/Cftra	45
39999	Professionl/Paraprof/Techns, NEC	45
32302	Respiratory Therapists	44
98905	Cleaners of Vechicles/Equipment	44
85305	Automotive Body & Rel Repairers	43
65035	Cooks, Short Order	42
66017	Physical Therapy Assists/Aides	42
32908	Dental Hygienists	42

Workforce Investment Area 1

Occupational Projections, 1998-2008

	Occupation	Total Growth
53105	New Accounts Clerks, Banking	41
58028	Shipping/Receiving/Traffic Clks	41
66005	Medical Assistants	41
49005	Sales Rprs, Scientfic Prods/Scie	40
92908	Photographic Process Mach Opers	39
97117	Driver/Sales Workers	39
53508	Bill & Account Collectors	39
28305	Paralegals & Legal Assistants	39
98102	Mechanic & Repairer Helpers	39
85110	Industrial Machinery Mechanics	39
21999	Management Support Workers, NEC	37
92726	Laundry/Drycleaning Mach Opers	36
31321	Instructors/Coaches, Sports/Phy	35
25104	Computer Support Specialists	35
85311	Bus/Truck/Diesel Engine Mechns	34
85905	Precision Instrument Repairers	34
43002	Insurance Sales Agents	34
22502	Civil Engineering Techns/Technls	34
56017	Data Entry Keyers, Ex Composing	34
28108	Lawyers	34
22599	Engineering Techns/Technls, NEC	33
87708	Paving/Surfacing/Tamping Opers	33
53905	Teacher Aides/Educational Assts	33
49014	Parts Salespersons	32
81008	First Line Supervs: Prod/Opertng	31
73011	Logging Tractor Operators	31
53121	Loan & Credit Clerks	30
32518	Pharmacy Technicians	30
83005	Insptrs/Tstrs/Grdrs/Smplrs/Wghrs	30
63099	Protective Service Workers, NEC	30
22121	Civil Engineers	29
31305	Teachers, Elementary School	28
43023	Sales Agents, Advertising	28
66099	Health Service Workers, NEC	28
65005	Bartenders	27
49999	Sales & Related Workers, NEC	27
85953	Tire Repairers & Changers	27
32919	Radiologic Techns/Technologists	26
24505	Chemical Techns/Thnls, Ex Health	26
65021	Bakers, Bread & Pastry	26
93999	Hand Workers, NEC	26
32928	Surgical Technologists	25
97938	Grader/Bulldozer/Scraper Opers	25
85717	Electronics Rprs, Comm/Ind Eq	24
43017	Sales Agents, Business Services	23
95099	Plant & System Operators, NEC	23
85902	Heat/AC/Refrig Mechns/Instllrs	23
13011	Adver/Mrkt/Promo/PR/Sales Mgrs	22

Workforce Investment Area 1

Occupational Projections, 1998-2008

	Occupation	**Total Growth**
32511	Physician Assistants	22
27311	Recreation Workers	22
22521	Surveying/Mapping Techicians	22
22505	Elect & Electronic Techns/Tehnls	21
53311	Insurance Claims Clerks	21
68023	Baggage Porters/Bellhops	21
32314	Speech Pathologts/Audiologists	21
68041	Funeral Attendants	20
85314	Mobile Heavy Equipment Mechns	20
97956	Operating Engineers	20
22126	Electrical & Electronics Engis	20
31514	Counselors, Vocation/Education	20
97108	Bus Drviers, Transit/Intercity	20
13005	Human Resources Managers	19
15002	Postmasters/Mail Superintendents	19
53302	Ins Adjustrs/Examiners/Investgrs	18
31299	Postsecondary Teachers, NEC	18
22302	Architects, Ex Landscape/Naval	18
39011	Funeral Directors & Morticians	17
89111	Tool Grinders/Filers/Sharpeners	17
55321	File Clerks	17
92998	Machine Operators/Tenders, NEC	17
13017	Engr/Nat Sci/Comp/Info Sys Mgrs	17
57305	Postal Mail Carriers	17
87808	Roofers	16
65014	Dining Rm/Cafe Attds/Bar Helpers	16
21902	Cost Estimators	16
97111	Bus Drivers, School	16
21511	Human Res/Training/Lab Rel Specs	16
67008	Pest Controllers Workers	16
34023	Photographers	15
97989	Material Moving Eq Opers, NEC	15
85328	Small Engine Mechanics	15
87803	Hazardous Materials Removel Wkrs	15
98315	Plumbers/Related Helpers	15
85123	Millwrights	15
79017	Animal Caretakers, Ex Farm	15
24302	Conservation Scientists/Forestrs	14
95002	Water & Waste Treat Plant Opers	14
53314	Insurance Policy Process Clerks	14
98319	Construction Trades Helpers, NEC	14
32517	Pharmacists	14
31212	Health Specialties Teachrs, Post	14
32113	Chiropractors	13
85702	Telephone/Cable TV Instlrs/Rprs	13
61005	Police/Detective Supervrs	13
92944	Cutng/Slicng Machine Opers/Tndrs	13
22511	Mechnl Engineering Techns/Tehnls	13

Workforce Investment Area 1

Occupational Projections, 1998-2008

	Occupation	Total Growth
53902	Library Assists/Bkmobile Drivers	13
91705	Welding Machine Opers/Tenders	12
22514	Drafters	12
97947	Industrial Truck & Tractor Opers	12
32902	Med/Clinical Lab Technologists	12
32905	Med/Clinical Lab Technicians	12
27307	Residential Counselors	12
62041	Child Care Wkrs, Prvt Household	12
92305	Head Sawyer	12
92314	Woodwrkng Mach Ops/Tndrs, Ex Swg	12
13008	Purchasing Managers	12
22199	Engineers, NEC	12
58008	Production/Planning/Expdtng Clks	12
13014	Administrative Services Managers	12
55108	Secretaries, Ex Legal or Medical	11
98311	Brick/Stone Mason Helpers	11
55323	Order Clerks	11
31303	Teachers, Preschool	11
67099	Cleaning/Bldg Serv Workers, NEC	11
79008	Log Graders & Scalers	11
21921	Claims Examiners Prop/Casual Ins	10
81017	First Line Supervs: Helprs/Labrs	10
85714	Electric Motor/Transform Rprs	10
79806	Veterinary Assistants	10
87711	Highway Maintenance Workers	9
83099	Inspectors/Testers/Related, NEC	9
21302	Wholesale/Retail Buyers, Ex Farm	9
55338	Bookkpng/Accntng/Auditng Clerks	9
87602	Carpet Installers	9
68021	Ushers/Lobby Atts/Ticket Takers	9
27108	Psychologists	9
21102	Insurance Underwriters	9
24308	Biological Scientists	9
66026	Pharmacy Aides	9
92953	Coat/Paint/Spray Mach Oprs/Tndrs	9
55332	Interview Clks, Ex Personnel/Soc	9
21308	Purchasing Agts, Ex Whl/Ret/Farm	8
21199	Financial Specialists, NEC	8
27199	Social Scientists, NEC	8
87108	Drywall Installers	8
66014	Psychiatric Aides	8
57311	Couriers & Messengers	8
92543	Printing Press Mach Opers/Tndrs	8
92721	Sewing Mach Opers, Non-Garment	8
32523	Dietetic Technicians	8
61008	Institution Cleaning Supervrs	8
31517	Instructional Coordinators	8
21105	Credit Analysts	8

Workforce Investment Area 1

Occupational Projections, 1998-2008

	Occupation	Total Growth
15011	Prprty/Real Est/Comm Assoc Mgrs	8
91714	Metal Fabricators, Structral Met	7
87111	Tapers	7
43014	Secrts/Comdts/Fin Ser Sales Agts	7
92974	Packaging/Fillng Mach Oprs/Tndrs	7
24111	Geologsts/Geophysts/Oceanogrphrs	7
91502	Numerical Control Mach Oprs, M/P	7
31202	Life Sciences Teachers, Postsec	7
32925	Cardiology Technologists/Techns	7
85723	Electric Powerline Instllrs/Rprs	7
22135	Mechanical Engineers	7
22128	Industrial Engineers, Ex Safety	7
85711	Elec Home Appl/Power Tool Rprs	7
92923	Furn/Kiln/Oven/Drier/Kettle Oprs	7
97899	Transportation Workers, NEC	6
39014	Embalmers	6
24105	Chemists	6
21505	Special Agents, Insurance	6
72002	First Line Suprvs: Ag/Forest/Fis	6
73005	Choke Setters	6
21914	Tax Examiners/Colltrs/Rev Agts	6
31214	English Lng/Lit Teachrs, Postsec	6
22311	Surveyrs/Cartographrs/Photogrmts	6
63011	Police Detectives	6
85999	Mechanics/Installers/Rprs, NEC	6
31226	Computer Science Teachers, Post	6
57302	Mail Clks, Ex Mail Mach/Post Srv	6
31242	Business Teachers, Postsecondary	6
32399	Therapists, NEC	6
32114	Veterinarians	6
85502	Central Office/PBX Instllrs/Rprs	6
31314	Teachers/ Instructors, VocED/Tr	6
15005	Education Administrators	6
58014	Meter Readers, Utilities	5
32521	Dietitians & Nutritionists	5
89805	Bakers, Manufacturing	5
15014	Industrial Production Managers	5
24102	Physicists & Astronomers	5
87805	Sheet Metal Duct Installers	5
92311	Woodworking Mach Sttrs, Ex Sawng	5
28105	Adjudicators & Hearing Officers	5
31224	Math/Science Teachers, Postsec	5
87202	Electricians	5
53702	Court Clerks	5
31114	Nursing Instructors	5
56002	Billing/Posting Clerks/Mach Oprs	5
79002	Forest & Conservation Workers	5
68008	Manicurists	5

Workforce Investment Area 1

Occupational Projections, 1998-2008

	Occupation	Total Growth
63035	Private Detectives/Investigators	5
89311	Cabinetmakers/Bench Carpentrs	5
25103	Database Administrators	5
89517	Pressers, Delicate Fabric	5
34008	Public Relations Specialists	5
31222	Engineering Teachers, Postsec	4
31304	Teachers, Kindergarten	4
21905	Management Analysts	4
31399	Teachers & Instructors, NEC	4
32514	Opticians, Dispensing	4
34044	Merch Displayers/Window Dressers	4
21908	Construction, Bldg Inspectors	4
65099	Food Service Workers, NEC	4
92302	Sawing Mach Sttrs/Set-Up Opers	4
92947	Painters, Transportation Equip	4
92951	Coat/Paint/Spray Mach Sttrs/Oprs	4
87811	Glaziers	4
58099	Mtrl Rec/Sched/Distr Wkrs, NEC	4
55105	Medical Secretaries	4
79011	Graders/Sorters, Agri Products	4
93938	Meat/Poultry/Fish Cutters, Hand	4
81099	Blue-Collar Worker Supervs, NEC	4
31252	Education Teachrs, Postsecondary	3
32508	Emergency Medical Techns/Paramds	3
89132	Sheet Metal Workers	3
32305	Occupational Therapists	3
89505	Custom Tailors & Sewers	3
85708	Elec Home Entertain Equip Rprs	3
58026	Order Fillers, Wholesale/Retail	3
31317	Instructors, Adult (Non-VocEd)	3
31505	Library Technicians	3
83002	Inspectors/Testers/Graders, Prec	3
25199	Computer Scientists, NEC	3
85947	Coin/Vending/Amuse Mach Servrs	3
43099	Sales Rps/Salespersons, Serv NEC	3
98316	Roofers Helpers	3
58002	Dispatchers: Police/Fire/Amblnce	3
97941	Hoist & Winch Operators	3
53908	Advertising Clerks	3
89808	Food Batchmakers	3
21305	Purchasing Agents & Buyers, Farm	3
53708	License Clerks	3
31231	Anthrop/Sociol Teachers, Postsec	2
31232	Area/Ethnic/Cultrl Stds Teachers	2
31235	History Teachers, Postsecondary	2
31218	Art/Drama/Music Teachrs, Postsec	2
31247	Social Work Teachers, Postsec	2
31215	Foreign Lng/Lit Teachrs, Postsec	2

Workforce Investment Area 1

Occupational Projections, 1998-2008

	Occupation	Total Growth
85799	Electric/Electro Eq Mechns, NEC	2
21117	Budget Analysts	2
53705	Municipal Clerks	2
98314	Painters/Paperhangers Helpers	2
31237	Psycholgy Teachrs, Postsecondary	2
34053	Dancers & Choreographers	2
89718	Platemakers	2
34011	Reporters & Correspondents	2
24599	Physicl/Life Science Techns, NEC	2
87317	Plasterers & Stucco Masons	2
91911	Met Mold/Core/Cast Mach Ops/Tdrs	2
34035	Artists & Commercial Artists	2
58017	Weighers/Measurers/Checkers	2
93114	Elec/Electronic Equip Assem, Prc	2
63008	Fire Fighters	2
31204	Chemistry Teachrs, Postsecondary	2
28399	Legal Assistants, NEC	1
27105	Urban & Regional Planners	1
21917	Assessors	1
93105	Mach Builder Assemblers, Prec	1
87508	Pipelayers	1
93902	Machine Assemblers	1
24399	Life Scientists, NEC	1
85308	Motorcycle Mechanics	1
24305	Agricultural/Food Scientists	1
85119	Machinery Maint Mechanics, NEC	1
24199	Physical Scientists, NEC	1
32914	Nuclear Medical Technologists	1
66023	Amblnce Drivers/Attends, Ex EMTs	1
65023	Butchers & Meatcutters, Retail	1
34028	Broadcast & Sound Technicians	1
55302	Court Reporters/Med Trans/Stenos	1
32913	Radiation Therapists	1
63041	Fish & Game Wardens	1
34056	Actors/Directors/Producers	1
32951	Veterinary Technologists/Techns	1
91317	Forging Machine Sttrs/Oprs, M/P	0
91305	Press Mach Settrs/Opers, M/P	0
63023	Bailiffs	0
91111	Millng/Plan Mach Sttrs/Oprs, M/P	0
57102	Switchboard Operators	0
92971	Extrud/Form/Pres Mach Oprs/Tndrs	0
22127	Computer Engineers	0
97921	Gas Compressor Operators	0
85128	Machinery Maintenance Workers	0
21508	Employment Interviewers	0
19999	Managers & Administrators, NEC	0
79858	Farm Wkrs, Farm/Ranch Animals	0

Workforce Investment Area 1

Occupational Projections, 1998-2008

	Occupation	Total Growth
53805	Reservation & Trans Ticket Agts	0
32317	Recreational Therapists	0
43011	Real Estate Appraisers	0
87902	Earth Drillers, Ex Oil & Gas	-1
87999	Constr/Extractive Wkrs, NEC	-1
89702	Compositors/Typesetters, Pre	-1
32931	Psychiatric Technicians	-1
92905	Motion Picture Projectionists	-1
53117	Credit Checkers	-1
55314	Human Res Assists, Ex Payrl/Time	-1
25105	Computer Programmers	-1
28102	Judges & Magistrates	-1
93953	Grinders & Polishers, Hand	-1
58021	Marking Clerks	-1
89511	Shoe/Leathr Wkrs/Rprs, Precision	-1
49002	Sales Engineers	-1
93908	Coil Winders/Tapers/Finishers	-1
24502	Biological/Agric Techns/Technols	-2
53111	Loan Interviewers	-2
91105	Lathe/Turng Mach Sttrs/Oprs, M/P	-2
97951	Conveyor Operators/Tenders	-2
53126	Statement Clerks	-2
15023	Communication/Transp/Util Mgrs	-2
55328	Statistical Clerks	-2
92997	Machine Settrs/Setup Opers, NEC	-2
92926	Boiler Opers/Tndrs, Low Pressure	-2
91321	Machine Forming Oprs/Tndrs, M/P	-2
71005	Farm Managers	-2
25108	Computer Programmer Aides	-2
85505	Frame Wirers, Central Office	-2
81011	First Line Supervs: Transport	-2
67011	Elevator Operators	-2
53108	Transit Clerks	-3
87911	Rotary Drill Operators, Oil/Gas	-3
97199	Motor Vehicle Operators, NEC	-3
92728	Pressing Mach Oprs/Tndrs, Txtles	-3
22108	Mining Engineers, Inc Safety	-3
55326	Procurement Clerks	-3
21502	Claims Takers, Unemploy Benefits	-3
92968	Extrud/Form/Pres Mach Sttrs/Oprs	-3
87914	Derrick Operators, Oil/Gas	-3
91935	Furnace Operators & Tenders	-3
58005	Dispatchers, Ex Police/Fire/Ambl	-4
93197	Precision Assemblers, Metal, NEC	-4
85917	Watch Repairers	-4
97928	Dredge Operators/Dipper Tndrs	-4
32105	Dentists	-4
87311	Cncrt Fnshrs/Cmnt Msns/Trzo Wkrs	-5

Workforce Investment Area 1

Occupational Projections, 1998-2008

	Occupation	Total Growth
92958	Cleang/Wash/Picklg Eq Oprs/Tndrs	-5
85721	Power/Substation/Relay Electrcns	-5
95032	Stationary Engineers	-5
55341	Payroll & Timekeeping Clerks	-5
87714	Rail-Track Laying/Maint Eq Opers	-5
56099	Office Machine Operators, NEC	-5
55335	Customer Service Reprs, Util	-5
91908	Metal Mold/Core/Cast Mach Sttrs	-5
85118	Mach Maint Mechns: Water/Power	-6
89706	Paste-Up Workers	-6
87908	Rock Splitters, Quarry	-6
31502	Librarians	-6
98705	Refuse/Recyclable Mtrl Collectrs	-7
97932	Loading Mach Oprs, Mining	-8
79801	Farm Workers	-8
97953	Pump Operators	-8
97944	Crane & Tower Operators	-8
87943	Mine Cutting/Channeling Mach Ops	-9
32926	EKG Technicians	-9
81002	First Line Supervs: Mechs/Rprs	-9
53502	Welfare Eligibility Workers	-10
93905	Electrical/Electronic Assemblers	-12
79999	Agric/Forestry/Fishing Wkrs, NEC	-13
97114	Taxi Drivers & Chauffeurs	-13
79021	Farm Equipment Operators	-14
97999	Transp/Materl Moving Eq Ops, NEC	-14
34017	Announcers, Radio & TV	-14
87921	Roustabouts, Oil/Gas	-14
92541	Typesetting/Composing Mach Oprs	-15
92965	Crush/Grd/Mix Mach Opers/Tndrs	-16
15021	Mining & Related Managers	-17
92717	Sewing Machine Opers, Garment	-19
56011	Computer Oprs, Ex Peripheral Eq	-23
97935	Shuttle Car Operators	-28
19002	Govt Chief Execs & Legislators	-34
57105	Directory Assistance Operators	-47
85726	Station Instllrs/Rprs, Telephone	-57
97805	Service Station Attendants	-58
87923	Roof Bolters, Mining	-58
55307	Word Processors & Typists	-61
87941	Continuous Mining Mach Opers	-73
65028	Cooks, Institution/Cafeteria	-82
85117	Mine Machinery Mechanics	-91
81005	First Line Supervs: Const/Extrac	-123
87989	Extraction Wkrs, Ex Helpers, NEC	-129
87949	Mining Mach Operators, NEC	-291

Source: http://www.state.wv.us/bep/lmi/occproj/wia1rank98.htm.

Section III:

Labor Market Impacts of Small Business and the Shadow Economy

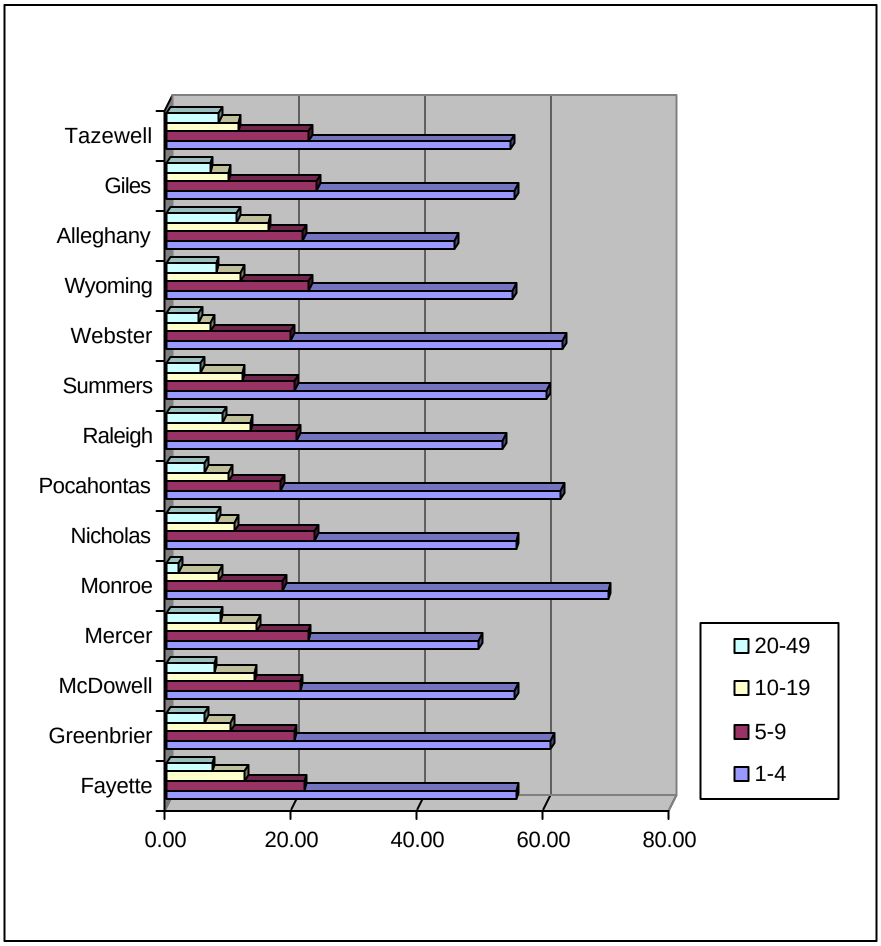
State of the Workforce Report
Region 1 Workforce Investment Board

Labor Market Impacts of Small Business and the Shadow Economy

Small businesses have been a favored part of the economy for the past decade, but for many of the wrong reasons. An influential research article in the mid 1980's found that small businesses created most new jobs. While that was true, subsequent research found that this observation was applicable to gross, not net job growth. The author later reversed his findings, pointing out net job growth rates were not correlated with firm size. Fortunately, the flurry of research that accompanied this initial observation led researchers to find that small businesses were indeed critical to economic performance, but that the reasons were far more subtle (and also more important) than simple employment growth.

In 1999, over 73,000 West Virginians worked in firms that employed fewer than five people. These firms (or microbusinesses) employed roughly ten percent of the State's official labor force, but produced roughly 12.9 percent of the goods and services in the state. By comparison, microbusinesses in the adjoining nine state region employed an equal percentage of workers, but produced only 8.5 percent of goods and services. In West Virginia, small businesses (those employing fewer than 25 workers) employed 33 percent of workers and produced 38.8 percent of the State's total goods and services. In the surrounding nine state region, small businesses employed 29.9 percent of workers, but produced only 24.4 percent of goods and services. West Virginia has roughly the same proportion of microbusinesses and more small businesses than surrounding states, but produce a higher proportion of the State's goods and services. Microbusinesses are an important part of the State's economy. If microbusiness were classified as a separate industry, it would be larger than coal mining, manufacturing, the financial sector and public utilities. Small firms dominate the economic landscape in Workforce Investment Area 1 and the surrounding Virginia counties. See Figure 1.

Figure 1: Proportion of Small Businesses of Total



Some Characteristics of Microbusiness

Small firms engage in every type of trade, producing virtually every type of good and service. Not surprisingly, some industries have a preponderence of small firms. Dental and medical offices, for example, often employ just a few workers. Similarly, agriculture, the arts and many business services are heavily represented by microbusinesses. Other industries, such as chemical manufacturing and coal mining, experience a higher average firm size. However, there is considerable size overlap, with most industries having firms ranging from the very small (under 5 employees) to large (more than 500).[1]

Small businesses are not subject to many of the regulations directed at larger businesses, such as some types of access regulations required by the Americans With Disabilities Act. Small businesses also differ from larger firms because their owners typically perform both management and production duties. However, the relative burden of regulations is typically larger for small firms than for large firms. This is true for regulations such as Occupational Safety and Health regulation compliance (e.g. preparation of Material Safety Data Sheets), as well as business licensing, et. cetera. Since small firms have fewer workers to perform these tasks, the fixed costs of compliance are higher. This is a potential barrier to firms entering the marketplace. These high fixed costs also affect the ability of firms to hire and conduct worker training.

Workers in Small Businesses

There is little data to suggest significant differences among workers in differently sized firms. Indeed, when it comes to hiring, small firms and big firms compete for the same set of labor, and the choice of employment location by the workers is clearly predicated on wage, benefits and specific job characteristics. As these vary systematically by firm size, then firm size matters to the quality of worker it obtains. Similarly, firms with market power in the goods market may be able to pass some of their additional profit to their workers. Also, monopsony power in hiring may lead to quality differences in workers across firm types. Most evidence suggests that, with the exception of monopsony power, these phenomenons are transitory. This means that any persistent compensation differential between firms of different size are based on actual productivity differences. Otherwise, the firm with the lower output to labor cost ratio would not survive. It is likely that an observable wage (or total compensation) differential between firms may exist over the long run, but for that to occur, so too must there be productivity differences underlying the wage differential. These productivity differences may not be due solely to worker characteristics, but may be explained by non-labor inputs to production. Notably, persistent wage differential present problems for firms who may find themselves faced with lower quality workers as the labor market matches quality to compensation. This is the competitive outcome in labor markets.

Monopsonistic labor markets are an exception to the competitive outcome described above. Monopsony occurs when one firm acts as the sole employer in a region. Monopsony power occurs when the regional labor market is dominated by a few employers. In this type of labor market, the wage is dictated by both the degree of worker flexibility and the competitive nature of the output market. In practice it is unlikely that these problems plague Workforce Investment Area 1. That does not mean there are not wage differentials, just that they are based on the relative productivity of the firm, an aspect beyond the short run influence of policy. However, the broad policy ramification of this is a wide effort to influence productivity through education and training.

Scale Economies in Hiring and Training

Scale economies suggest that the per unit cost of conducting employee searches and hiring is greater for small firms than larger establishments. This means that small firms are slower to hire or fire workers based upon fluctuations in the demand for labor. This results in a more stable work force, but one in which productivity may suffer as workers are underemployed during low demand periods, or over worked in high demand periods. This impact partially offsets the other productivity enhancing characteristics of small firms, and points to direct policy measures to mitigate these additional costs.

Scale economies also affect the per unit cost of training in small firms. With fewer workers upon which to spread the fixed costs of a training program, small firms experience higher costs, and hence conduct less worker training. As explained later in this section, this partially offsets the productivity benefits that small firms enjoy. Ironically, the law of diminishing returns implies hiring and training are more expensive for small firms. These findings have clear implications for workforce training policy.

In addition to the very clear issues in workforce training, scale economies generate secondary impacts on firm development that warrant scrutiny. In West Virginia, these high fixed costs (or scale economies) are most likely the single biggest cause of a phenomenon known as the *shadow economy*.

The Shadow Economy in West Virginia

That part of an economy which is unmeasured, the *shadow economy*, is a persistent part of all economies. Also known as the *informal sector*, the *shadow economy*, consists of legal activities such as home repair and childcare, as well as illegal activities such as the sale of illicit drugs. Some estimates of the size of the *shadow economy* also include non-market activities such as the value of a homemaker's care of children. Of concern is outlining the size of the *shadow economy* in which money is exchanged.

Measuring and understanding the size and impact of the shadow economy in West Virginia is important. First, it is important simply because measurement permits us to know where we are in terms of economic activity, while mis-measurement inevitably leads to poor public policy. Also, this economic activity takes place outside the eyes of the *Department of Tax and Revenue*, meaning it is potentially illegal. The result is that the formal benefits of having performed the work may be lost. This means that the work experience and many of the assets cannot easily enter the formal sector of the economy. For example, a person providing child care in the shadow economy while attending college for an early childhood education degree is amassing important experience that will not likely count towards a future job.[2]

Fortunately, West Virginia suffers few of the major problems of *shadow economies*. For example, the Ukraine and other parts of the former Soviet Union suffer tremendous fiscal drains from unreported activity. This weakens their government's ability to provide basic services. Also, activities that are purely illegal such as illicit drug sales, may impose tremendous costs on society in terms of health care, lost production, and enforcement and incarceration costs.

In West Virginia, neither of these two problems appear to be great. It is unlikely that tax collections on all the *shadow economy* in the State would exceed enforcement costs. And, perhaps most significantly, the proportion of illegal activities (all of which occur in the *shadow economy*) appear to be relatively low in West Virginia. The best evidence of this is the very low crime rates enjoyed by the State.[3]

The *shadow economy* is difficult to measure. The size of West Virginia's shadow economy as a share of measured *Gross State Product* is estimated in this report. Two popular estimation techniques were employed, and their results averaged.[4] Both methods yielded similar results, and when averaged, provided estimates of the size of the *shadow economy* very consistent with other estimates in countries with similar economies to that of West Virginia. West Virginia's shadow economy ranges from 15 to 25 percent, while according to most recent studies the U.S. as a whole has a shadow economy of roughly 10.5 percent.

The size of the *shadow economy* is important in comparing the level of the State's economy with the rest of the nation. West Virginia's measured per capita income is roughly 70 percent of the U.S. average. When the size of the *shadow economy* is included at the State and national level, the income gap for West Virginia closes by a third. Since it suggests that workers in the State are materially better off than official statistics, this is good news. This information is especially useful for firms that make location decisions based on consumer demand for a region. Due to the size of the unmeasured economy, West Virginians may possess as much as $4,000 per capita more spending power than official statistics indicate.

Most studies find that economic activities in the *shadow economy* are extensions of work performed in the formal sector. For example, a carpenter who works part time for a neighbor for cash is augmenting income earned in the formal sector. A recent survey of *shadow economy* activities in West Virginia reveals this pattern clearly. A high proportion of *shadow economy* activities are reported to be related to formal work patterns. It is also interesting to note that a relatively high proportion of West Virginia's economy is composed of activities that are easily transferred to the *shadow economy*. For example, West Virginia has a high proportion of its labor force employed in construction and health care. Both of these industries are prominent among the types of activities undertaken in the shadow economy. Simply stated, a skilled cabinet maker working in the formal sector is more likely to make cabinets in the *shadow economy* than is an university economist.

Workers employed in seasonal jobs such as education, construction and tourism are also more likely to engage in informal activities in the off season. In many counties, the schools are the biggest employer making the summer time ripe for growth in the *shadow economy*. Also, as the tourism industry grows in West Virginia, so too will the proportion of seasonal workers. This may lead to an expansion in the size of the State's *shadow economy*.

Table 1: Types of Shadow Activities

Activity (for cash or exchange)	All Households	Participating in Shadow Economy
Household repair	9.7%	48.3%
Collect wood, coal, landscaping or yard work	5.4%	26.7%
Hunt or fish	1.2%	4.8%
Raise farm animals	2.3%	11.5%
Grow non-farm animals	1.3%	6.5%
Crafts	6.4%	30.5%
Child care, nursing, housework	8.3%	18.2%
Bookkeeping	3.4%	16.5%
Percent of total households engaged in shadow economy	21.4%	—

Source: Mencken, F. Carson and Sally Ward Maggard "Informal Economic Activity in West Virginia: A Descriptive And Multivariate Analysis", in Inside West Virginia: Public Policy Perspectives for the 21st Century.

The economic impact of the *shadow economy* is not simply its dollar value in production or the income it generates. *Shadow economies* provide benefits and impose costs. In addition to the costs already mentioned, it is useful to note that the *shadow economy* may also serve as a gateway to the formal sector. Also, the *shadow economy* may be one of the few available sources of labor for some workers. Simply stated, a part of the labor force is not sufficiently productive to make their hiring in the formal sector profitable to firms. The *shadow economy*, with its absence of much regulation and taxation, may be viewed as a supplemental form of income to other types of income assistance. However, this issue is subject to many policy considerations that are outside the scope of this report.

Understanding how the *shadow economy* reacts to the business cycle is also important for policymaking. The response of the shadow economy to a recession may either cushion or exaggerate the impact of an economic downturn. The estimates of the *shadow economy* show that it is much more prone to dramatic business cycle fluctuations than are the overall economy. This is a recurring finding across most dynamic studies of the shadow economy. Unfortunately, this means that West Virginia may suffer from deeper recessions than the nation as a whole, in part due to the relatively large size of our shadow economy. One potential remedy for this is to enact policies that ease worker transition into the formal sector.

Finally, knowing the size and composition of the shadow economy is important for us simply to understand why it exists and how it affects our economy. Policies at the State and local level can address issues such as tax complexity, levels of taxation, education, access to capital, and others that may influence the size and scope of the *shadow economy*.

Some Cultural Implications of the Shadow Economy

Economists often view firms as pure profit maximizers. There are many benefits of this approach, especially when evaluating the economy as a whole. It is also useful for describing the behavior of large businesses. However, this approach fails to explain a richness of firm behavior when there are aspects beyond pure profit maximization in the goals of the business. This is especially important in an examination of small businesses.[5]

One recurring observation is that bigger firms can usually produce goods and services at lower per unit cost than smaller firms. These are known as *economies of scale*. High overhead costs are the primary cause of *economies of scale*. However, most microbusinesses (and many larger small businesses) produce goods and services at levels beneath the *economies of scale* range. Why firms remain viable at production levels that do not result in the lowest per unit cost is a difficult question to answer. If these firms are merely growing, and will eventually achieve *economies of scale*, then the existing theories explains their existence. However, many of these firms intentionally remain small. Analyzing this phenomenon is, in part, what this research agenda seeks to develop.

Two potential reasons for the continued presence of small firms have emerged. The first is that small businesses are not purely profit maximizing. In this explanation, small firms such as individual proprietorships and small businesses are also interested in other attributes of business besides profits alone. In this view, business aspects such as location, working hours, etc. weigh heavily on a firm's decision making process. Of course, these aspects are also important to workers in large corporations. However, these aspects of an individual do not influence firm size decisions. To be clear, this does not suggest that larger firms are less sophisticated decision makers than smaller firms, simply that these myriad of other issues do not influence a firm's decision on size or production level, they are expressed in other ways. Large firms may accommodate a large workforce by substituting higher wages, more benefits and job security for the flexibility that smaller firms permit.

The reason why businesses remain small may be that due to their intimate size, they consider aspects other than profit maximization when determining production levels. Firms with only a handful of employees may seek to remain at their current size, and forego more profitable levels of production to preserve aspects of the business that they appreciate more than they would the additional monetary profit. These aspects may include a sense of artisanship, a close knit working relationship, flexible hours or the choice of location. Firms with workers that share these goals may choose appropriate production levels that jointly satisfy all the workers goals, not one that simply maximizes monetary profits.

These issues are important because simple measures of wages do not capture this flexibility aspect of employment. And flexibility may be more important to individual workers than income. For example, the ability to assist in childcare duties is clearly important to many workers, and may be worth a direct income trade-off. This may be especially true since child care may be so costly for some workers that a lower paying or part time job with flexible hours *may actually yield a higher net income* than a fixed work week that pays a higher salary. This simple observation is absent from most policy discussions about wages and working conditions. As a result, a whole host of employment options are discouraged simply because they are not full time with extensive benefits. Policies that encourage only full-time jobs with benefits are, at best, short sighted.

Market Flexibility and Small Businesses

Firms that operate beneath the *minimum efficient scale*, and remain there would, under traditional explanations of industry dynamics, fail to survive. However, a large proportion of microbusinesses in West Virginia (perhaps more than 80 percent), remain modestly sized and flourish. The survival of these companies can be partially explained by their flexibility. Anecdotally, we see that in West Virginia many of the microbusinesses provide goods and services that are unavailable through larger enterprises. The state's microbusinesses are, in part, gap providers of specialty items. This is a flexibility that permits firms that can vary quality, quantity, service and location to flourish, even when they do not enjoy *economies of scale*.

The importance of flexibility in the production of goods and services cannot be overstated. A 1998 study found that information flows between the largest and smallest firms in two very different industries led to dramatic delays in price changes. Indeed, in these markets, the smallest firms were able to adjust prices to changes in demand over two months more quickly than the largest firms.[6] These findings strongly reinforce our contentions that small firms may be able to survive simply through increased flexibility in business: pricing, quality, quantity, service and location. Two other researchers found that interfirm linkages, and small firm networks (such as the *Center for Economic Options*) were able to replicate (or in some cases improve upon) the *economies of scale* inherent in larger firms.[7] The flexibility of small firms permits them to survive and even flourish.

Small Business and the Macroeconomy

Strong economic performance is an important goal of fiscal policy. Governments choose a set of taxation and expenditure goals that provide the mix of public services that businesses need. These include education, physical infrastructure and a healthy legal environment. The policies employed at the federal, state and local level play an important role on the overall economy and on individuals and firms directly. It is in recommending an appropriate set of policies that this research is directed. In formulating these policies, much attention has been paid to the immediate impact on firms. This is also the goal of most traditional economic development policies, such as tax abatements and worker training programs.

Policies directed specifically at microbusinesses should be predicated on an understanding of the role of microbusiness in the overall performance of the economy. If, as much evidence suggests, microbusiness plays a key role in enhancing the performance of the economy, then policies directed at its growth are of potential benefit. If the impact of firms to the aggregate economy does not vary with firm size, then fiscal and economic development policy should provide a neutral effect on firms with respect to size. Today, most economic development and fiscal policy is not size neutral. Indeed, despite much evidence that smaller firms play a greater role in the performance of the economy than do larger firms, most development and fiscal policy remains biased in favor of larger firms. This is inefficient both for government and society as a whole. While these issues need much greater exploration, here we will offer several brief explanations as to why microbusinesses are of greater relative importance in the overall economy than larger firms.

Small Business and Economic Growth

Economic growth is a direct goal of many government policies. Growth in per capita income and production offer obvious benefits to society, such as more consumer goods, better housing and education. There are other, more subtle benefits, such as more leisure, greater choice in living arrangements, greater options regarding location, education and choice of career. Similarly, the range of choices offered to more affluent regions represent a more attractive set of options. While it is easy to become immersed in the current debate regarding health care, environment and a social safety net, this is a *much preferable* set of problems than those faced in poor countries. Simply, all things being equal, high levels of per capita income and production are preferable.

The policy choices that governments make can affect economic growth. The most important policies that impact economic growth are a basic set of laws and property rights. In terms of immediate impact on the economy, education and training typically provided children offers more benefits to long term growth than does almost any other policy. This is a recurring finding in economics, and one that will perhaps become popularized in policy circles with the 2000 award of the *Nobel Prize in Economic Science* to James Heckman, the leading researcher in the field.

Innovation and Growth

The higher growth rate attributable to the presence of smaller firms may be partially explained in a number of ways. First, the ability of smaller firms to exploit quality, quantity and pricing niches that larger firms cannot is important.[8] Second, smaller businesses tend to provide a seed bed for technological development and innovation. One recent study found that the ratio of Research and Development Spending to actual innovation was much more favorable in small businesses.[9] Third, it is possible that small businesses are more productive. This means that they simply produce more goods and services, per worker, than do larger business. The first three arguments reasons are well accepted, and although they may require additional research, this last hypothesis needs much further development. That is one of the many questions this research will seek to answer.

In West Virginia we know our small businesses contribute strongly to technological growth and innovation. We also know that the business cycle of 1983 was significantly worse in West Virginia than the nation as a whole. This was due, in part, to a heavy concentration of employment in a few industries. A higher proportion of microbusinesses may have softened that experience. Finally, we know that smaller businesses are more productive in West Virginia than their larger counterparts. This is true even when one accounts for the industry in which each operate. This relationship is simple data, the cause and implications are not yet fully understood.

Finally, the impact of small businesses on West Virginia's macroeconomy is only partly known. The need for more research into microbusinesses and small to medium sized enterprises in general is clear. What is known at present impacts workforce investment policy directly. Small firms need high quality, well trained workers, but face higher costs in finding and training employees. Policies or programs which directly reduce the cost of hiring and training workers in small firms should be pursued.

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[1]Though part of the variation is due to data irregularities (such as firms that have actually closed down remaining as sole proprietors), this is a minor instance. The *West Virginia Bureau of Employment Programs* uses data on firm size for only those firms registering with them for unemployment insurance. This dramatically biases the sample so that these data do not capture actual distribution of firms by size.

[2]A recent book by Hernando de Soto, The Mystery of Capital, outlines a great deal of evidence that this has led to dramatically slower economic growth in parts of that country. While it is possible that physical capital is not easily transferred from the shadow to formal sectors of the economy, it is more likely that this is a problem for human capital.

[3]It is important to note though, that a recent study by Richard R. Clayton Marijuana in the "Third World" Appalachia, U.S.A., found that eastern Kentucky suffered from an unusally high level of marijuana growth. In Elliot County, for example, $21M of production was estimated in a county where total personal income was only $70 M per year. These numbers frankly seem a bit high for West Virginia. Notably, the high cyclicality of the shadow economy suggests the bulk of its production is in legal areas, since illegal activities do not diminish in a recession. In any event the immediate damage to the economy related to illicit drugs is at their point of use, not their point of production.

[4]The two techniques are the Multiple Input - Multiple Cause method, which uses a nested multiple regression model to estimate the annual change in the shadow economy that is then anchored using a money demand equation (Giles, 1999). This is a very technically challenging method. An alternative method is to compare the proportion of currency in circulation to that which should be used to support measured economic transactions in the State (this is also known as the *missing money* technique). Both methods yielded remarkably similar results.

[5]Among the earliest explanations for the formation of firms was that they exist to minimize the transaction costs of organizing production. This theory was developed by Ronald Coase in 1937, for which he received the 1991 Nobel Prize in Economics. This explains both the existence of firms and of coordination organizations (like the *Center for Economic Options*).

[6]Hicks, Michael J. Hierarchical Delays as a Source of Sticky Prices: Evidence From Two Workably Competitive Markets, Ph.D. Dissertation, University of Tennessee, 1998.

[7]Lazerson, M., "Organizational Growth of Small Firms: An Outcome of Markets and Hierarchies?" *American Sociological Review,* 53(3), pp 330-342, 1998; Gomes-Cassey, B., The Alliance Revolution: The Shape of Business Rivalry, Cambridge, Mass, Harvard University Press. 1998.

[8]It is interesting to note that the dominant explanation for the cause of business cycles relies on the inability of firms to exploit changes in these attributes. These theories, often referred to as New-Keynesian economics, employs rigidities in wages and prices to empirically model business cycle activities. So, though it has yet to be evaluated statistically, the presence of firms able to rapidly make price, quality and quantity adjustments may act to stabilize an economy.

[9]See the extended discussion in Acs, Zoltan J., Bo Carlssson and Charlie Karlsson Entrepreneurship, Small & Medium Sized Enterprises and the Macroeconomy, Cambridge University Press, 2000.