STATE OF THE WORKFORCE REPORT

SOUTH WESTERN WEST VIRGINIA REGION 2

WORKFORCE INVESTMENT BOARD

April, 2002

Prepared for:

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Section I:

Business Survey Analysis

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Section I: Business Survey Analysis *Table of Contents*

SUMMARY OF DATA FINDINGS

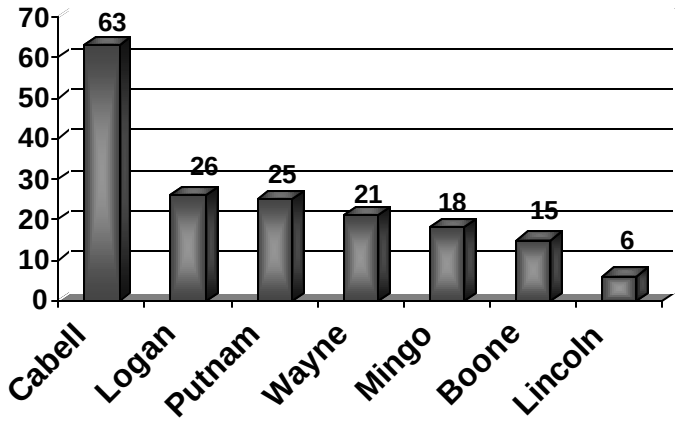
- The business survey analysis is comprised of extensive interviews from 174 business / agency leaders who represent 294 businesses in the Region 2 Area.
- Businesses participating in the survey employed 37,496 employees; business size varied from three to 6,500 employees. Over half of the firms surveyed had less than 100 workers.
- Present employment in Region 2 appears to be higher than typical employment. Most notably, employment in firms with fewer than 50 employees or more than 500 employees is presently higher than usual.
- Representatives of firms in the information the health care industries report having the most new hires. The majority of firms typically hire 50 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 believed that promoting from within was the most useful recruiting method; referrals ranked second.
- 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 basic reading, intermediate math, Internet skills, and programming / web development skills. All of the skill sets demonstrated an increase in future importance except for critical thinking, which decreased by a slight 3%.
- Businesses reported that they turn away several job applicants on an annual basis. Nine respondents reported turning away over 1,000 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 appearance / dress / grooming.
- 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 (79% yes).
- Most of the firms that were surveyed hire high school graduates. Sixty-two 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. Ninety firms said they would be hiring additional employees over the next five years.
- Twenty-five percent of the respondents reported a need for education and training of current employees. Thirteen percent said they have a need for career progression training. Management was the most prevalent career progression training need.
- The retail trade and health care industries reported the greatest training needs. Combined, these industries send 4,701 employees to annual training.
- Thirteen percent of the respondents provide some type of tuition assistance or incentives to employees for additional education.
- The Workforce Investment Board, RCBI, and vocational / technical schools were the most popular selections for partnerships with other employee training programs.
- RCBI 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 quality of the training program as well as its specialization.
- 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 2, the Center for Business and Economic Research (CBER) at Marshall University's Lewis College of Business has extensively interviewed 174 business principals who represent 294 businesses in the Region 2 area. Region 2 consists of the West Virginia counties of Boone, Cabell, Lincoln, Logan, Mingo, Putnam, and Wayne. Information collected from the 294 businesses taking part in this effort has been presented below. This information has been presented in a question-by-question format with appropriate cross-tabs as necessary.

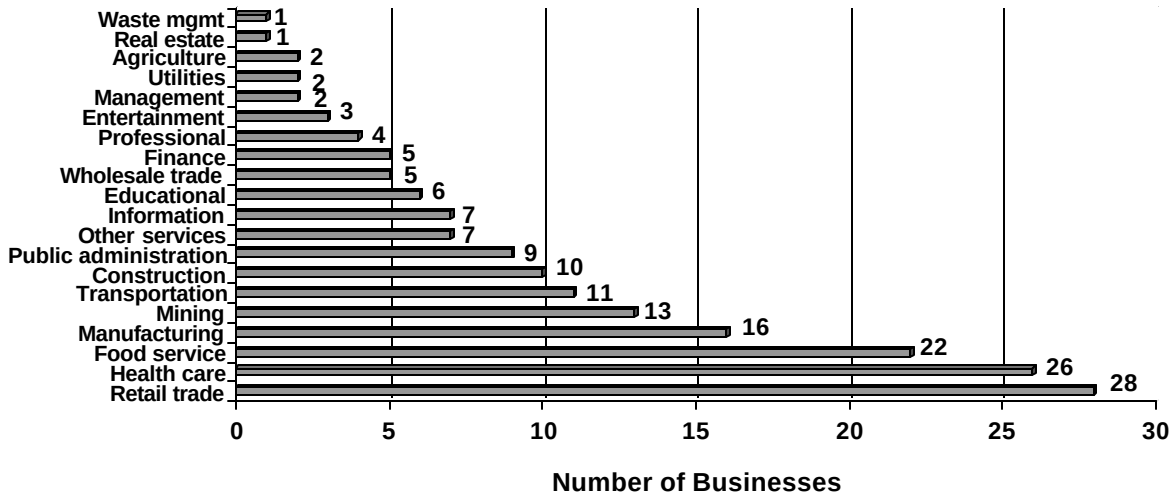
An extensive survey instrument was developed cooperatively between staff of the CBER and representatives from the Region 2 Workforce Investment Board. The final instrument was comprised of 38 questions, many of which involved multiple responses. Survey specialists from the CBER conducted the business surveys over the telephone during the month of December 2001. 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 business 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 was represented by the surveying effort as illustrated in Exhibit 2.

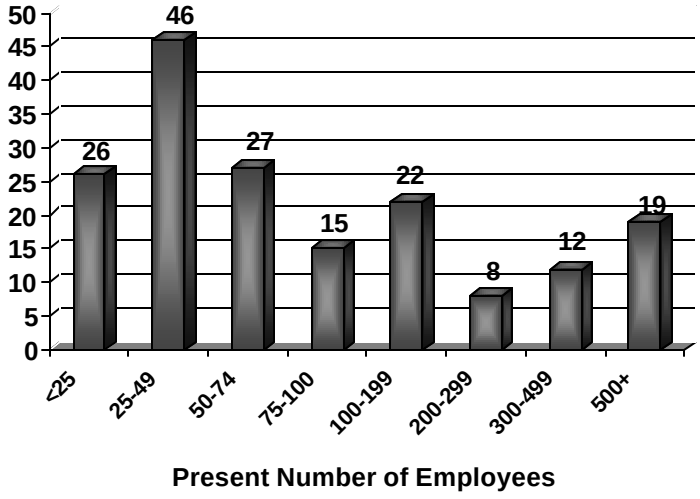
Exhibit 2: Number of businesses representing various industries.



EMPLOYEES:

Every attempt was made to obtain a completed survey from businesses in each of the counties with 50 or more employees. Most of the businesses responding to the survey had less than 50 employees, which is reflective of the business climate in this region. Businesses participating in the extensive survey employed a total of 35,081 employees. This total excludes the 29,000 system-wide employees reported by CSX, since not all of these individuals were employed in West Virginia. Business sizes varied from employing three employees to employing 6,500 employees. A breakdown of business size based on number of present employees can be found in Exhibit 3.

Exhibit 3: Number of businesses interviewed based on total present employees.



The corresponding number of employees per industry has been depicted in Exhibit 4 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 5 illustrates this comparison.

Exhibit 4: Number of employees represented per industry.

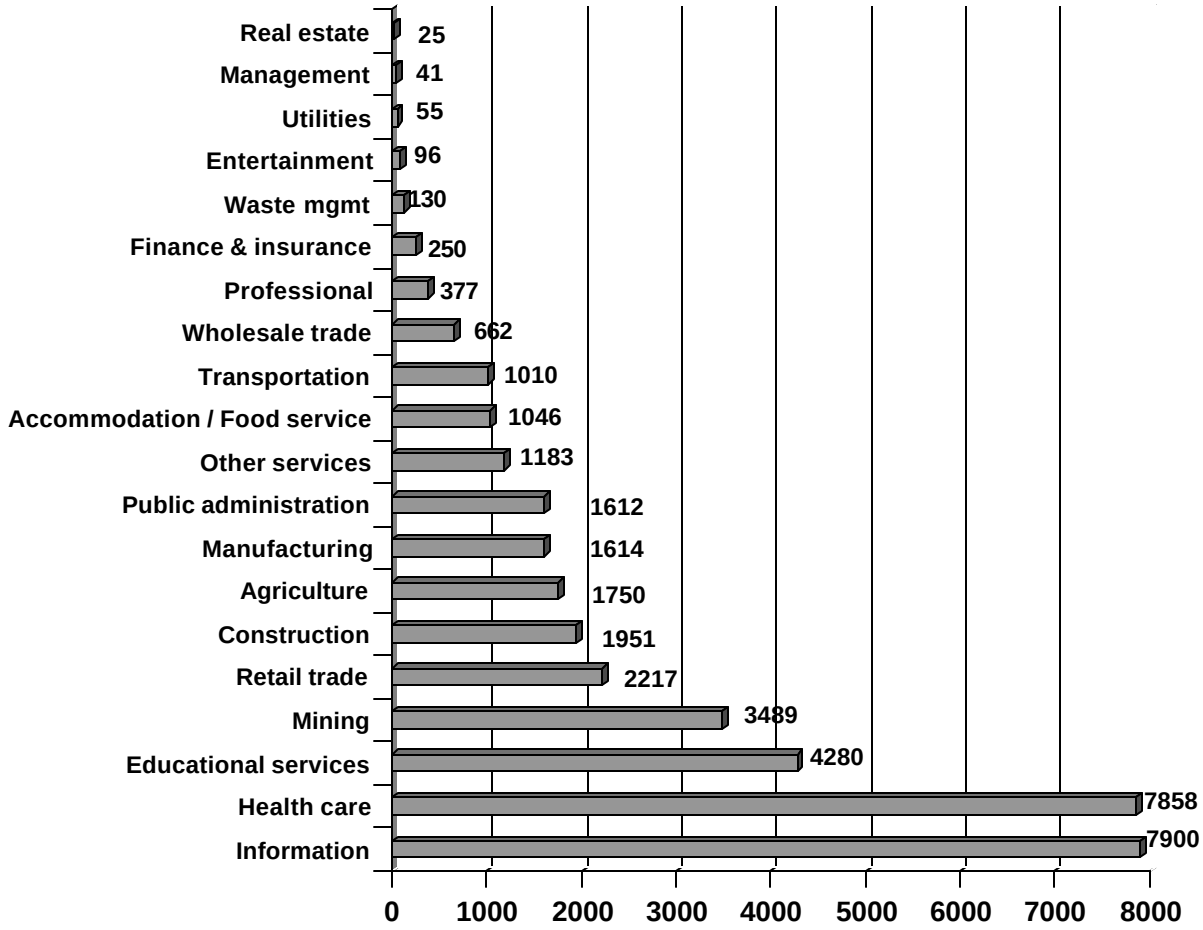
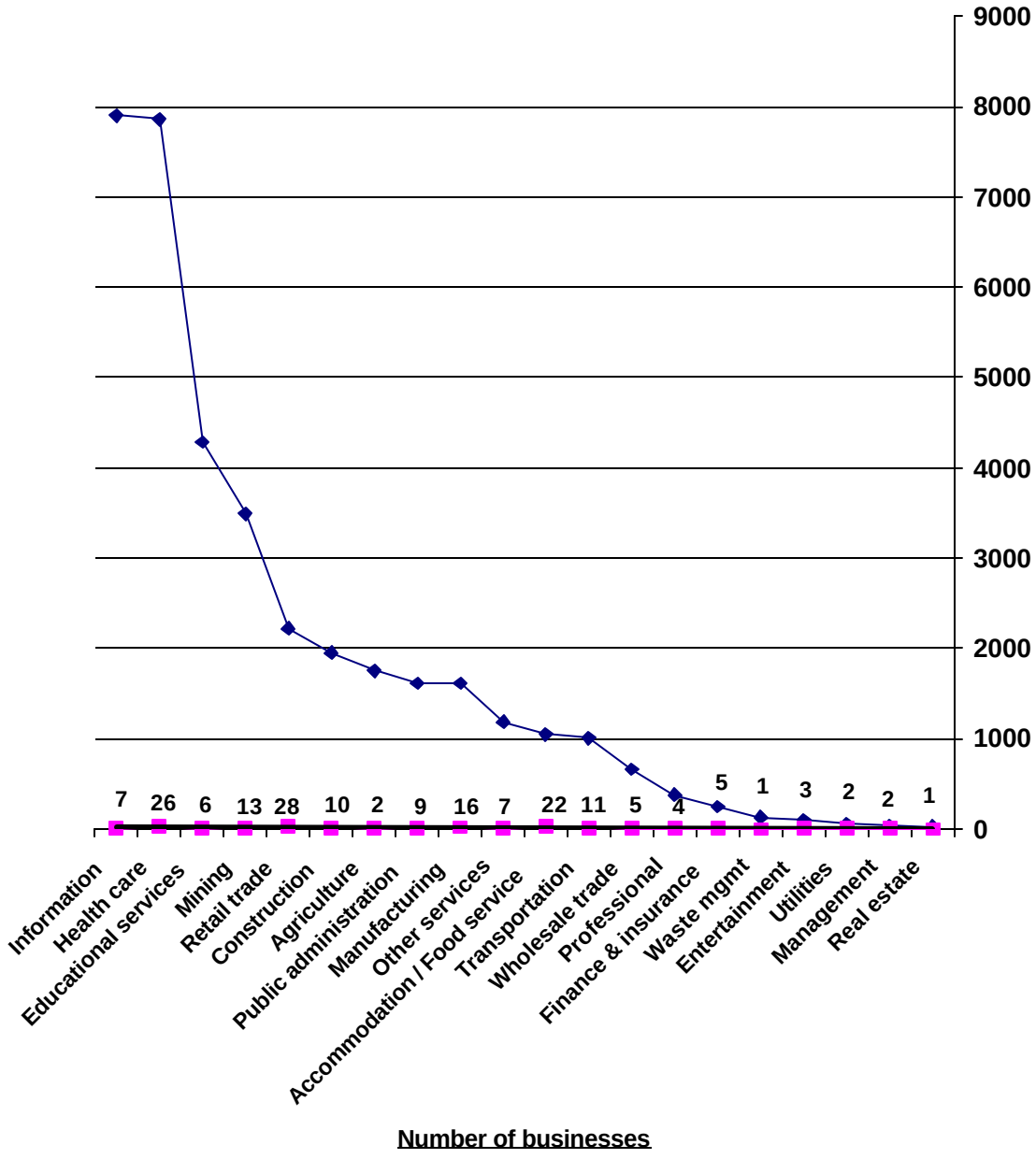


Exhibit 5: A comparison of the number of businesses per industry vs. number of employees

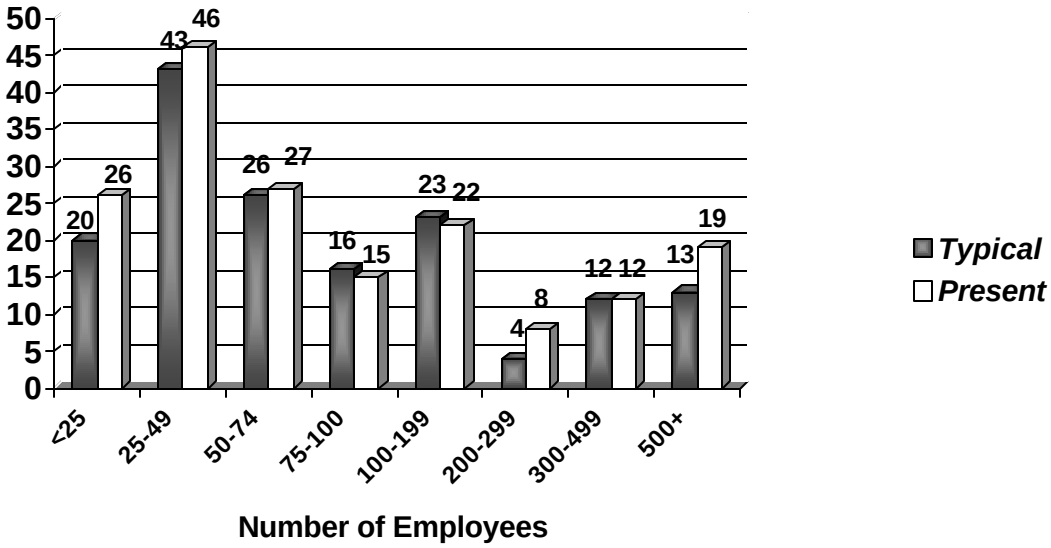


NOTE: Numbers along the bottom of the above chart represent number of businesses. The data illustrates that businesses in some of the industries employ a proportionately higher number of employees than are employed by businesses in other industries. As examples, businesses in the information industry appear to employ more employees per business than businesses in the construction industry. Agricultural related businesses employ more employees per business than businesses in the utilities industry. Though a relatively high number (26) of health care-related businesses responded to the survey,

which represented one of the highest number (7,858) of employees, 28 responses came from the retail trade industry, which represented 2,217 employees.

Employers that were interviewed said that they typically employ a total of 30,612 employees. When comparing this data with the present number of individuals currently employed by these firms, overall employment numbers appear to be higher – with present employment higher than typical annual employment. See Exhibit 6.

Exhibit 6: Overall typical employment vs. present employment among survey respondents.

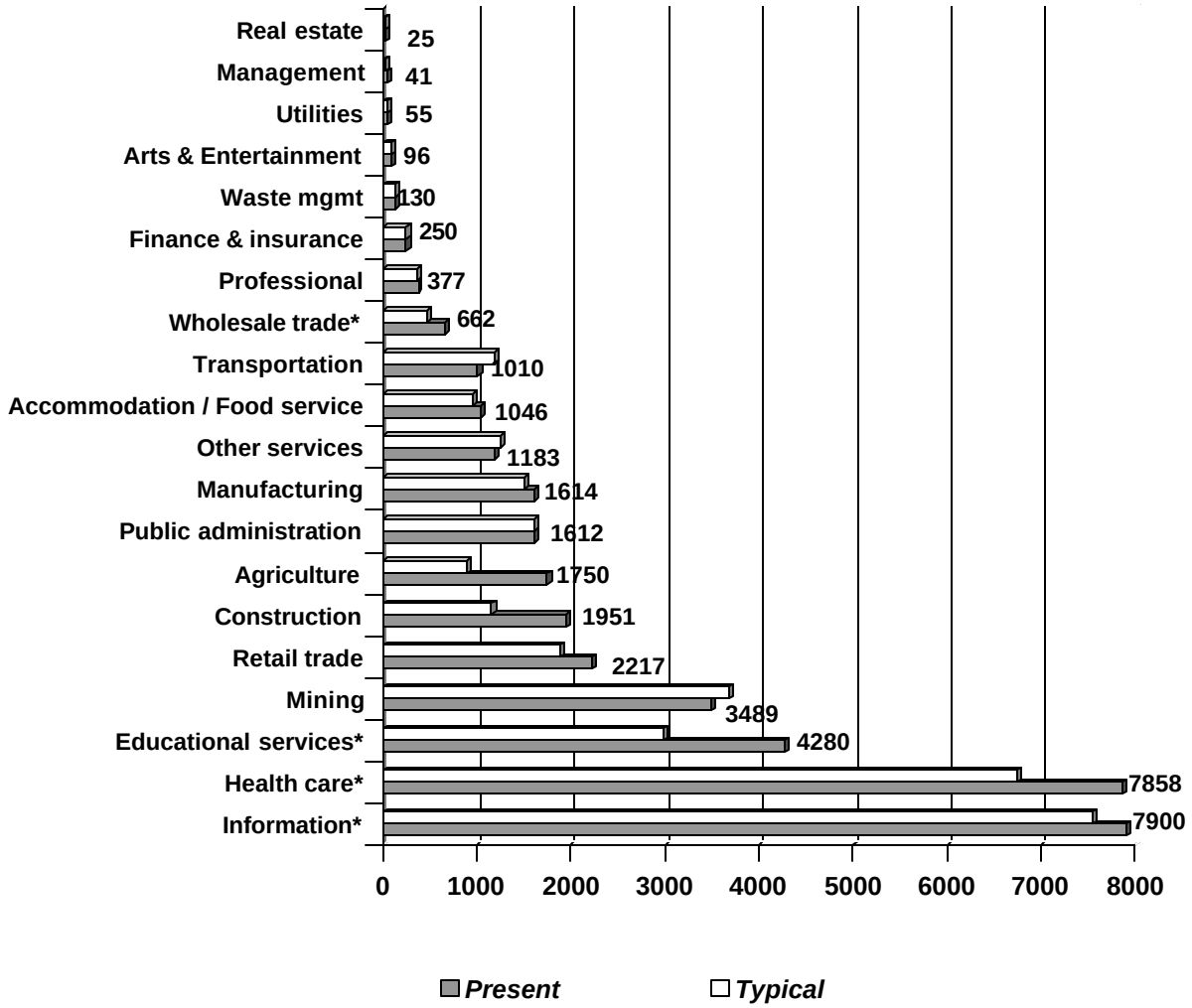


Typical employment vs. present employment per industry is illustrated in Exhibit 7. It should be noted that surveys from some of the businesses in industries containing the larger number of employees did not provide a typical number of employees, therefore, the present vs. typical number of employee 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. Transportation, other services, and mining all demonstrated typical employment being greater than current employment; whereas current employment in retail trade, construction, agriculture, manufacturing, and accommodation / food service, is greater than the typical employment in these industries.

It should be noted that throughout this document, adding the number of employees by industry will not accurately represent the total number of workers due to firms reporting belonging to more than one industry.

Exhibit 7: Present number of employees vs. typical number of employees per industry.



**denotes industries containing businesses which provided no answer to the "typical" estimate.*

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

NEW HIRES:

During their interview, company representatives told CBER survey specialists that they typically hire 8,800 new employees (collectively) per year. Eighteen companies have no new annual hires, while 21 companies hire 100 or more employees over the course of a year. Information, health care, and mining collectively account for over 60% of the annual hires in Region 2, while accommodation / food service, retail trade, and professional services collectively account for 20% of the typical annual hires in this region of the state. Exhibits 8 & 9 illustrate.

Exhibit 8: New hires in a typical year.

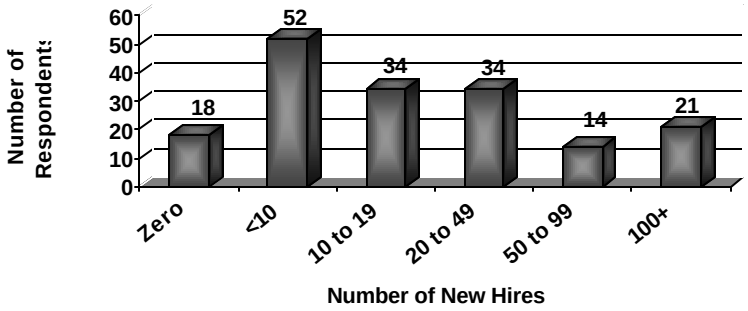


Exhibit 9: Total new hires by industry:

Industry	New Hires	Percentage of Overall New Hires
Information	2990	33.9%
Health care	1625	18.5%
Mining	885	10.1%
Accommodation / Food service	687	7.8%
Retail trade	627	7.1%
Professional	462	5.3%
Construction	310	3.5%
Transportation	248	2.8%
Educational services	220	2.5%
Other services	218	2.5%
Manufacturing	163	1.9%
Agriculture	150	1.7%
Public administration	88	1.0%
Wholesale trade	54	<1%
Arts & Entertainment	30	<1%
Finance & insurance	27	<1%
Management	6	<1%
Waste management	4	<1%
Real estate	3	<1%
Utilities	3	<1%

RECRUITMENT METHODS:

Newspaper advertisements, walk-ins, referrals, and promoting from within are the top recruiting methods responding firms 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 promoting from within was the most useful recruiting method with 78 firms ranking this particular method with a 1 or 2. Walk-ins were the second-most useful recruitment method among 71of the respondents.

Exhibit 10 demonstrates the perceived usefulness of the advertising method by the employers, while Exhibit 11 compares the popularity of various recruitment methods used by businesses to attract new employees.

Exhibit 10: Most often utilized recruitment methods.

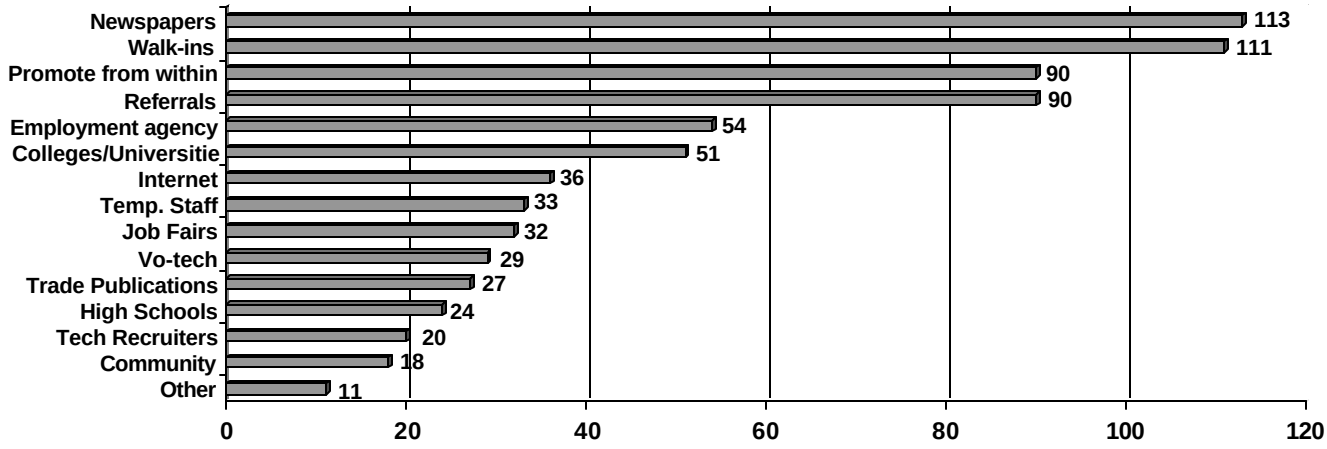
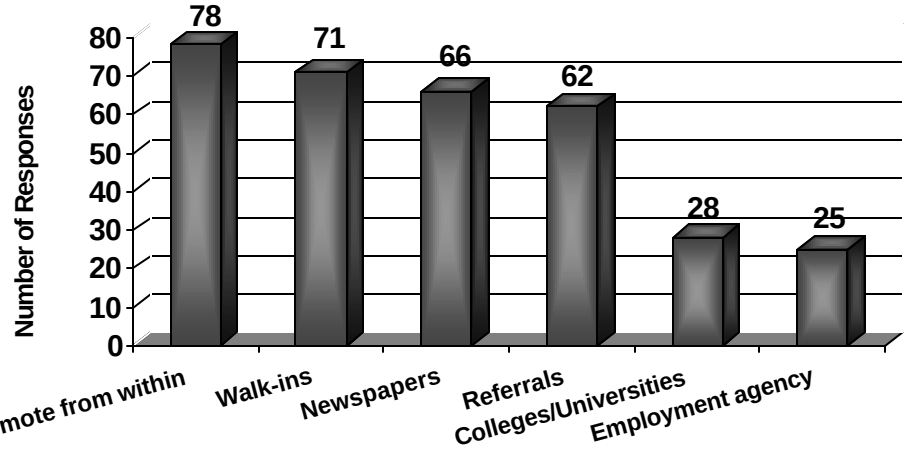


Exhibit 11: Most useful recruiting method for new employees.



It is worthy to note that while remaining in the top six, the most often utilized recruitment methods when compared to employers' perception of the most useful change in rank. For example, the most often utilized recruitment method is through advertisements in the newspaper; however, employers ranked it third when indicating their perception of the most useful recruiting methods for new employees. The data also indicates that walk-ins meet with a great deal of employment success – all the more reason to prepare the workforce for a job interview.

Exhibit 12 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 promoting from within were the most popular recruiting methods of choice reported by most of the industries. Trade publications are favored by the agriculture industry, while educational services favor colleges and universities for recruiting new employees. Job fairs, high schools, vocational-technical schools, community colleges, temporary staff, and technical recruiters are the least utilized.

Exhibit 12: Employee recruiting methods by industry.

Industry	Recruitment Method														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Information	7	2	1	1	1	1	2	1	4	2	2	1	0	4	1
Health care	25	15	12	5	8	8	14	10	19	8	11	9	9	13	1
Mining	8	8	1	1	3	0	2	2	8	2	6	1	3	5	1
Accommodation / Food service	17	16	1	5	2	1	6	1	19	2	7	1	1	16	0
Retail trade	13	18	3	6	5	1	3	2	28	5	6	2	3	12	0
Professional	2	4	2	0	1	0	0	1	3	1	1	0	0	3	0
Construction	6	6	2	2	2	2	2	3	5	2	5	1	2	5	1
Transportation	8	7	1	1	3	1	5	5	7	3	3	1	1	5	1
Educational services	5	4	3	0	0	0	6	5	3	2	0	1	1	4	1
Other services	5	3	1	1	0	1	1	2	2	1	0	0	3	3	0
Manufacturing	8	8	3	2	3	2	6	2	7	3	6	1	3	10	1
Agriculture	1	1	0	0	0	0	0	1	0	0	1	0	1	0	0
Public administration	3	1	0	0	0	0	2	1	2	1	2	0	1	4	2
Wholesale trade	3	3	1	0	0	1	2	1	4	2	4	0	1	4	0
Arts & Entertainment	2	1	0	0	0	0	1	1	2	1	1	1	0	1	1
Finance & insurance	2	1	1	1	1	0	1	0	3	0	1	0	0	3	0
Management	1	1	0	0	0	0	0	0	0	0	0	0	0	2	0
Waste management	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Real estate	1	1	1	1	1	1	1	0	1	1	1	1	0	1	0
Utilities	1	1	1	0	0	0	0	0	1	1	1	0	0	2	0

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 area 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. *(Note, not all percentages 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 13: Importance of basic reading skills.

Basic Reading	Importance Ranking										
	Most important →										Least important
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	21	78%	4	15%	2	7%	0	0	0	0	27
Health care	22	85%	4	15%	0	0	0	0	0	0	26
Accommodations / food	16	73%	1	5%	4	18%	1	5%	0	0	22
Manufacturing	9	56%	3	19%	4	25%	0	0	0	0	16
Mining	7	58%	3	25%	0	0	0	0	2	17%	12
Transportation	9	82%	0	0	1	9%	0	0	1	9%	11
Construction	5	50%	2	20%	0	0	1	10%	2	20%	10
Public administration	7	78%	1	11%	0	0	0	0	1	11%	9
Information	5	71%	0	0	2	29%	0	0	0	0	7
Other services	7	100%	0	0	0	0	0	0	0	0	7
Educational services	6	100%	0	0	0	0	0	0	0	0	6
Finance	5	100%	0	0	0	0	0	0	0	0	5
Wholesale trade	4	80%	1	20%	0	0	0	0	0	0	5
Professional services	3	75%	0	0	0	0	0	0	1	25%	4
Entertainment / arts	1	33%	1	33%	0	0	0	0	1	33%	3
Management	2	100%	0	0	0	0	0	0	0	0	2
Agriculture	1	50%	1	50%	0	0	0	0	0	0	2
Utilities	1	50%	1	50%	0	0	0	0	0	0	2
Real estate	0	0	0	0	0	0	1	100%	0	0	1
Waste management	0	0	0	0	1	100%	0	0	0	0	1

Basic reading appears be most important to the majority of the industries. With the exception of entertainment / arts, real estate, and waste management, basic reading skills was given the high score of a 1 or 2 by at least 70% of the responding businesses. It should be noted that 100% of the respondents in the education, finance, management and other services industries ranked basic reading as a number one 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 14: Importance of intermediate reading skills.

Intermediate Reading	Importance Ranking										
	Most important →								Least important		
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	9	33%	8	30%	7	26%	2	7%	1	4%	27
Health care	16	62%	6	23%	4	15%	0	0	0	0	26
Accommodations / food	2	9%	6	27%	8	36%	2	9%	4	18%	22
Manufacturing	7	44%	4	25%	5	31%	0	0	0	0	16
Mining	0	0	5	46%	2	18%	2	18%	2	18%	11
Transportation	4	36%	2	18%	1	9%	3	27%	1	9%	11
Construction	3	30%	2	20%	2	20%	1	10%	2	20%	10
Public administration	6	75%	1	13%	0	0	1	13%	0	0	8
Information	4	57%	1	14%	2	29%	0	0	0	0	7
Other services	5	83%	0	0	0	0	0	0	1	17%	6
Educational services	5	83%	1	17%	0	0	0	0	0	0	6
Finance	3	60%	0	0	2	40%	0	0	0	0	5
Wholesale trade	2	40%	1	20%	2	40%	0	0	0	0	5
Professional services	2	50%	0	0	0	0	0	0	2	50%	4
Entertainment / arts	0	0	0	0	1	33%	1	33%	1	33%	3
Management	2	100%	0	0	0	0	0	0	0	0	2
Agriculture	1	50%	1	50%	0	0	0	0	0	0	2
Utilities	2	100%	0	0	0	0	0	0	0	0	2
Real estate	0	0	0	0	0	0	1	100%	0	0	1
Waste management	0	0	0	0	1	100%	0	0	0	0	1

The importance of intermediate reading requirements among employers begins to shift slightly toward less essential amid some industries. Whereas basic reading skills were important to at least 70% of the businesses responding to the survey (ranking 1 or 2), the importance of intermediate reading skills requirements drop to as low as zero in the waste management, real estate, and entertainment/arts industries.

Intermediate reading skills remain extremely important (ranking 1 or 2) to businesses hiring in the utilities, agriculture, management, and educational services 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.

Advanced reading. Advanced reading skills are defined as more complex reading, ascertaining meaning of uncommon jargon or technical terms from context of reading material, and recognizing probable 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 15 below.

Exhibit 15: Importance of advanced reading skills.

Advanced Reading	Importance Ranking										
	Most important →									Least important	
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	4	15%	6	22%	9	33%	4	15%	4	15%	27
Health care	3	12%	10	39%	6	23%	3	12%	4	15%	26
Accommodations / food	0	0%	2	9%	4	18%	5	23%	11	50%	22
Manufacturing	4	25%	3	19%	3	19%	1	6%	5	31%	16
Mining	2	18%	4	36%	1	9%	2	18%	2	18%	11
Transportation	0	0%	2	20%	2	20%	4	40%	2	20%	10
Construction	1	10%	1	10%	3	30%	1	10%	4	40%	10
Public administration	3	38%	0	0%	2	25%	3	38%	0	0%	8
Information	2	29%	2	29%	3	43%	0	0%	0	0%	7
Other services	1	17%	0	0%	2	33%	1	17%	2	33%	6
Educational services	4	67%	2	33%	0	0%	0	0%	0	0%	6
Finance	1	20%	1	20%	2	40%	0	0%	1	20%	5
Wholesale trade	0	0%	2	40%	1	20%	0	0%	2	40%	5
Professional services	1	25%	0	0%	1	25%	0	0%	2	50%	4
Entertainment / arts	0	0%	0	0%	1	33%	1	33%	1	33%	3
Management	1	50%	0	0%	1	50%	0	0	0	0	2
Agriculture	0	0%	1	50%	1	50%	0	0%	0	0%	2
Utilities	1	50%	0	0%	1	50%	0	0%	0	0%	2
Real estate	0	0%	0	0%	0	0%	1	100%	0	0%	1
Waste management	0	0%	0	0%	1	100%	0	0%	0	0%	1

Advanced reading is most important to the education industry 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 health care industry, mining industry, information industry, management industry, agriculture industry, and utilities industry with at least 50% of the businesses from each indicating it as a desired job skill.

On the contrary, businesses in the accommodations / food industry, transportation industry, entertainment / arts industry, waste management industry, and real estate industry placed little importance on advanced reading skills.

Overall reading. Exhibit 16 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, 25 businesses emphasize the importance of basic reading, placing a 93% level of importance on the basic reading skill. When asked about intermediate reading, however, 17 businesses in the retail trade industry (63%) rank 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 37% or 10 respondents. Exhibit 16 details this information.

Exhibit 16: Overall reading requirements by industry.

Total Reading	RANKINGS											
	Basic Reading				Intermediate Reading				Advanced Reading			
	1		2		1		2		1		2	
By Industry	#	%	#	%	#	%	#	%	#	%	#	%
Retail trade	21	78%	4	15%	9	33%	8	30%	4	15%	6	22%
Health care	22	85%	4	15%	16	62%	6	23%	3	12%	10	39%
Accommodations / food	16	73%	1	5%	2	9%	6	27%	0	0%	2	9%
Manufacturing	9	56%	3	19%	7	44%	4	25%	4	25%	3	19%
Mining	7	58%	3	25%	0	0%	5	46%	2	18%	4	36%
Transportation	9	82%	0	0%	4	36%	2	18%	0	0%	2	20%
Construction	5	50%	2	20%	3	30%	2	20%	1	10%	1	10%
Public administration	7	78%	1	11%	6	75%	1	13%	3	38%	0	0%
Information	5	71%	0	0%	4	57%	1	14%	2	29%	2	29%
Other services	7	100%	0	0%	5	83%	0	0%	1	17%	0	0%
Educational services	6	100%	0	0%	5	83%	1	17%	4	67%	2	33%
Finance	5	100%	0	0%	3	60%	0	0%	1	20%	1	20%
Wholesale trade	4	80%	1	20%	2	40%	1	20%	0	0%	2	40%
Professional services	3	75%	0	0%	2	50%	0	0%	1	25%	0	0%
Entertainment / arts	1	33%	1	33%	0	0%	0	0%	0	0%	0	0%
Management	2	100%	0	0%	2	100%	0	0%	1	50%	0	0%
Agriculture	1	50%	1	50%	1	50%	1	50%	0	0%	1	50%
Utilities	1	50%	1	50%	2	100%	0	0%	1	50%	0	0%
Real estate	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Waste management	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

With the exception of the mining industry, which increases slightly from a desire for intermediate reading skills to a desire for advanced reading skills, and education, for which reading importance 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.

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 17.

Exhibit 17: Importance of basic math skills.

Basic Math	Importance Ranking										
	Most important → Least important										
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	21	78%	2	7%	2	7%	2	7%	0	0%	27
Health care	13	50%	6	23%	4	15%	2	8%	1	4%	26
Accommodations / food	15	68%	2	9%	4	18%	1	5%	0	0%	22
Manufacturing	8	50%	4	25%	4	25%	0	0%	0	0%	16
Mining	5	46%	4	36%	0	0%	0	0%	2	18%	11
Transportation	6	55%	2	18%	1	9%	1	9%	1	9%	11
Construction	6	60%	0	0%	2	20%	0	0%	2	20%	10
Public administration	6	67%	0	0%	3	33%	0	0%	0	0%	9
Information	2	29%	0	0%	0	0%	3	43%	2	29%	7
Other services	6	86%	1	14%	0	0%	0	0%	0	0%	7
Educational services	6	100%	0	0%	0	0%	0	0%	0	0%	6
Finance	4	80%	0	0%	1	20%	0	0%	0	0%	5
Wholesale trade	3	60%	0	0%	1	20%	1	20%	0	0%	5
Professional services	2	50%	1	25%	0	0%	0	0%	1	25%	4
Entertainment / arts	2	67%	1	33%	0	0%	0	0%	0	0%	3
Management	1	50%	1	50%	0	0%	0	0%	0	0%	2
Agriculture	2	100%	0	0%	0	0%	0	0%	0	0%	2
Utilities	1	50%	1	50%	0	0%	0	0%	0	0%	2
Real estate	0	0%	0	0%	1	100%	0	0%	0	0%	1
Waste management	0	0%	0	0%	1	100%	0	0%	0	0%	1

The importance of basic math requirements varies more among the industries than did basic reading skills. Industries placing the most importance (80% or above with combined ranking of 1 & 2 for highest importance) on basic math include retail trade, mining, other services, education, finance, entertainment/arts, management, agriculture, and utilities.

The information industry appears to place the least importance on employees having basic math skills.

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 18 explains.

Exhibit 18: Importance of intermediate math skills.

Intermediate Math	Importance Ranking										
	Most important →								Least important		
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	13	52%	5	20%	4	16%	2	8%	1	4%	25
Health care	7	27%	8	31%	5	19%	2	8%	4	15%	26
Accommodations / food	8	36%	3	14%	7	32%	4	18%	0	0%	22
Manufacturing	7	44%	4	25%	5	31%	0	0%	0	0%	16
Mining	1	8%	6	50%	1	8%	1	8%	3	25%	12
Transportation	2	18%	2	18%	3	27%	3	27%	1	9%	11
Construction	3	30%	3	30%	0	0%	1	10%	3	30%	10
Public administration	4	50%	1	13%	0	0%	2	25%	1	13%	8
Information	1	14%	1	14%	0	0%	3	43%	2	29%	7
Other services	3	50%	1	17%	0	0%	0	0%	2	33%	6
Educational services	4	67%	2	33%	0	0%	0	0%	0	0%	6
Finance	2	40%	1	20%	2	40%	0	0%	0	0%	5
Wholesale trade	1	20%	1	20%	2	40%	1	20%	0	0%	5
Professional services	3	75%	0	0%	0	0%	0	0%	1	25%	4
Entertainment / arts	1	33%	0	0%	1	33%	1	33%	0	0%	3
Management	1	50%	1	50%	0	0%	0	0%	0	0%	2
Agriculture	1	50%	1	50%	0	0%	0	0%	0	0%	2
Utilities	2	100%	0	0%	0	0%	0	0%	0	0%	2
Real estate	0	0%	0	0%	1	100%	0	0%	0	0%	1
Waste management	0	0%	0	0%	1	100%	0	0%	0	0%	1

The importance of intermediate math requirements is prevalent among the education, management, agriculture, 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 professional services and retail trade industries also ranked intermediate math skills as important with cumulative 1 or 2 markings as 75% and 72%, respectively.

Of all of the industries, the information industry is least likely to seek employees with an intermediate math background, as 72% of the respondents ranked this skill as a 4 or 5.

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 19 illustrates.

Exhibit 19: Importance of advanced math skills.

Advanced Math	Importance Ranking										
	Most important →								Least important		
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	3	12%	1	4%	8	32%	5	20%	8	32%	25
Health care	4	15%	6	23%	4	15%	3	12%	9	35%	26
Accommodations / food	0	0%	1	5%	3	14%	3	14%	15	68%	22
Manufacturing	5	31%	4	25%	2	13%	1	6%	4	25%	16
Mining	2	18%	4	36%	1	9%	1	9%	3	27%	11
Transportation	3	30%	0	0%	2	20%	2	20%	3	30%	10
Construction	3	30%	0	0%	0	0%	1	10%	6	60%	10
Public administration	2	25%	0	0%	2	25%	2	25%	2	25%	8
Information	0	0%	0	0%	1	14%	4	57%	2	29%	7
Other services	1	17%	0	0%	0	0%	2	33%	3	50%	6
Educational services	3	50%	1	17%	1	17%	1	17%	0	0%	6
Finance	1	20%	1	20%	2	40%	0	0%	1	20%	5
Wholesale trade	2	40%	0	0%	1	20%	0	0%	2	40%	5
Professional services	0	0%	0	0%	0	0%	1	25%	3	75%	4
Entertainment / arts	1	33%	0	0%	0	0%	2	67%	0	0%	3
Management	0	0%	1	50%	1	50%	0	0%	0	0%	2
Agriculture	2	100%	0	0%	0	0%	0	0%	0	0%	2
Utilities	1	50%	0	0%	0	0%	0	0%	1	50%	2
Real estate	0	0%	0	0%	1	100%	0	0%	0	0%	1
Waste management	0	0%	0	0%	1	100%	0	0%	0	0%	1

The importance of advanced math requirements is most prevalent in the agriculture industry with 100% of the respondents ranking advanced math with high importance. Respondents from the manufacturing, mining, and education industries also ranked advanced math as important -- 56%, 54%, and 67% respectively.

Professional services ranked advanced math as least importance with 100% of the respondents giving this particular skill a 4 or 5. Business respondents from the accommodation / food industry, construction industry, information industry, professional services industry, and other services industry also indicated that advanced math was not a necessary skill for job placement within their respective industries.

Overall math requirements. Exhibit 20 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, which comprise the various industries listed below, math requirements become less important among more industries as math difficulty increases. Exhibit 20 explains this in further detail.

Exhibit 20: Overall math requirements by industry.

Total Math	RANKINGS											
	Basic Math				Intermediate Math				Advanced Math			
	1		2		1		2		1		2	
By Industry	#	%	#	%	#	%	#	%	#	%	#	%
Retail trade	21	78%	2	7%	13	52%	5	20%	3	12%	1	40%
Health care	13	50%	6	23%	7	27%	8	31%	4	15%	6	23%
Accommodations / food	15	68%	2	9%	8	36%	3	14%	0	0%	1	5%
Manufacturing	8	50%	4	25%	7	44%	4	25%	5	31%	4	25%
Mining	5	46%	4	36%	1	8%	6	50%	2	18%	4	36%
Transportation	6	55%	2	18%	2	18%	2	18%	3	30%	0	0%
Construction	6	60%	0	0%	3	30%	3	30%	3	30%	0	0%
Public administration	6	67%	0	0%	4	50%	1	13%	2	25%	0	0%
Information	2	29%	0	0%	1	14%	1	14%	0	0%	0	0%
Other services	6	86%	1	14%	3	50%	1	17%	1	17%	0	0%
Educational services	6	100%	0	0%	4	67%	2	33%	3	50%	1	17%
Finance	4	80%	0	0%	2	40%	1	20%	1	20%	1	20%
Wholesale trade	3	60%	0	0%	1	20%	1	20%	2	40%	0	0%
Professional services	2	50%	1	25%	3	75%	0	0%	0	0%	0	0%
Entertainment / arts	2	67%	1	33%	1	33%	0	0%	1	33%	0	0%
Management	1	50%	1	50%	1	50%	1	50%	0	0%	1	50%
Agriculture	2	100%	0	0%	1	50%	1	50%	2	100%	0	0%
Utilities	1	50%	1	50%	2	100%	0	0%	1	50%	0	0%
Real estate	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Waste management	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

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 the exception of real estate and waste management.

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 21 explains.

Exhibit 21: Importance of basic writing skills.

Basic Writing	Importance Ranking										
	Most important →										Least important
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	13	48%	4	15%	7	26%	1	4%	2	7%	27
Health care	19	73%	4	15%	2	8%	0	0%	1	4%	26
Accommodations / food	21	96%	0	0%	1	5%	0	0%	0	0%	22
Manufacturing	3	19%	2	13%	8	50%	2	13%	1	6%	16
Mining	0	0%	5	42%	3	25%	3	25%	1	8%	12
Transportation	5	46%	0	0%	2	18%	2	18%	2	18%	11
Construction	3	30%	2	20%	3	30%	0	0%	2	20%	10
Public administration	7	78%	1	11%	0	0%	1	11%	0	0%	9
Information	2	29%	2	29%	2	29%	1	14%	0	0%	7
Other services	1	14%	5	71%	1	14%	0	0%	0	0%	7
Educational services	5	83%	1	17%	0	0%	0	0%	0	0%	6
Finance	3	60%	0	0%	2	40%	0	0%	0	0%	5
Wholesale trade	4	80%	1	20%	0	0%	0	0%	0	0%	5
Professional services	4	100%	0	0%	0	0%	0	0%	0	0%	4
Entertainment / arts	1	33%	1	33%	0	0%	0	0%	1	33%	3
Management	1	50%	0	0%	1	50%	0	0%	0	0%	2
Agriculture	0	0%	2	100%	0	0%	0	0%	0	0%	2
Utilities	2	100%	0	0%	0	0%	0	0%	0	0%	2
Real estate	0	0%	0	0%	1	100%	0	0%	0	0%	1
Waste management	0	0%	0	0%	1	100%	0	0%	0	0%	1

The importance of basic writing skills is readily apparent among the utilities, agriculture, professional services, wholesale trade, and education industries – with 100% of the businesses in each of these industries ranking this skill importance as a 1 or 2 priority. Over 85% of the business representatives in the health, accommodations/food, public administration, and other services industries ranked 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 22 depicts their responses.

Exhibit 22: Importance of listening skills.

Listening Skills	Importance Ranking										
	Most important →									Least important	
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	24	89%	2	7%	1	4%	0	0%	0	0%	27
Health care	23	89%	2	8%	1	4%	0	0%	0	0%	26
Accommodations / food	21	96%	0	0%	1	5%	0	0%	0	0%	22
Manufacturing	11	69%	4	25%	1	6%	0	0%	0	0%	16
Mining	6	46%	5	39%	1	8%	1	8%	0	0%	13
Transportation	8	73%	2	18%	1	9%	0	0%	0	0%	11
Construction	6	60%	3	30%	0	0%	0	0%	1	10%	10
Public administration	7	78%	0	0%	1	11%	1	11%	0	0%	9
Information	5	71%	2	29%	0	0%	0	0%	0	0%	7
Other services	5	71%	1	14%	1	14%	0	0%	0	0%	7
Educational services	5	83%	1	17%	0	0%	0	0%	0	0%	6
Finance	5	100%	0	0%	0	0%	0	0%	0	0%	5
Wholesale trade	3	60%	1	20%	1	20%	0	0%	0	0%	5
Professional services	4	100%	0	0%	0	0%	0	0%	0	0%	4
Entertainment / arts	0	0%	2	68%	0	0%	1	33%	0	0%	3
Management	2	100%	0	0%	0	0%	0	0%	0	0%	2
Agriculture	1	50%	1	50%	0	0%	0	0%	0	0%	2
Utilities	2	100%	0	0%	0	0%	0	0%	0	0%	2
Real estate	1	100%	0	0%	0	0%	0	0%	0	0%	1
Waste management	0	0%	1	100%	0	0%	0	0%	0	0%	1

Though listening skills carried a high degree of importance among most of the survey respondents, 100% of the businesses in the information industry, educational services, finance industry, professional services industry, management industry, agriculture industry, utilities industry, real estate industry, and waste management industry ranked this skill with a 1 or 2 importance rating.

Only one business in the construction industry ranked listening skills as a least important work skill.

Customer relation 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 23 depicts their responses.

Exhibit 23: Importance of customer relations' skills.

Customer Relations Skills	Importance Ranking										
	Most important →								Least important		
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	26	96%	1	4%	0	0%	0	0%	0	0%	27
Health care	22	88%	2	8%	0	0%	0	0%	1	4%	25
Accommodations / food	22	100%	0	0%	0	0%	0	0%	0	0%	22
Manufacturing	8	50%	2	13%	3	19%	2	13%	1	6%	16
Mining	4	33%	1	8%	1	8%	2	17%	4	33%	12
Transportation	7	70%	1	10%	1	10%	0	0%	1	10%	10
Construction	5	56%	2	22%	1	11%	1	11%	0	0%	9
Public administration	5	56%	2	22%	2	22%	0	0%	0	0%	9
Information	4	57%	1	14%	2	29%	0	0%	0	0%	7
Other services	6	86%	0	0%	0	0%	1	14%	0	0%	7
Educational services	3	60%	1	20%	1	20%	0	0%	0	0%	5
Finance	4	100%	0	0%	0	0%	0	0%	0	0%	4
Wholesale trade	4	80%	0	0%	1	20%	0	0%	0	0%	5
Professional services	3	75%	0	0%	0	0%	1	25%	0	0%	4
Entertainment / arts	3	100%	0	0%	0	0%	0	0%	0	0%	3
Management	2	100%	0	0%	0	0%	0	0%	0	0%	2
Agriculture	1	100%	0	0%	0	0%	0	0%	0	0%	1
Utilities	1	50%	1	50%	0	0%	0	0%	0	0%	2
Real estate	0	0%	1	100%	0	0%	0	0%	0	0%	1
Waste management	0	0%	0	0%	0	0%	1	100%	0	0%	1

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

Businesses in the mining industry and waste management industry were least concerned about customer relations skills.

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 24 illustrates.

Exhibit 24: Importance of teamwork skills.

Teamwork Skills	Importance Ranking										
	Most important →									Least important	
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	23	85%	3	11%	1	4%	0	0%	0	0%	27
Health care	23	89%	0	0%	1	4%	1	4%	1	4%	26
Accommodations / food	22	100%	0	0%	0	0%	0	0%	0	0%	22
Manufacturing	10	63%	3	19%	1	6%	2	13%	0	0%	16
Mining	10	77%	2	15%	1	8%	0	0%	0	0%	13
Transportation	6	55%	2	18%	1	9%	1	9%	1	9%	11
Construction	7	70%	3	30%	0	0%	0	0%	0	0%	10
Public administration	7	78%	0	0%	1	11%	1	11%	0	0%	9
Information	3	43%	3	43%	1	14%	0	0%	0	0%	7
Other services	7	100%	0	0%	0	0%	0	0%	0	0%	7
Educational services	5	83%	1	17%	0	0%	0	0%	0	0%	6
Finance	5	100%	0	0%	0	0%	0	0%	0	0%	5
Wholesale trade	4	80%	1	20%	0	0%	0	0%	0	0%	5
Professional services	2	50%	0	0%	2	50%	0	0%	0	0%	4
Entertainment / arts	1	33%	1	33%	1	33%	0	0%	0	0%	3
Management	1	50%	0	0%	1	50%	0	0%	0	0%	2
Agriculture	1	50%	1	50%	0	0%	0	0%	0	0%	2
Utilities	0	0%	1	50%	1	50%	0	0%	0	0%	2
Real estate	0	0%	1	100%	0	0%	0	0%	0	0%	1
Waste management	0	0%	0	0%	1	100%	0	0%	0	0%	1

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: accommodations / food, construction, other services, education, finance, wholesale trade, agriculture, and real estate. Other industries such as retail trade and mining 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.

Only one business in health care and one business in transportation ranked team building as unimportant (ranked 5).

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 25: Importance of observation skills.

Observation Skills	Importance Ranking										
	Most important → Least important										
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	20	74%	7	26%	0	0%	0	0%	0	0%	27
Health care	22	85%	4	15%	0	0%	0	0%	0	0%	26
Accommodations / food	17	77%	2	9%	3	14%	0	0%	0	0%	22
Manufacturing	11	69%	4	25%	0	0%	1	6%	0	0%	16
Mining	11	85%	1	8%	1	8%	0	0%	0	0%	13
Transportation	10	91%	0	0%	1	9%	0	0%	0	0%	11
Construction	8	80%	1	10%	1	10%	0	0%	0	0%	10
Public administration	6	67%	0	0%	2	22%	1	11%	0	0%	9
Information	4	57%	2	29%	0	0%	1	14%	0	0%	7
Other services	5	71%	0	0%	2	29%	0	0%	0	0%	7
Educational services	5	83%	1	17%	0	0%	0	0%	0	0%	6
Finance	4	80%	1	20%	0	0%	0	0%	0	0%	5
Wholesale trade	3	60%	2	40%	0	0%	0	0%	0	0%	5
Professional services	3	75%	0	0%	1	25%	0	0%	0	0%	4
Entertainment / arts	0	0%	0	0%	3	100%	0	0%	0	0%	3
Management	0	0%	1	50%	1	50%	0	0%	0	0%	2
Agriculture	2	100%	0	0%	0	0%	0	0%	0	0%	2
Utilities	1	50%	0	0%	1	50%	0	0%	0	0%	2
Real estate	0	0%	1	100%	0	0%	0	0%	0	0%	1
Waste management	1	100%	0	0%	0	0%	0	0%	0	0%	1

The importance of observation skills to the responding businesses is most apparent in the retail trade industry, health care industry, education industry, finance industry, wholesale trade industry, agriculture industry, real estate industry, and waste management industry, 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 public administration industry, and one business in the information industry ranked observation skills with a 4. No business ranked this work skill with a 5. This suggests that observation skills have a medium to high importance ranking among all industries.

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 26 illustrates.

Exhibit 26: Importance of applied technology skills.

Applied Technology Skills	Importance Ranking										
	Most important →										Least important
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	3	12%	4	15%	4	15%	8	31%	7	27%	26
Health care	5	20%	4	16%	3	12%	2	8%	11	44%	25
Accommodations / food	1	5%	0	0%	3	14%	2	9%	16	73%	22
Manufacturing	6	38%	3	19%	2	13%	3	19%	2	13%	16
Mining	9	69%	4	31%	0	0%	0	0%	0	0%	13
Transportation	4	36%	1	9%	2	18%	1	9%	3	27%	11
Construction	4	40%	3	30%	1	10%	1	10%	1	10%	10
Public administration	2	25%	0	0%	3	38%	1	13%	2	25%	8
Information	3	50%	3	50%	0	0%	0	0%	0	0%	6
Other services	1	17%	0	0%	2	33%	0	0%	3	50%	6
Educational services	2	33%	2	33%	2	33%	0	0%	0	0%	6
Finance	1	20%	0	0%	3	60%	0	0%	1	20%	5
Wholesale trade	1	20%	1	20%	0	0%	0	0%	3	60%	5
Professional services	2	67%	0	0%	0	0%	0	0%	1	33%	3
Entertainment / arts	1	33%	0	0%	1	33%	0	0%	1	33%	3
Management	0	0%	0	0%	1	50%	0	0%	1	50%	2
Agriculture	0	0%	2	100%	0	0%	0	0%	0	0%	2
Utilities	2	100%	0	0%	0	0%	0	0%	0	0%	2
Real estate	0	0%	1	100%	0	0%	0	0%	0	0%	1
Waste management	0	0%	0	0%	1	100%	0	0%	0	0%	1

The importance of applied technology skills is prevalent among businesses in the mining and information industries with 100% of the respondents representing these industries placing a 1 or 2 importance ranking on this job skill. Additionally, 100% of all of the businesses representing the agriculture industry, utilities industry, and the real estate industry also placed a high importance emphasis on applied technology skills.

Applied technology skills were least important to the respondents in the accommodations / food industry with 82% ranking this skill as a 4 or 5.

Critical thinking skills. Employers were asked to rank the importance of critical thinking skills when they consider hiring new employees. Exhibit 27 illustrates the desire among the industries for this work skill.

Exhibit 27: Importance of critical thinking skills.

Critical Thinking Skills	Importance Ranking										
	Most important →								Least important		
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	3	12%	4	16%	7	28%	6	24%	5	20%	25
Health care	13	50%	6	23%	5	19%	1	4%	1	4%	26
Accommodations / food	2	9%	4	18%	6	27%	7	32%	3	14%	22
Manufacturing	3	20%	1	7%	9	60%	2	13%	0	0%	15
Mining	7	58%	4	33%	1	8%	0	0%	0	0%	12
Transportation	4	36%	3	27%	2	18%	1	9%	1	9%	11
Construction	5	50%	4	40%	0	0%	1	10%	0	0%	10
Public administration	3	33%	3	33%	1	11%	1	11%	1	11%	9
Information	0	0%	2	29%	3	43%	2	29%	0	0%	7
Other services	3	43%	1	14%	1	14%	0	0%	2	29%	7
Educational services	4	68%	2	33%	0	0%	0	0%	0	0%	6
Finance	3	60%	1	20%	1	20%	0	0%	0	0%	5
Wholesale trade	2	50%	1	25%	0	0%	1	25%	0	0%	4
Professional services	1	33%	1	33%	0	0%	1	33%	0	0%	3
Entertainment / arts	0	0%	1	33%	1	33%	0	0%	1	33%	3
Management	0	0%	0	0%	2	100%	0	0%	0	0%	2
Agriculture	1	50%	1	50%	0	0%	0	0%	0	0%	2
Utilities	1	100%	0	0%	0	0%	0	0%	0	0%	1
Real estate	1	100%	0	0%	0	0%	0	0%	0	0%	1
Waste management	0	0%	0	0%	0	0%	1	100%	0	0%	1

The importance of critical thinking skills ranked highest among businesses in the education, agriculture, utilities, and real estate industries with 100% of the respondents giving this work skill a 1 or 2 ranking. At least 90% of the businesses in the mining industry and construction industry believed that critical thinking was a most important work skill.

With the exception of waste management, the other industries were mostly neutral in their view of the importance of critical thinking when hiring new employees.

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 firm.

Exhibit 28: Importance of locating information skills.

Locating Information Skills	Importance Ranking										
	Most important →								Least important		
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	7	27%	5	19%	3	12%	6	23%	5	19%	26
Health care	11	42%	3	12%	9	35%	2	8%	1	4%	26
Accommodations / food	5	23%	7	32%	4	18%	3	14%	3	14%	22
Manufacturing	4	25%	8	50%	3	19%	1	6%	0	0%	16
Mining	5	42%	4	33%	2	17%	1	8%	0	0%	12
Transportation	6	55%	0	0%	2	18%	1	9%	2	18%	11
Construction	5	56%	1	11%	2	22%	0	0%	1	11%	9
Public administration	0	0%	4	44%	2	22%	2	22%	1	11%	9
Information	1	14%	1	14%	1	14%	2	29%	2	29%	7
Other services	2	29%	2	29%	1	14%	1	14%	1	14%	7
Educational services	3	50%	2	33%	1	17%	0	0%	0	0%	6
Finance	3	60%	0	0%	1	20%	0	0%	1	20%	5
Wholesale trade	2	40%	1	20%	1	20%	1	20%	0	0%	5
Professional services	1	25%	1	25%	0	0%	0	0%	2	50%	4
Entertainment / arts	1	33%	0	0%	1	33%	0	0%	1	33%	3
Management	0	0%	0	0%	1	50%	0	0%	1	50%	2
Agriculture	1	50%	0	0%	1	50%	0	0%	0	0%	2
Utilities	1	50%	0	0%	0	0%	0	0%	1	50%	2
Real estate	0	0%	1	100%	0	0%	0	0%	0	0%	1
Waste management	0	0%	0	0%	0	0%	0	0%	1	100%	1

The respondent from the real estate industry indicated that locating information was an important work skill associated with that particular industry. Over 75 percent of the respondents from the manufacturing industry, mining industry, and educational services industry indicated that this particular work skill was a 1 or 2 importance priority.

Businesses from the information industry and from the waste management industry placed the least importance on the locating information job skill.

Data entry skills. Employers were asked to rank the importance they place on data entry skills when interviewing candidates applying for new jobs. Exhibit 29 explains.

Exhibit 29: 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	15%	5	19%	8	30%	8	30%	2	7%	27
Health care	7	28%	7	28%	8	32%	1	4%	2	8%	25
Accommodations / food	1	5%	4	19%	13	62%	2	10%	1	5%	21
Manufacturing	4	25%	0	0%	7	44%	3	19%	2	13%	16
Mining	1	9%	1	9%	3	27%	3	27%	3	27%	11
Transportation	2	18%	2	18%	2	18%	1	9%	4	36%	11
Construction	1	10%	0	0%	3	30%	2	20%	4	40%	10
Public administration	2	22%	3	33%	2	22%	1	11%	1	11%	9
Information	3	50%	3	50%	0	0%	0	0%	0	0%	6
Other services	1	20%	3	60%	1	20%	0	0%	0	0%	5
Educational services	2	33%	1	17%	3	50%	0	0%	0	0%	6
Finance	3	60%	2	40%	0	0%	0	0%	0	0%	5
Wholesale trade	2	40%	2	40%	1	20%	0	0%	0	0%	5
Professional services	2	67%	0	0%	1	33%	0	0%	0	0%	3
Entertainment / arts	0	0%	0	0%	1	33%	0	0%	2	67%	3
Management	1	50%	0	0%	1	50%	0	0%	0	0%	2
Agriculture	1	50%	0	0%	1	50%	0	0%	0	0%	2
Utilities	1	100%	0	0%	0	0%	0	0%	0	0%	1
Real estate	1	100%	0	0%	0	0%	0	0%	0	0%	1
Waste management	0	0%	0	0%	0	0%	0	0%	1	100%	1

The importance of data entry skills is apparent among the information industry, finance industry, utilities industry, and real estate industry with 100% of the respondents giving this work skill a 1 or 2 ranking. Over 50% of the respondents from health, public administration, other services, and wholesale trade also said that it was important for successful new hires to have data entry skills.

Data entry skills were of least importance to the mining, construction, entertainment /arts, and waste management industries.

Computer technical / hardware skills. Computer technical / hardware skills have been defined as a computer technician type of position 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 30 illustrates their responses.

Exhibit 30: 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	1	4%	1	4%	5	20%	7	28%	11	44%	25
Health care	5	20%	2	8%	4	16%	3	12%	11	44%	25
Accommodations / food	0	0%	0	0%	3	16%	0	0%	16	84%	19
Manufacturing	1	7%	1	7%	5	33%	3	20%	5	33%	15
Mining	0	0%	2	18%	3	27%	2	18%	4	36%	11
Transportation	0	0%	0	0%	1	10%	2	20%	7	70%	10
Construction	2	20%	0	0%	3	30%	1	10%	4	40%	10
Public administration	0	0%	1	13%	1	13%	4	50%	2	25%	8
Information	1	14%	1	14%	0	0%	3	43%	2	29%	7
Other services	1	17%	0	0%	2	33%	0	0%	3	50%	6
Educational services	1	17%	2	33%	1	17%	1	17%	1	17%	6
Finance	1	20%	0	0%	2	40%	1	20%	1	20%	5
Wholesale trade	0	0%	2	40%	1	20%	1	20%	1	20%	5
Professional services	0	0%	0	0%	0	0%	1	25%	3	75%	4
Entertainment / arts	0	0%	0	0%	0	0%	1	33%	2	67%	3
Management	0	0%	0	0%	0	0%	0	0%	2	100%	2
Agriculture	0	0%	0	0%	2	100%	0	0%	0	0%	2
Utilities	0	0%	1	50%	0	0%	0	0%	1	50%	2
Real estate	1	100%	0	0%	0	0%	0	0%	0	0%	1
Waste management	0	0%	0	0%	0	0%	0	0%	1	100%	1

Education, utilities, and real estate were the only industries placing any major emphasis on this particular work skill.

Businesses surveyed in the professional services, entertainment/arts, management, and waste management industries all ranked computer technical / hardware skills as a "least important" work skill desired from their current new hires.

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 31 details their responses.

Exhibit 31: 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	4%	3	12%	7	27%	5	19%	10	39%	26
Health care	6	23%	7	27%	6	23%	4	15%	3	12%	26
Accommodations / food	1	5%	0	0%	1	5%	1	5%	16	84%	19
Manufacturing	4	27%	1	7%	5	33%	2	13%	3	20%	15
Mining	0	0%	5	46%	1	9%	1	9%	4	36%	11
Transportation	2	18%	1	9%	2	18%	1	9%	5	46%	11
Construction	1	10%	1	10%	2	20%	3	30%	3	30%	10
Public administration	3	33%	2	22%	2	22%	1	11%	1	11%	9
Information	1	14%	4	57%	0	0%	1	14%	1	14%	7
Other services	0	0%	2	29%	3	43%	1	14%	1	14%	7
Educational services	4	67%	1	17%	1	17%	0	0%	0	0%	6
Finance	4	80%	1	20%	0	0%	0	0%	0	0%	5
Wholesale trade	2	50%	0	0%	1	25%	0	0%	1	25%	4
Professional services	1	25%	0	0%	0	0%	0	0%	3	75%	4
Entertainment / arts	0	0%	1	33%	0	0%	0	0%	2	67%	3
Management	1	50%	0	0%	0	0%	0	0%	1	50%	2
Agriculture	0	0%	1	50%	1	50%	0	0%	0	0%	2
Utilities	0	0%	1	50%	0	0%	0	0%	1	50%	2
Real estate	1	100%	0	0%	0	0%	0	0%	0	0%	1
Waste management	0	0%	0	0%	0	0%	0	0%	1	100%	1

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

Accommodations / food and waste management ranked computer application skills as a low priority skill for current new hires.

Internet skills. Employers were asked to rank the importance of Internet skills when considering new hires. Exhibit 32 explains.

Exhibit 32: Importance of Internet skills.

Internet Skills	Importance Ranking										
	Most important →								Least important		
	1		2		3		4		5		Total
By Industry	#	%	#	%	#	%	#	%	#	%	
Retail trade	1	4%	2	8%	2	8%	5	20%	15	60%	25
Health care	3	12%	4	15%	7	27%	3	12%	9	35%	26
Accommodations / food	0	0%	0	0%	1	6%	0	0%	17	94%	18
Manufacturing	1	7%	2	13%	2	13%	2	13%	8	53%	15
Mining	0	0%	0	0%	3	27%	3	27%	5	46%	11
Transportation	1	10%	1	10%	0	0%	2	20%	6	60%	10
Construction	0	0%	0	0%	1	10%	3	30%	6	60%	10
Public administration	1	13%	3	38%	0	0%	0	0%	4	50%	8
Information	1	14%	1	14%	0	0%	4	57%	1	14%	7
Other services	0	0%	1	17%	1	17%	2	33%	2	33%	6
Educational services	4	67%	2	33%	0	0%	0	0%	0	0%	6
Finance	0	0%	1	25%	2	50%	0	0%	1	25%	4
Wholesale trade	2	40%	1	20%	1	20%	0	0%	1	20%	5
Professional services	1	25%	0	0%	0	0%	0	0%	3	75%	4
Entertainment / arts	0	0%	1	33%	0	0%	0	0%	2	67%	3
Management	1	50%	0	0%	0	0%	0	0%	1	50%	2
Agriculture	0	0%	0	0%	1	50%	1	50%	0	0%	2
Utilities	1	50%	0	0%	0	0%	0	0%	1	50%	2
Real estate	1	100%	0	0%	0	0%	0	0%	0	0%	1
Waste management	0	0%	0	0%	0	0%	0	0%	1	100%	1

The importance of Internet skills is most prevalent among businesses in education and in real estate indicated by 100% of the respondents in these two industries ranking Internet skills as a 1 or 2 priority. Over 50% of the businesses responding from the wholesale trade, utilities, management, and public administration industries gave Internet skills a 1 or 2 priority score.

The remaining industries ranked the importance of Internet skills as a 3, 4, or 5 priority.

Programming and web design. Employers were asked to rank the importance of programming and web design skills when considering new hires. Exhibit 33 explains.

Exhibit 33: 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	1	4%	0	0%	1	4%	5	21%	17	71%	24
Health care	2	8%	2	8%	3	12%	3	12%	16	62%	26
Accommodations / food	0	0%	0	0%	0	0%	0	0%	19	100%	19
Manufacturing	0	0%	0	0%	3	20%	1	7%	11	73%	15
Mining	0	0%	0	0%	2	18%	1	9%	8	73%	11
Transportation	1	9%	0	0%	0	0%	1	9%	9	82%	11
Construction	0	0%	0	0%	1	11%	2	22%	6	68%	9
Public administration	0	0%	1	13%	0	0%	1	13%	6	75%	8
Information	1	14%	0	0%	1	14%	4	57%	1	14%	7
Other services	0	0%	0	0%	1	17%	1	17%	4	67%	6
Educational services	1	17%	1	17%	2	33%	1	17%	1	17%	6
Finance	0	0%	1	25%	0	0%	1	25%	2	50%	4
Wholesale trade	0	0%	0	0%	1	20%	2	40%	2	40%	5
Professional services	0	0%	0	0%	0	0%	0	0%	4	100%	4
Entertainment / arts	0	0%	1	33%	0	0%	0	0%	2	67%	3
Management	0	0%	0	0%	1	50%	0	0%	1	50%	2
Agriculture	0	0%	0	0%	1	100%	0	0%	0	0%	1
Utilities	0	0%	0	0%	0	0%	1	50%	1	50%	2
Real estate	1	100%	0	0%	0	0%	0	0%	0	0%	1
Waste management	0	0%	0	0%	0	0%	0	0%	1	100%	1

The importance of programming/web design skills was indicated only by the respondent from the real estate industry. This work skill carried a 1 or 2 priority from only one business in the retail trade industry, transportation industry public administration industry, information industry, education industry, finance industry, and entertainment / arts industry. Though a total of four 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 (16%).

Overall responses. A collective look at the importance of the various individual work skills reveals the overall importance or emphasis on the basics. Exhibit 34 illustrates. *("Total" represents total number of respondents ranking the particular work skill)*

Exhibit 34: Importance of employee job skills overall total by skill.

Overall Responses	Importance Ranking										
	Most important →									Least important	
	1		2		3		4		5		Total
By Skill	#	%	#	%	#	%	#	%	#	%	
Basic reading	125	74%	19	11%	13	8%	3	2%	8	5%	168
Intermediate reading	69	42%	34	21%	36	22%	12	7%	14	9%	165
Advanced reading	28	17%	32	20%	42	26%	23	14%	39	24%	164
Basic math	101	61%	24	14%	24	14%	9	5%	9	5%	167
Intermediate math	61	37%	35	21%	31	19%	19	12%	18	11%	164
Advanced math	29	18%	19	12%	30	19%	24	15%	60	37%	162
Basic writing	82	49%	28	17%	35	21%	10	6%	13	8%	168
Listening	136	81%	22	13%	7	4%	3	2%	1	1%	169
Customer relations	126	77%	13	8%	10	6%	8	5%	7	4%	164
Teamwork	132	78%	18	11%	12	7%	5	3%	2	1%	169
Observation	127	75%	24	14%	15	9%	3	2%	0	0%	169
Applied technology	46	28%	23	14%	27	17%	18	11%	49	30%	163
Critical thinking	55	34%	35	21%	37	23%	23	14%	14	9%	164
Locating Information	52	32%	39	24%	33	20%	20	12%	21	13%	165
Data entry	37	23%	33	21%	52	32%	17	11%	22	14%	161
Computer tech/hardware	14	9%	12	8%	28	18%	28	18%	75	48%	157
Computer application	30	19%	30	19%	31	19%	19	12%	52	32%	162
Internet	17	11%	19	12%	19	12%	23	15%	79	50%	157
Programming / Web	7	5%	6	4%	14	9%	25	16%	105	67%	157

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 real estate and education (all four); finance (computer applications); and wholesale trade and management (computer application / internet).

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 35 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.

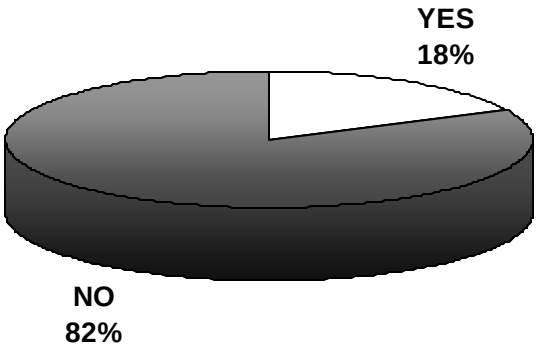
Exhibit 35: Change in basic skills need projected in the next 3 to 5 years.

Overall Responses	Importance Ranking										
	Current importance					Future importance					% Change
	1		2		Total	1		2		Total	
By Skill	#	%	#	%		#	%	#	%		
Basic reading	125	74%	19	11%	168	102	75%	18	13%	137	+3%
Intermediate reading	69	42%	34	21%	165	58	43%	31	23%	135	+3%
Advanced reading	28	17%	32	20%	164	28	21%	24	18%	133	+2%
Basic math	101	61%	24	14%	167	90	66%	21	15%	136	+6%
Intermediate math	61	37%	35	21%	164	61	46%	32	24%	134	+12%
Advanced math	29	18%	19	12%	162	33	25%	19	14%	133	+9%
Basic writing	82	49%	28	17%	168	71	52%	27	20%	136	+6%
Listening	136	81%	22	13%	169	117	84%	16	12%	139	+2%
Customer relations	126	77%	13	8%	164	109	80%	10	7%	136	+2%
Teamwork	132	78%	18	11%	169	115	83%	13	9%	139	+3%
Observation	127	75%	24	14%	169	109	78%	21	15%	139	+4%
Applied technology	46	28%	23	14%	163	45	33%	22	16%	136	+7%
Critical thinking	55	34%	35	21%	164	53	39%	31	13%	136	-3%
Locating Information	52	32%	39	24%	165	49	36%	38	28%	136	+8%
Data entry	37	23%	33	21%	161	43	32%	22	16%	135	+4%
Computer tech/hardware	14	9%	12	8%	157	18	13%	17	13%	134	+9%
Computer application	30	19%	30	19%	162	37	27%	24	18%	135	+7%
Internet	17	11%	19	12%	157	24	18%	24	18%	131	+13%
Programming / Web	7	5%	6	4%	157	10	8%	15	11%	132	+10%

Based on the survey responses, it appears that employers see a future emphasis on all three levels of math skills, basic writing skills, Internet skills, and programming / web development skills. It should be noted that all of the skill sets demonstrated an increase in future importance except for critical thinking, which decreased by a slight 3%.

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 18% of the 174 respondents reported foreseeing future job skills as depicted by Exhibit 36.

Exhibit 36: Job skills foreseen as needed in the future.



A list of the future job skills potentially needed by the responding companies has been provided in Exhibit 37. The corresponding number indicates the importance ranking that survey respondents gave to the future job skill.

Exhibit 37: List of future job skills potentially needed by responding companies.

Job skill		Job skill		Job skill	
Accounting	1	Auto CAD	1	Carpenter	1
Class D Operator	1	CFC	1	Communications	1
Comprehension	1	Food handling permit	1	Good work ethics	1
CAN	1	Electric welding	1	Electrical engineering	1
Merchandising	1	OSHA training	1	Patient confidentiality	1
Perfect driving record	1	Programmable logic	1	Register	1
Transcription / medical codes	1	Typing skills	1	Medical background	1
Transcription skills	1	Restaurant experience	1	Sales presentations	1
Stress management	1	Time management	1	Timelines / attendance	1
Prioritization	1	Pipe welding	2	Presentation skills (2)	2
Commercial drivers license	2	People skills	2	State/federal compliance	2

JOB APPLICANTS:

Number of applicants turned away. Employers were asked to reveal the approximate number of job applicants they typically turn away annually. Respondents reported turning away as few as 1 applicant per year to turning away as many as 3,500 applicants per year. Seven respondents said that they do not turn job applicants away. Exhibit 38 illustrates the number of job applicants turned away by the respondents over the course of a year; Exhibit 39 shows this by industry.

Exhibit 38: Job applicants turned away.

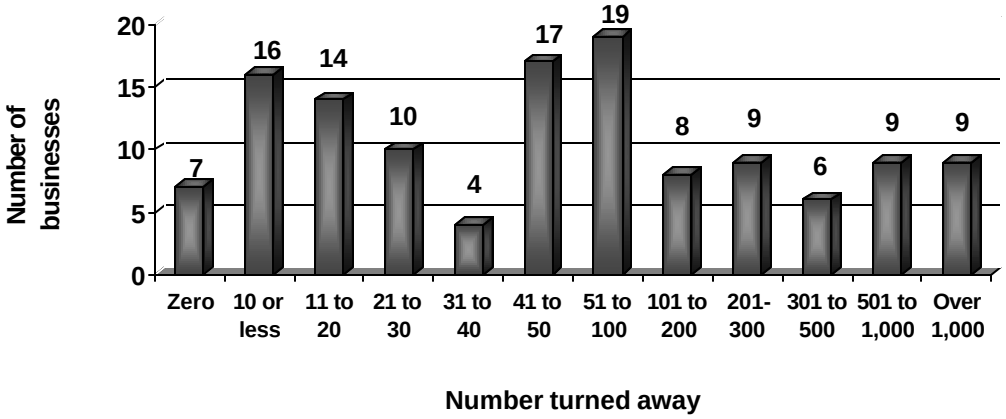


Exhibit 39: Applicants turned away by industry.

Industry	Number of Applicants Turned Away											
	0	≤ 10	11-20	21-30	31-40	41-50	51-100	101-200	201-300	301-500	501-1000	1000 - over
Retail trade	1	4	3	1	0	3	1	2	0	0	4	0
Health	2	1	3	3	2	1	3	0	3	3	1	1
Accommodations / food	0	2	3	0	0	1	6	3	1	0	1	0
Manufacturing	1	1	0	2	1	2	3	0	2	0	0	1
Mining	0	1	1	0	0	1	1	0	0	1	0	3
Transportation	1	0	1	1	0	2	0	0	1	1	0	0
Construction	0	2	0	2	0	1	1	0	0	0	0	0
Public administration	1	2	0	0	0	1	1	0	0	0	1	0
Information	0	0	0	0	1	1	0	2	0	1	1	1
Other services	1	0	1	0	0	0	0	0	0	0	0	1
Education	0	0	0	0	0	1	1	1	0	0	0	1
Finance	0	1	0	0	0	2	1	0	0	0	0	0
Wholesale trade	0	1	1	0	0	0	0	0	0	0	0	1
Professional services	0	1	1	0	0	0	0	0	1	0	1	0
Entertainment / arts	0	0	0	0	0	0	1	0	0	0	0	0
Management	0	0	0	0	0	0	0	0	0	0	0	0
Agriculture	0	0	0	0	0	0	0	0	0	0	0	0
Utilities	0	0	0	0	0	0	0	0	1	0	0	0
Real estate	0	0	0	1	0	0	0	0	0	0	0	0
Waste management	0	0	0	0	0	1	0	0	0	0	0	0

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 or a lot of the time. Exhibit 40 illustrates the frequency with which each of the reasons were mentioned. The exhibit also illustrates the number of times the reason was given by survey respondents (total).

Exhibit 40: Reasons employers turn away job applicants.

Reason	Frequency		
	Some	A lot	Total
Have no positions available	27	93	120
Poor recommendation from previous employers	64	25	89
Lacks appropriate previous work experience	74	15	89
Attitude and demeanor	54	32	86
Appearance / dress / grooming	56	24	80
Lacks appropriate teamwork skills	43	30	73
Lacks customer relation skills	44	26	70
Lacks required reading skills	21	46	67
Lacks appropriate technology skills	52	15	67
Criminal record	49	17	66
Wage and benefits expectations	62	4	66
Lacks required math reasoning skills	41	22	63
Displays poor listening skills	27	35	62
Unable to locate information	46	14	60
Lacks basic writing skills	29	31	60
Lacks appropriate observation skills	45	14	59
Lacks appropriate data entry skills	57	1	58
Score on screening/pre-employment test	35	18	53
Lack specialty degree/licensing	27	25	52
Lacks professional/technical certification	30	20	50
Drug test results	20	27	47

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, appearance, dress, and grooming are also noteworthy reasons employers choose not to hire a potential employee.

Other reasons for turning away job applicants provided by the survey respondents included availability (2); driving record (3); time availability; failed background check; typing skills; incomplete forms; is not dependable; lack of driver's license; not enough education; not qualified; or not willing to work. One respondent said that it sometimes depends upon the job.

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 some of the time or a lot of the time. Exhibit 41 illustrates the frequency with which each of the reasons were mentioned. The exhibit also illustrates the number of times the reason was given by survey respondents (total).

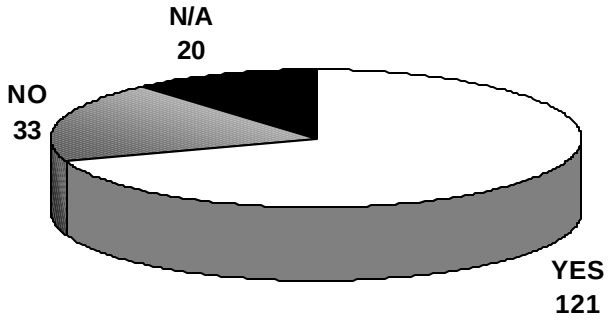
Exhibit 41: Reasons employers release employees.

Reason	Frequency		
	Some	A lot	Total
Employee is not dependable	50	67	117
Employee poorly performs job	58	48	106
Employee resigned	40	61	101
Company is being downsized	42	37	79
Employee lacks appropriate teamwork skills	49	20	69
Employees' skills no longer match company need	44	16	60

Dependability and poor performance are the two main reasons employers say that they have to release employees. Sixty-seven percent of the respondents said that they release employees because of dependability issues; 61% report releasing employees because of poor performance. Only 35% of the respondents release employees because their skills no longer match the company's needs.

Qualified applicant pool. Employers were asked if they believed there is an adequate pool of qualified employees available from which they can hire. Nearly 70% said that they believe there is, while 19% disagree. Exhibit 42 illustrates.

Exhibit 42: Do employers believe there is a qualified applicant pool from which to hire?



Hiring new employees. Employers were asked to indicate the level of educational attainment from which they typically hire new employees. Employers were also asked to indicate if they believed these individuals were well prepared to enter the workforce. Exhibit 43 depicts their responses.

Exhibit 43: Who do you currently hire and are they well prepared?

Educational Attainment	Currently Hire?			Well Prepared?		
	Yes	No	% Yes	Yes	No	% Yes
High school graduate	149	25	86%	92	22	62%
College graduates	112	62	64%	77	4	69%
Vo-Tech graduate	106	68	61%	65	15	61%
Community College graduate	83	91	48%	49	12	59%
Apprenticeships	37	137	21%	19	8	51%

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, 92 (62%) believe these employees are well prepared. College graduates is the next most popular hiring pool with 64% of the respondents saying they hire from this group. Employers believe that college graduates are the best prepared of the group with 69% of those hiring college graduates saying such.

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.

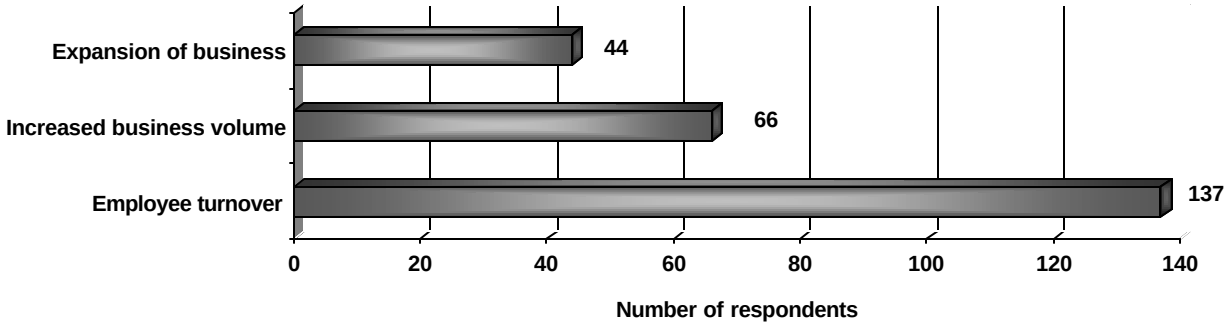
Exhibit 44: Percentage of current and future employees hired by educational attainment category.

	Current					Future				
Educational Attainment	< 10%	10-25%	26-50%	51-75%	76-100%	< 10%	10-25%	26-50%	51-75%	76-100%
High school	6	11	33	19	55	2	8	10	10	21
College graduate	25	37	15	7	8	7	19	4	7	1
Vo-tech graduate	14	25	25	3	6	4	20	4	1	2
Community college grad	17	19	14	1	4	6	15	4	0	0
Apprenticeships	8	17	2	0	4	2	2	2	0	3

Exhibit 44 illustrates that 55 businesses said they hire between 76% - 100% high school graduates. In the future, however, only 21 of the responding businesses expect to hire this percentage of their workforce from high school. Thirty-seven businesses hire between 10-25% of their workforce as college graduates. Nineteen businesses said they 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 45.

Exhibit 45: Reason for new hires.



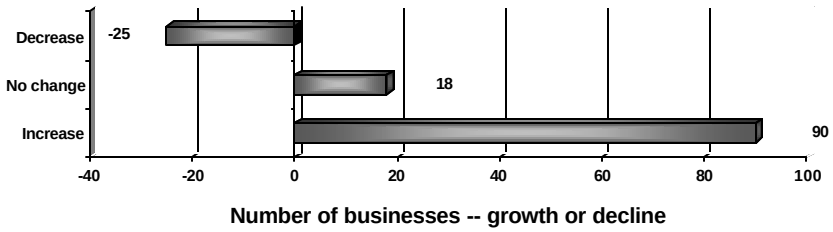
Anticipation of future new hires. Survey specialists asked the respondents if they anticipated their level of new hire needs to increase or decrease over the next 5 years. One hundred thirty-three respondents provided feedback for this question. (Exhibit 46.)

Exhibit 46: Anticipation of 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	200%		5	15%		18	0
1	100%		1	13%		13	Negative chg
2	75%		12	10%		2	-5
1	51%		1	8%		6	-10
6	50%		14	5%		1	-15
5	30%		1	1%		2	-20
6	25%		28	Positive chg		1	-40
6	20%						

Exhibit 46 demonstrates that more businesses expect to hire new employees and by larger percentages than those that do not or are downsizing. Twenty-five businesses indicated a negative change in hiring patterns over the next five years; ninety businesses said they would be hiring additional employees. Eighteen businesses expect no change. See Exhibit 47.

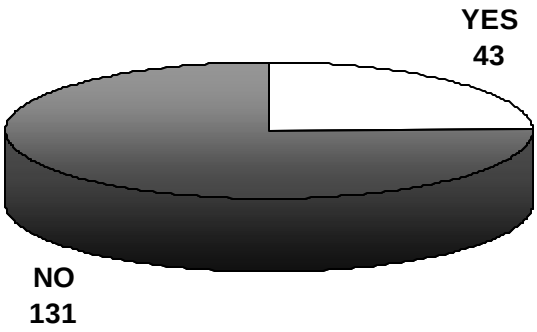
Exhibit 47: Increase vs. decrease of hiring needs over the next five years.



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, 75% of the 174 respondents said it was not needed. See Exhibit 48.

Exhibit 48: 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 49 illustrates the responses.

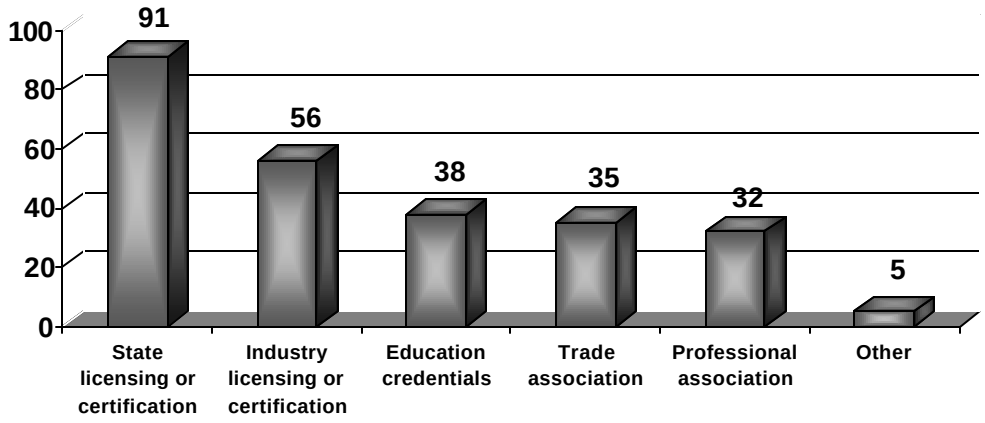
Exhibit 49: Specific types of education / training needed.

Training need		Training need		Training need	
Safety	8	Clinical	1	Conflict resolution	1
On-the-job training	4	Patient care skills	1	English	1
Management skills	4	Emergency medicine	1	Problem solving	1
Computer training	4	Hospital specialties	1	Reading	1
Sales specialist	3	EMT	1	Continuing ed courses	1
Math skills / conversions	3	Bookkeeping	1	New equipment training	1
Certified fire arms courses	2	Lab training	1	Mechanics	1
Communication skills	2	Life guard	1	Maintenance	1
Apprenticeship program	2	Data entry	1	Hazardous hauling	1
Electrical training	2	Front desk skills	1	Cash register training	1
Technical medical	2	New policies	1	Merchandizing	1
Technical	1	Telephone skills	1	Sanitation	1
Hydraulic machinist repair (coal)	1	Finance	1	13 wk State Police training	1
80 hr Underground mining/safety	1	Work ethic	1	Accounting	1

Safety training, on-the-job training, management skills, and computer training were the top four training needs expressed by the survey respondents.

Quality or competency standards. Employers were asked if their firms are guided by any quality of competency standards. Respondents could provide more than one answer to this question. Exhibit 50 illustrates their replies.

Exhibit 50: Quality or competency standards guiding companies of respondents.

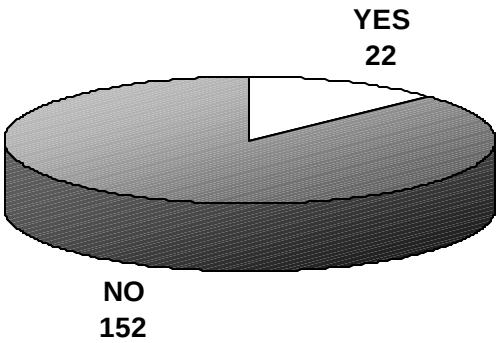


Ninety-one of the responding businesses (52%) have quality or competency standards guided by state licensing or state certification. Fifty-six of the respondents (32%) have quality of competency standards guided by industry licensing or certification.

"Other" responses included commercial driver's license (3 responses), department of transportation (1) and federal certifications (1).

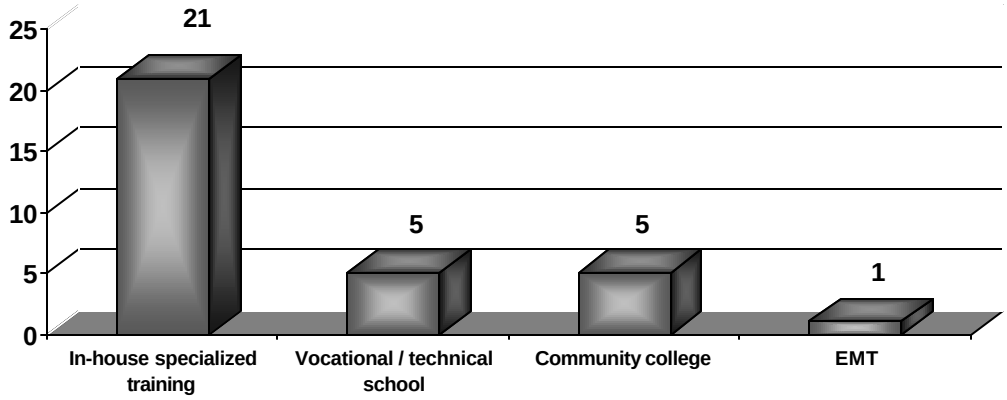
Career progression training. Respondents were asked if their companies have a need for career progression training programs that will provide advancement opportunities to present employees. Only 13% (22) of the respondents said yes as illustrated in Exhibit 51.

Exhibit 51: 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 52 explains.

Exhibit 52: Types of progression training needed.



The majority of employers indicating a need for progression training would like to have in-house specialized training.

Specific careers for which the career progression training prepares employees are included in Exhibit 53. The number to the side of the career name is the frequency with which the survey respondent mentioned the career.

Exhibit 53: Specific careers resulting from progression training.

Career		Career		Career	
Management	26	Deputies and sheriffs	1	Mental health tech program	1
Management or supervisory	1	Internal job posting	1	Mental health specialist	1
Higher level management	1	Keeping license	1	RN direct care specialist	1
Advancement within company	4	Lot boys to mechanics	1	RN career ladder	1
All facets	1	Sales to finance mgr	1	RN's any hospital	1
Coal mining	1	LPN's to RN's	1	Paramedics supervisor	1
Data entry	1	State representatives	1	Rehabilitation nursing	1
Buyers	1	Technology / computer	1	Staff development / workshops	1
Work with Collins Career Center for patient care skills, in-house nursing / LPN training					

The most prevalent career progression training need appears to be management / supervisory training with 28 responses fitting into this category.

Types of training and career progression training needed by industry. A more in-depth look at the need for training and for career progression training by industry is revealed in Exhibit 54.

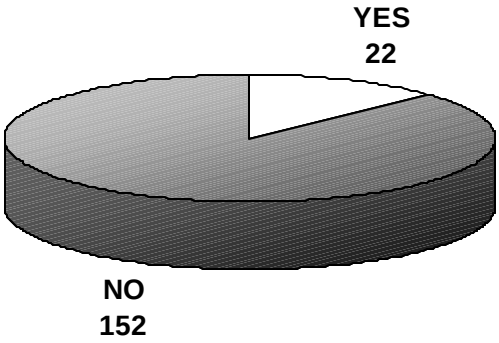
Exhibit 54: Training needs.

Career Training	Current Need for Education /Training		Need for Progression Training		Type of Progression Training Needed			Number of workers that under go annual training
					In-house	Voc-Tech	Comm Coll	
By Industry	Yes	No	Yes	No	Yes	Yes	Yes	
Retail trade	6	22	1	27	1			746
Health care	8	18	7	19	7	1	2	3,955
Accommodations / food	4	18	1	21	1			727
Manufacturing	4	12	4	12	3	2	3	839
Mining	5	8	3	10	1	2		1,141
Transportation	3	8	1	10	1			618
Construction	1	9	1	9	1			64
Public administration	5	4	2	7	2			595
Information	2	5	0	7				448
Other services	3	4	0	7				185
Educational services	2	4	1	5	1			2,255
Finance	0	5	1	4	1			135
Wholesale trade	0	5	1	4			1	458
Professional services	1	4	0	4				306
Entertainment / arts	0	3	0	3				52
Management	0	2	0	2				11
Agriculture	0	2	1	1	1			0
Utilities	0	2	0	0				10
Real estate	0	1	0	0				3
Waste management	0	1	0	0				3

Exhibit 54 illustrates the training and progression training needs as indicated by the survey respondents according to industry. It appears that the health industry is most interested in training – both regular education / training and progression training with 8 and 7 responses in favor of this, respectively. Respondents from the health industry were also interested in various types of training methods – the most popular of which is in-house training. Finally, the health industry represented the greatest number of employees currently undergoing annual training, followed by educational services.

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). Only 13% (22) of the employers said that their company does this. Exhibit 55 describes.

Exhibit 55: Tuition assistance or incentives to attain additional education.

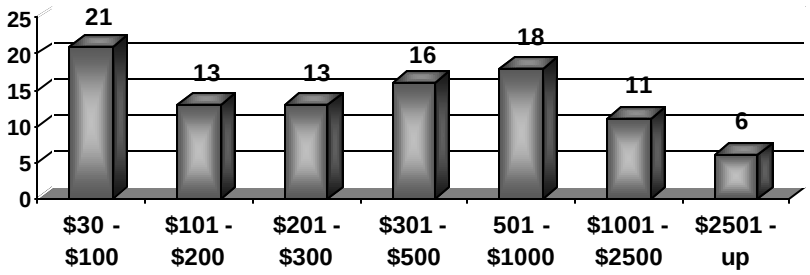


Types of tuition assistance varies greatly among the businesses. Most often, however, companies give their employees tuition reimbursement (24 companies). Respondents also said that their companies provide tuition assistance (4); have scholarship programs (6); and will provide time off from work to attend classes (1). Some of the businesses have a flat rate they pay. For example, one company will pay $1,500 a year for higher education. Another pays $1,000 toward advanced education for a full time employee and $500 for a part time employee.

Many of the tuition reimbursement programs mentioned are based on a cause and effect arrangement. For example, if the employee makes an "A" in the class, then the company will reimburse 100% of the tuition cost. If the employee makes a "B" in the class, the company will refund only 75% of the tuition cost. Other companies will assist with tuition if the classes pertain to the employee's job.

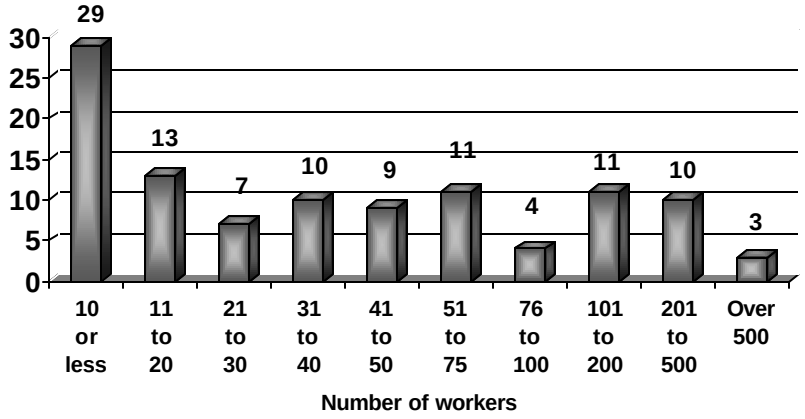
Training Cost per worker. Employers were asked to reveal how much they spend per worker on annual training. Ninety-eight respondents said that they spend as little as $30 to as much as $8,000 per worker. Exhibit 56 illustrates.

Exhibit 56: Amount responding employers spend on training per worker annually.



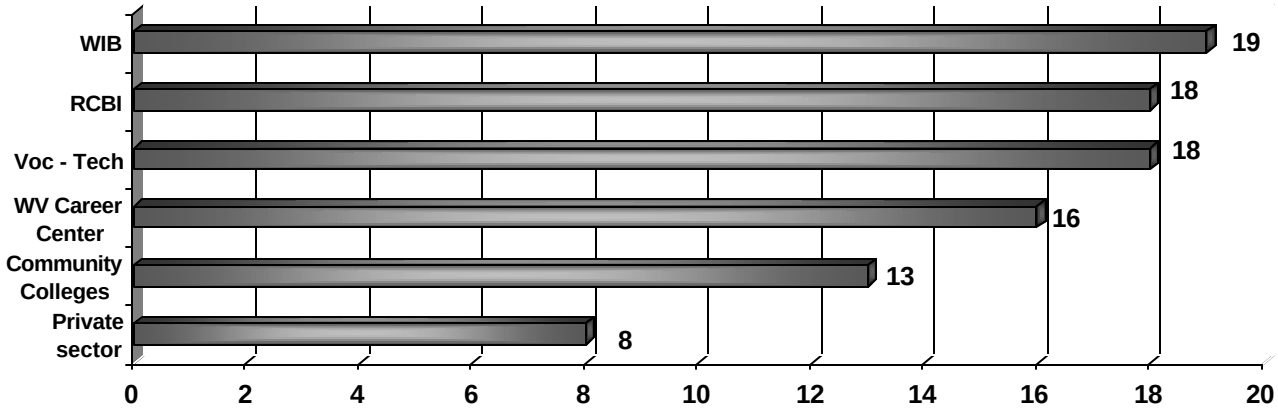
Workers undergoing annual training. Nearly 61% of the responding employers said that they send workers to training annually. Employers send as few as 1 worker to as many as 2,100. The number of workers sent by employers to annual training is depicted in Exhibit 57 below.

Exhibit 57: Number of workers sent to training by responding employers.



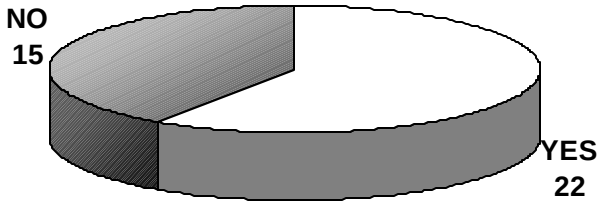
Partnership with other employee training programs. Employers were asked if they were be interested in working in partnership with other employee training programs. The Workforce Investment Board was the top choice (19 respondents) with RCBI and vocational / technical schools following close behind with 18 respondents each. Sixteen respondents mentioned work for West Virginia Career Center, while 13 indicated an interest in working with community colleges. Eight would like to work with the private sector. Exhibit 58 illustrates this data.

Exhibit 58: 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-seven respondents provided an answer the question with 59% (22 respondents) saying that they would send employees to this training on an annual basis. Exhibit 59 illustrates.

Exhibit 59: Foresee sending employees to annual training with training partnership?



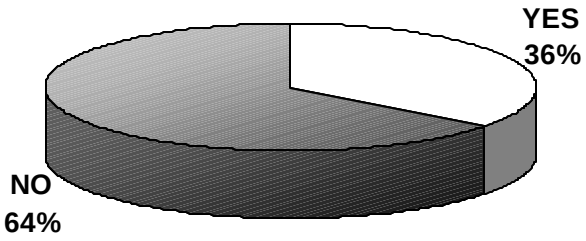
Twelve companies stating they would send employees to annual training with training partnerships said that they would spend various amounts per worker to do so. See Exhibit 60:

Exhibit 60: What companies would spend per worker to attend annual training with partnership

Amount		Amount		Amount	
$5.15 / hour	3	$400	1	50%	1
$100	2	$1,500	1	Minimum wage	1
$10 - $15	1	$2,500	1	Negotiable	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. Nearly 36% of the 174 respondents said that they were as illustrated in Exhibit 61 (Yes 62 / No 112).

Exhibit 61: Awareness of agencies available to assist with employee training needs.



Specific agencies that companies mentioned are listed in Exhibit 62. Also included in the exhibit are the agencies that the responding companies have utilized for training.

Exhibit 62: Awareness and utilization of agencies providing employee training assistance.

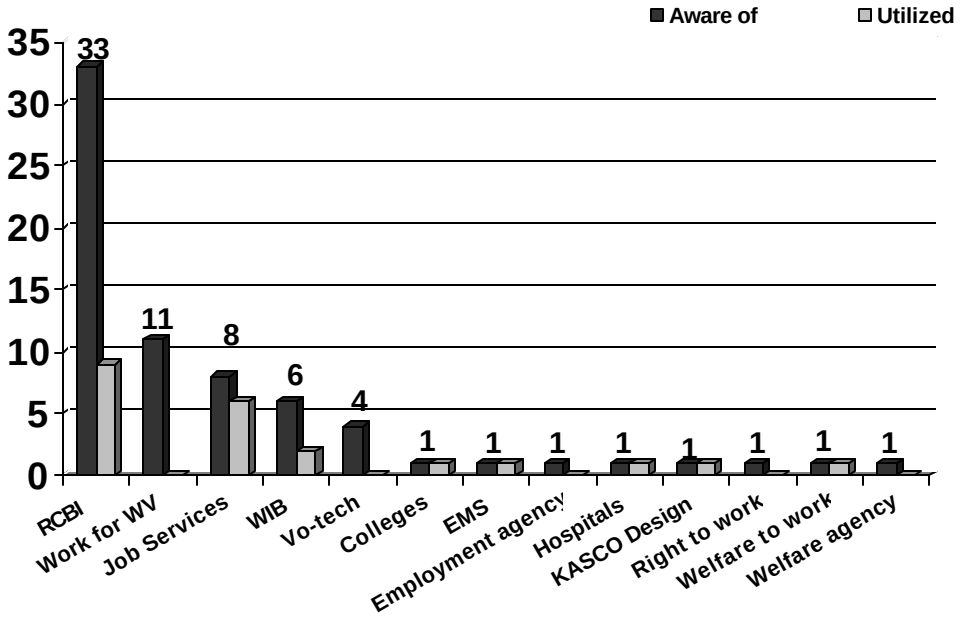


Exhibit 62 demonstrates that RCBI (Robert C. Byrd Institute) is the most widely known and utilized agency among the survey respondents to assist with employee training needs. The Work for West Virginia Career Center was mentioned 11 times, however not mentioned as being utilized at all. Job Services was mentioned by eight respondents and utilized by six. The Workforce Investment Board (WIB) was mentioned by six respondents and actually utilized by two.

Employers which had utilized these training programs were asked if they were satisfied with the services that were provided. Sixteen businesses had positive feedback included in Exhibit 63.

Exhibit 63: Positive feedback regarding workforce training programs.

Agency	Feedback
Colleges and universities	Affordability, expertise, follow-up methods
EMS	Well developed program
Hospitals	Affordability, expertise follow-up methods
Job Services	Helped increase the flow of applicants
KASCO Design	Affordability, expertise, follow-up methods
RCBI (5 comments)	Competent trainers, great training program and great money, gave information needed to proceed in work area
Workforce Investment Board	Helped with money

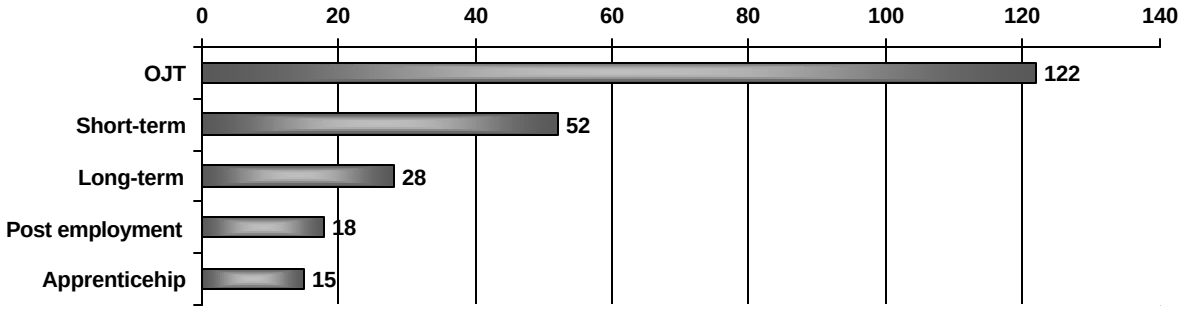
Exhibit 64 illustrates respondents who were not pleased with the training programs they have utilized.

Exhibit 64: Negative feedback regarding workforce training programs.

Agency	Feedback
Job Services (2 comments)	Employees that were sent were not overly interested in the job; candidates were not well qualified
Welfare to Work	Need to be more prepared for the job – "they do the best they can"

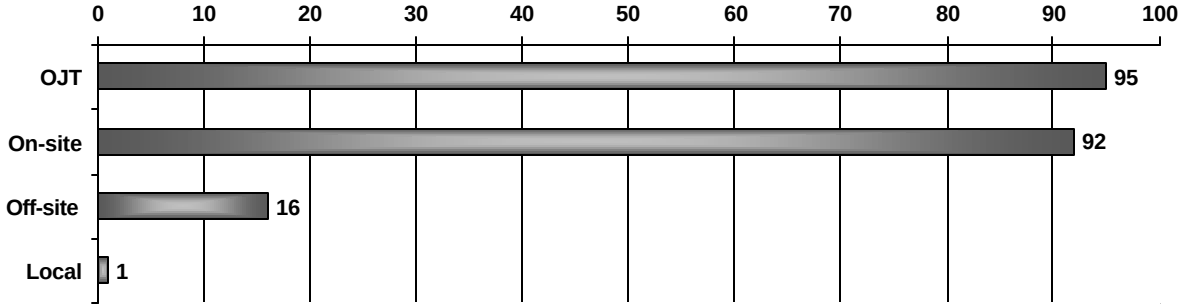
Most appealing types of training programs for new hires. Survey specialists asked the respondents about the type of training programs for new hires that would be the most appealing to their company. Seventy percent said "on-the-job" training. Nearly 30% were in favor of short-term, specialized training. Exhibit 65 illustrates.

Exhibit 65: Types of training programs for new hires in which companies are most interested



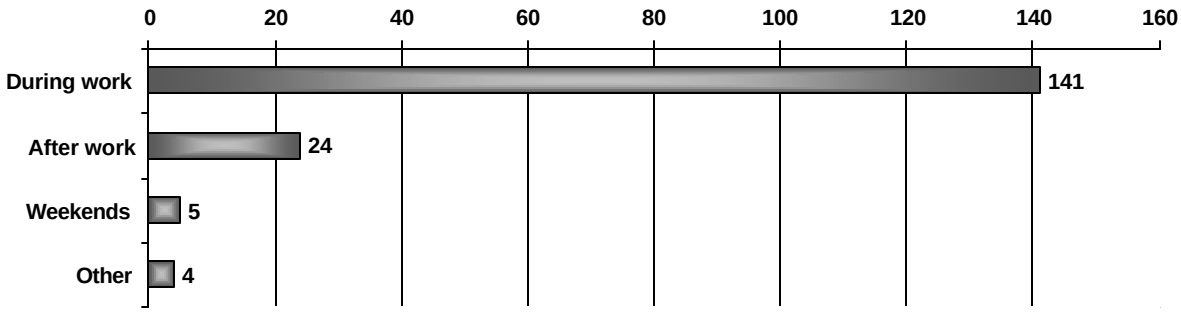
Most desirable employee training location. Employers were asked where the most desirable location would be for employee training. On-the-job-training was the most popular choice (55%) followed by on-site (53%). Off-site training appealed to only 9% of the respondents (16). Employers were allowed to choose more than one answer to the question. See Exhibit 66.

Exhibit 66: Most desirable location for employee training.



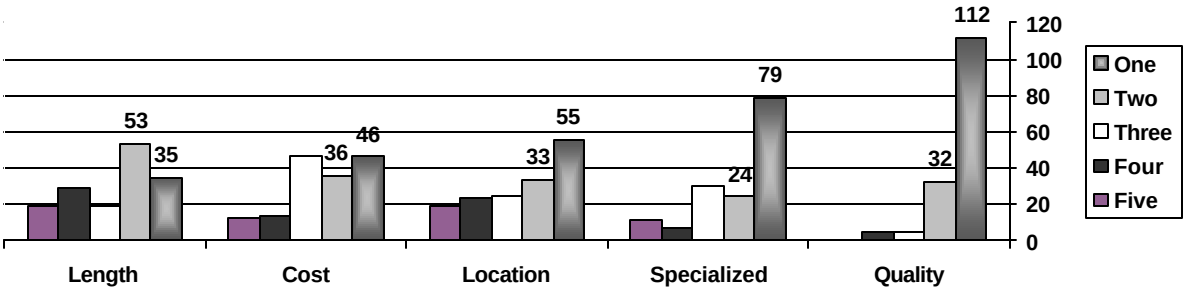
Most desirable time for training. Employers were also asked to reveal the most desirable time for employee training. Most (81%) said during work; some (14%) said after work; and few (3%) said weekends. Other responses included classes scheduled by union, depends upon position, evenings, and prior to employment. Exhibit 67 illustrates.

Exhibit 67: 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 quality of the training provider and the specialized training program than with the location of the training or the training cost. Exhibit 68 illustrates.

Exhibit 68: Training factors most important to employers.



Assistance with assessing job skills or identifying job competencies. Few respondents (10 firms) had a desire for assistance with assessing job skills (6%) nor with identifying job competencies (5% or 9 firms). Exhibits 69 and 70 illustrate.

Exhibit 69: Assistance with assessing job skills?

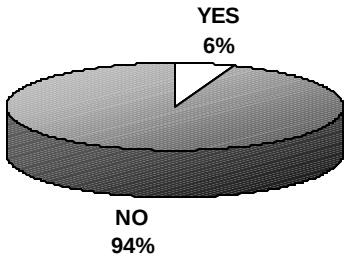
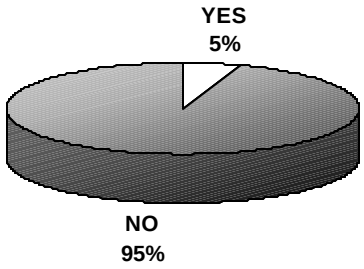


Exhibit 70: Identifying job competencies?



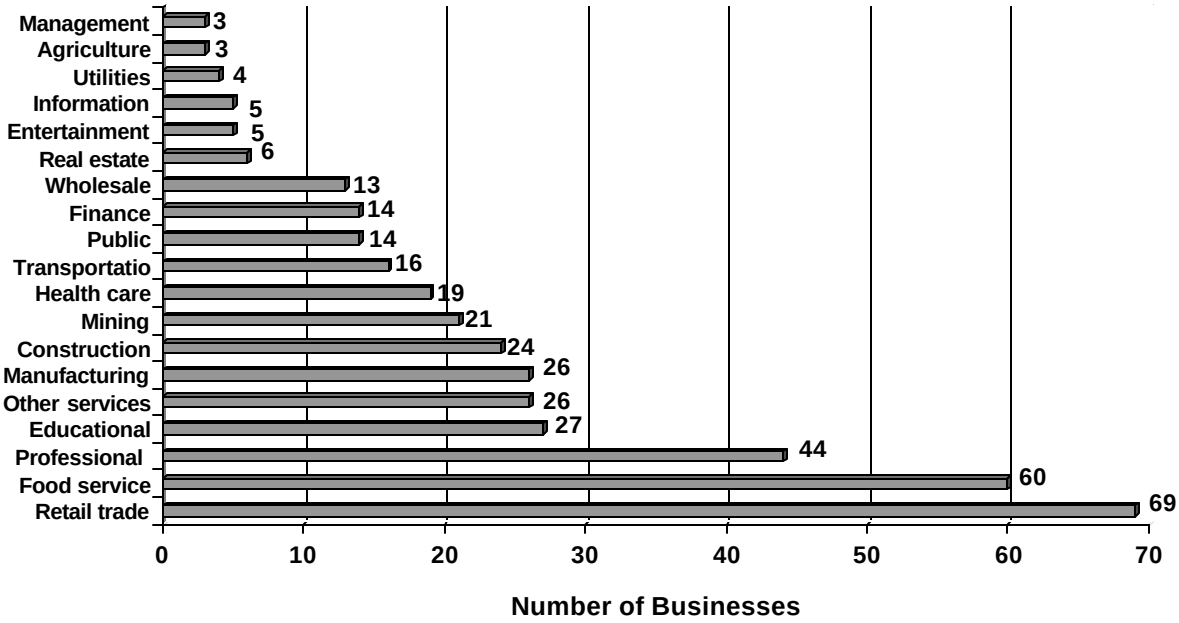
Workforce development focus groups. Finally, employers were asked if they would be interested in participating in a focus group on emerging occupations, curriculum development by industry, youth employability, and other workforce development issues. Thirty-one individuals agreed:

PREVIOUS DATA COLLECTION:

During September 2001, CBER telephone survey specialists collected 416 brief surveys of various businesses in the Region 2 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 71.

Exhibit 71: Industries represented in the brief business survey.



The majority of respondents were from the retail trade industry (69), food service / accommodation industry (60), or the professional services industry (44). 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 850 employees and expect to hire from between 2 and 200 employees over the coming 5 years.

Exhibit 72 illustrates the current number of employees held by the respondents while Exhibit 73 shows the number of employees respondents expect to hire over the next 5 years.

Exhibit 72: Current number of employees reported by short survey respondents.

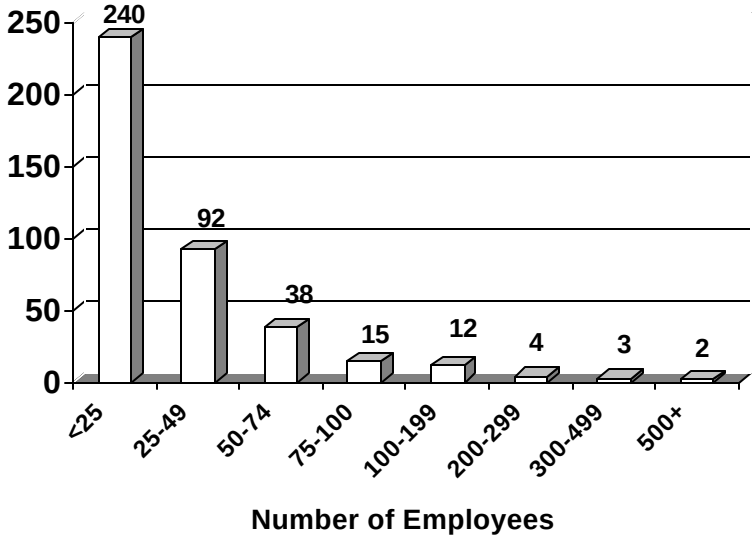


Exhibit 72 demonstrates that most of the respondents (332) to the brief survey employed fewer than 50 employees and thus represent the smaller firms located within the region.

Exhibit 73: Number of employees anticipated to be hired over the next five years.

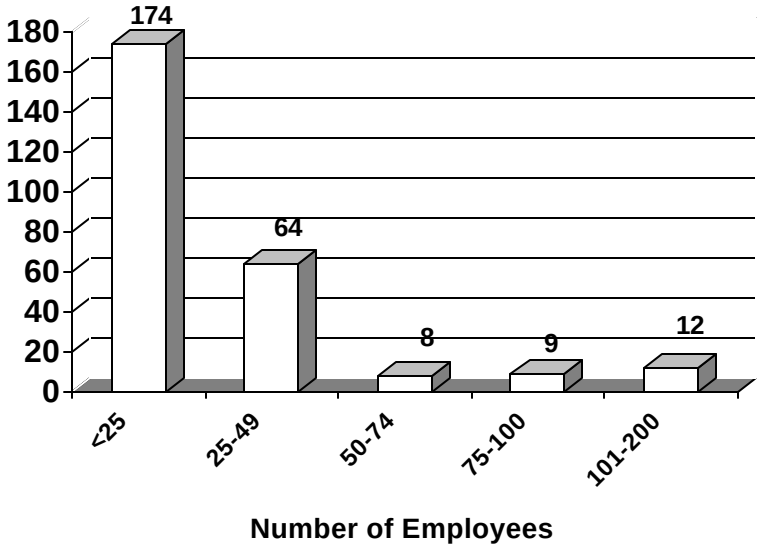


Exhibit 73 illustrates that most respondents anticipate hiring less than 25 new employees over the next five years. Only 12 respondents anticipate hiring over 100 new employees during this timeframe.

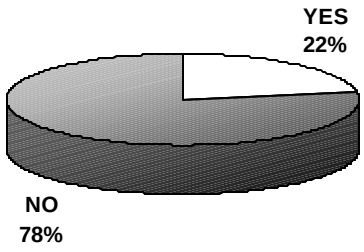
Job skills. Respondents were asked open–ended questions concerning job skills and knowledge they look for when hiring new employees. Oral skills and people skills topped the list with 268 firms looking for one of these two attributes in their new employees. Computer skills were the next most popular job skill these employers desired from new hires. Written skills and basic math skills were also frequently mentioned.

Experience and appearance were listed by several respondents while specific certifications such as commercial driver's license, EMT, and CPR 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. Over three-fourths of the respondents (324) were not willing to assist while 92 said yes. Exhibit 74 illustrates.

Exhibit 74: 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
South Western West Virginia Region 2
Workforce Investment Board

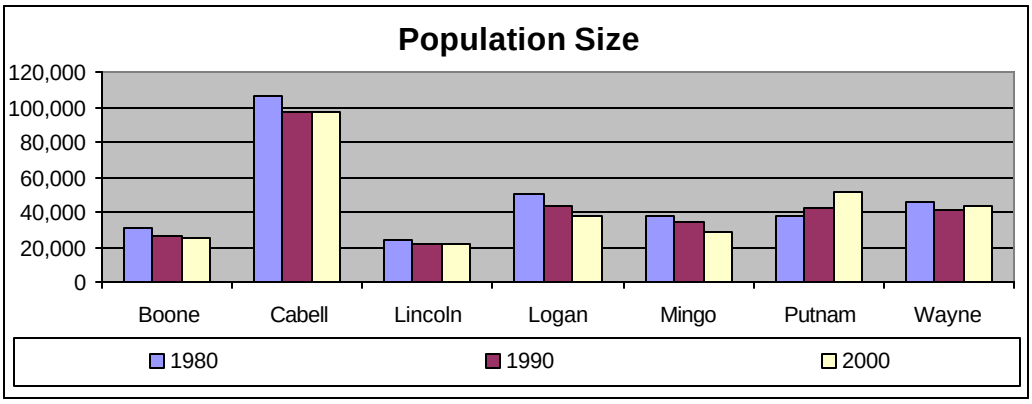
State of the Workforce Report

South Western West Virginia Region 2 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 several 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. This contributes 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 average, but not alarmingly so in most of the region. 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 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, and relatively lower paying jobs.
- While the improvements in the ACT standardized test scores 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 may be slightly biased downward due to the relatively high proportion of retirees in the region.
- At the 1-digit level, the region's top employing industries are services, trade, and government. At the 1- and 2-digit level, they are health services, educational services, government, and eating and drinking places. This is expected to continue into the near future.



Population Size, 1980 to 2000

	Boone	Cabell	Lincoln	Logan	Mingo	Putnam	Wayne	WIA 2	WV	US
1980	30,447	106,835	23,675	50,679	37,336	38,181	46,021	333,174	1,950,000	226,546,000
1990	25,870	96,827	21,382	43,032	33,739	42,835	41,636	305,321	1,793,000	248,791,000
2000	25,535	96,784	22,108	37,710	28,253	51,589	42,903	304,882	1,808,344	281,421,906

Source: http://www.state.wv.us/bep/lmi/cntyprof/, Statistical Abstract of the United States 2000, and
http://factfinder.census.gov/servlet/BasicFactsServlet (Census 2000: Population and Housing (QT)).

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 Cabell and Putnam counties, all other counties in the region have less than 50,000 residents. The region's population is about 16.86 percent of the state's population, down from 17.02 percent a decade ago and 17.09 percent in 1980. There is limited diversity in the region and the state (see tables below).

What Are The Implications?

The relatively small population size suggests a small labor force.

Percent Population by Race, 2000

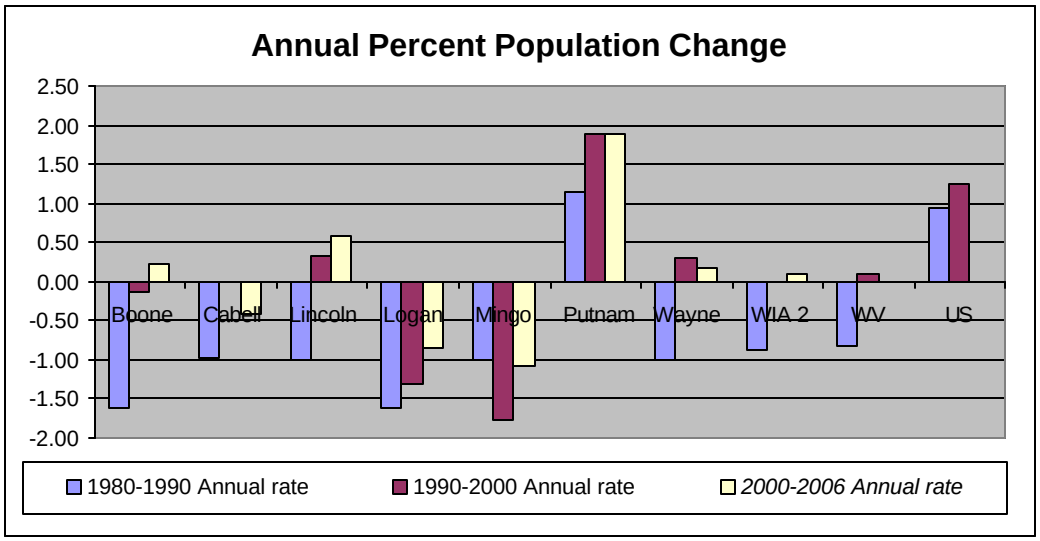
	Boone	Cabell	Lincoln	Logan	Mingo	Putnam	Wayne	WIA 2	WV	US
One race	99.50	98.90	99.40	99.40	99.30	99.40	99.40	99.2	99.10	97.60
White	98.50	93.40	99.00	96.30	96.40	98.00	98.80	96.4	95.00	75.10
Other than White	1.00	5.50	0.40	3.10	2.90	1.40	0.60	2.8	4.10	22.50
Two or more races	0.50	1.10	0.60	0.60	0.70	0.60	0.60	0.8	0.90	2.40

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

Hispanic or Latino and Race as Percent of Population, 2000

	Boone	Cabell	Lincoln	Logan	Mingo	Putnam	Wayne	WIA 2	WV	US
Hispanic or Latino	0.5	0.7	0.5	0.5	0.5	0.5	0.5	0.6	0.7	12.5
Mexican	0.2	0.2	0.2	0.3	0.1	0.2	0.2	0.2	0.2	7.3
Puerto Rican	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	1.2
Cuban	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4
Other Hispanic or Latino	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.3	0.3	3.6
Not Hispanic or Latino	99.5	99.3	99.5	99.5	99.5	99.5	99.5	99.4	99.3	87.5
White alone	98.2	92.9	98.5	95.9	96.0	97.6	98.4	96.0	94.6	69.1

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



Percent Population Change, 1980 to 2006

	Boone	Cabell	Lincoln	Logan	Mingo	Putnam	Wayne	WIA 2	W V	US
1980-1990	-15.03	-9.37	-9.69	-15.09	-9.63	12.19	-9.53	-8.36	-8.05	9.82
1990-2000	-1.29	-0.04	3.40	-12.37	-16.26	20.44	3.04	-0.14	0.86	13.12
2000-2006 Projection	*1.34*	*-2.42*	*3.55*	*-5.03*	*-6.34*	*11.84*	*1.07*	*0.53*		
1980-1990 Annual rate	-1.62	-0.98	-1.01	-1.62	-1.01	1.16	-1.00	-0.87	-0.84	0.94
1990-2000 Annual rate	-0.13	0.00	0.33	-1.31	-1.76	1.88	0.30	-0.01	0.09	1.24
2000-2006 Annual rate	*0.22*	*-0.41*	*0.58*	*-0.86*	*-1.08*	*1.88*	*0.18*	*0.09*		

Source: http://www.state.wv.us/bep/lmi/cntyprof/, Statistical Abstract of the United States 2000, and

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

Why Is This Important?

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

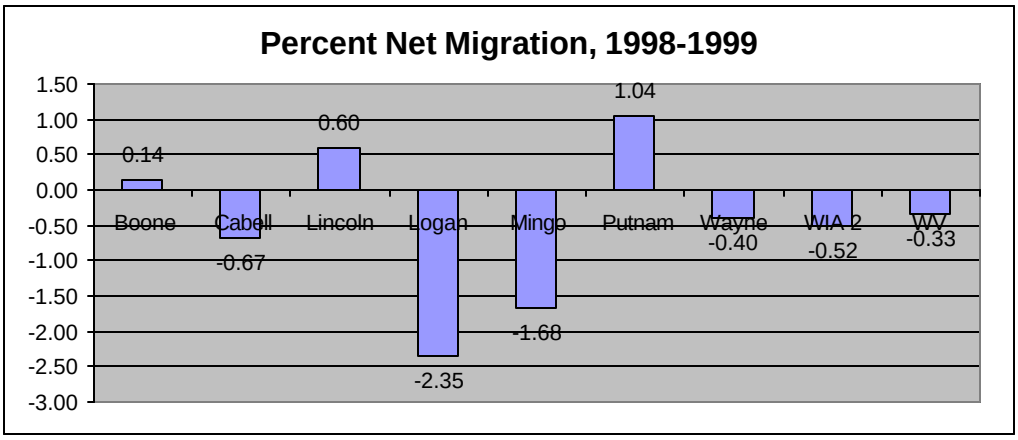
How Are We Doing?

All counties except Mingo experienced the same population change pattern during the 1980 to 2000 period. That is, a slowdown in the population decline or a rise in population growth rate. Importantly, population growth changed from negative to positive in Lincoln and Wayne counties and population growth continued at an increasing rate, above the national average, in Putnam county. The rate of population decline accelerated in Mingo county. Within the region, population decline slowed from 8.36 percent in the 1980s to 0.14 percent in the 1990s. Meanwhile, from 1990 to 2000, the state's population grew marginally by 0.86 percent, and the nation's population increased by 13.12 percent.

Projections for the 2000-2006 period show that the population trends will continue to improve very modestly for Boone, Lincoln, Logan, and Mingo counties and the region as a whole. The population trend in Mingo county is expected to increasingly mirror the regional trend. The high population growth rate in Putnam county is expected to stabilize.

What Are The Implications?

Except for Putnam county, which continued to grow faster than the national average, 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 population growth rates remain negative in some counties, the pool of potential labor force will continue to fall.



Net Migration, 1998-99

	Boone	Cabell	Lincoln	Logan	Mingo	Putnam	Wayne	WIA 2	WV
Population on 7/1/98	26,164	94,112	22,185	41,023	31,911	51,195	41,978	308,568	1,811,688
Net International Migration	-1	4	-1	2	0	-3	0	1	238
Net Domestic Migration	37	-637	135	-965	-535	535	-166	-1,596	-6,298
Net Total Migration	36	-633	134	-963	-535	532	-166	-1,595	-6,060
Percent Migration, 1998-1999	0.14	-0.67	0.60	-2.35	-1.68	1.04	-0.40	-0.52	-0.33

Source: http://eire.census.gov/popest/archives/county/co-99-1/99C1_54.txt.

Why Is This Important?

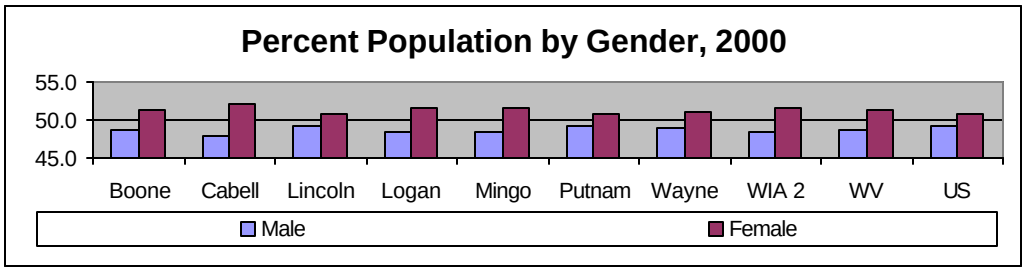
Percent net migration provides important information about the rate of population movement into and out of a geographic area. This may be an indicator of the desirability of the area in terms of place of residence or job/career opportunities.

How Are We Doing?

Four of the seven counties in the region, Cabell, Logan, Mingo, and Wayne, experienced net outmigration during the period in question. Furthermore, the rates of outmigration in each of the four counties, and the region as a whole, exceeds the state average. The other three counties, Boone, Lincoln, and Putnam, experienced nominal rates of inmigration.

What Are The Implications?

When viewed with the population data, this suggests that net outmigration is likely an important reason for the population decline in the population, and possibly labor force, in Cabell, Logan, and Mingo counties, and the region, during the late 1990s. Net outmigration may also account for Wayne county's slow population growth.



Percent Population by Gender, 2000

	Boone	Cabell	Lincoln	Logan	Mingo	Putnam	Wayne	WIA 2	WV	US
Male	48.8	47.8	49.3	48.5	48.4	49.2	48.9	48.5	48.6	49.1
Female	51.2	52.2	50.7	51.5	51.6	50.8	51.1	51.5	51.4	50.9

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

Why Is This Important?

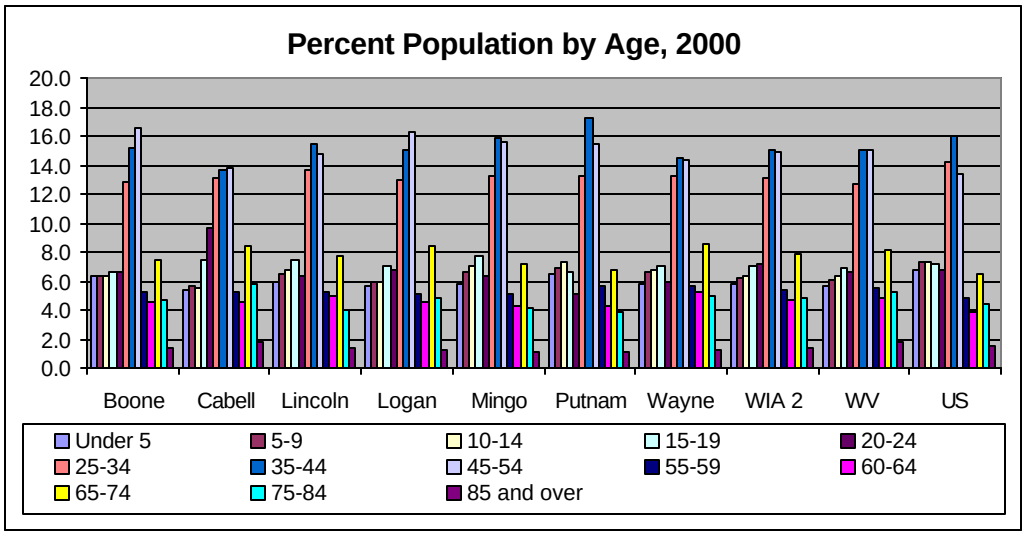
The percentage of population by gender can be useful to anticipate variations in labor force participation rates because the labor force participation rate for men tends to be higher than that of women's.

How Are We Doing?

The proportion of women in the seven counties in the region varies from 0.2 percent below the national average in Lincoln to 1.3 percent above the national average in Cabell. Overall, the proportion of women in the region is similar to the state average, and only 0.6 percent more than the national average.

What Are The Implications?

Since the percentage of women in the region compares to the state and the country averages, 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.



Why Is This Important?

The population age distribution can have implications on the entry and exit, as well as the experience of the workforce (entry-level, mid-level managers, and upper management).

How Are We Doing?

The percent of population in the counties' and region's six 0-34 years old groups are generally higher than the state's comparable groups but lower than the nation's. The percent of population in the counties' and region's two 35-54 years old groups are similar to the state's and only marginally higher than the nation's. On the other hand, the percent of population in the counties' and region's five 55 years and older groups are generally lower than the state's but higher than the nation's. The median age tells a similar story, where every county in the region but Logan has a median age lower than the state's, but all have median ages higher than the nation's.

Within each county, the region, and the state, the 15-19 years old groups are 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, region, and state, the 25-34 years old groups are consistently (and considerably) smaller than the 35-44 years old groups.

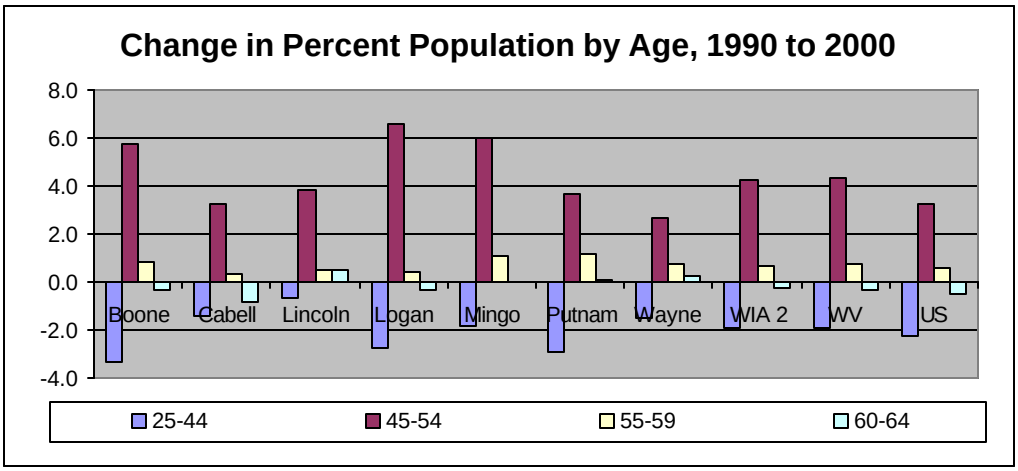
What Are The Implications?

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 in 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

	Boone	Cabell	Lincoln	Logan	Mingo	Putnam	Wayne	WIA 2	W V	US
Under 5 years	6.3	5.4	6.0	5.7	5.8	6.5	5.8	5.9	5.6	6.8
5 to 9 years	6.3	5.6	6.5	6.0	6.6	6.9	6.6	6.2	6.1	7.3
10 to 14 years	6.4	5.5	6.7	6.0	7.0	7.3	6.8	6.4	6.4	7.3
15 to 19 years	6.6	7.4	7.4	7.0	7.7	6.6	7.0	7.1	6.9	7.2
20 to 24 years	6.6	9.6	6.4	6.7	6.3	5.1	6.0	7.2	6.6	6.7
25 to 34 years	12.8	13.1	13.7	12.9	13.3	13.2	13.2	13.2	12.7	14.2
35 to 44 years	15.2	13.6	15.4	15.1	15.9	17.2	14.5	15.0	15.1	16.0
45 to 54 years	16.5	13.8	14.7	16.3	15.6	15.5	14.4	15.0	15.0	13.4
55 to 59 years	5.3	5.2	5.3	5.1	5.1	5.7	5.7	5.3	5.5	4.8
60 to 64 years	4.5	4.6	5.0	4.6	4.3	4.3	5.2	4.6	4.8	3.8
65 to 74 years	7.5	8.4	7.7	8.4	7.2	6.7	8.6	7.9	8.2	6.5
75 to 84 years	4.7	5.8	4.0	4.8	4.1	3.8	5.0	4.9	5.3	4.4
85 years and over	1.4	1.8	1.4	1.3	1.1	1.1	1.3	1.4	1.8	1.5
Median age, years	38.8	37.5	37.4	39.3	37.2	37.7	38.4		38.9	35.3

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



Change in Percent Population by Age, 1990 to 2000

	Boone	Cabell	Lincoln	Logan	Mingo	Putnam	Wayne	WIA 2	WV	US
Under 5 years	0.6	-0.1	0.0	0.0	-0.8	-0.3	0.0	0.0	-0.3	-0.6
5 to 24 years	-4.5	-1.1	-4.5	-5.9	-6.5	-2.4	-3.2	-3.4	-2.8	-0.4
25 to 44 years	-3.3	-1.5	-0.7	-2.7	-1.8	-3.0	-1.5	-1.9	-1.9	-2.3
45 to 54 years	5.8	3.2	3.8	6.6	6.0	3.7	2.6	4.2	4.3	3.3
55 to 59 years	0.9	0.3	0.5	0.4	1.1	1.2	0.7	0.7	0.7	0.6
60 to 64 years	-0.4	-0.8	0.5	-0.4	0.0	0.1	0.2	-0.3	-0.3	-0.5
65 to 74 years	-0.3	-0.9	0.5	0.7	0.7	0.1	0.3	-0.1	-0.5	-0.8
75 to 84 years	1.0	0.4	-0.3	0.9	1.1	0.3	0.7	0.6	0.4	0.4
85 years and over	0.4	0.1	0.3	0.4	0.2	0.2	0.1	0.2	0.4	0.3

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

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

Why Is This Important?

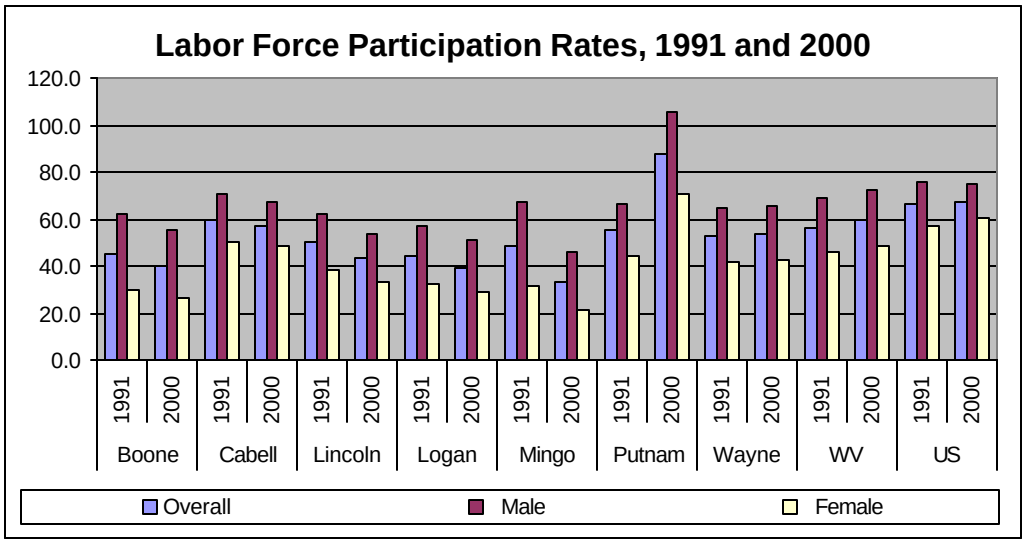
The change in percent of population by age provides another means to assess entry and exit, and experience of the workforce.

How Are We Doing?

All counties across the region experienced a decrease in the percent of population in the 5-24 and 25-44 years old groups in the 1990s. Cumulatively for the region, the rate of decline in the first group is greater than the state's and nation's, while the second group's rate of decline is the same as the state's, which is lower than the nation's. During this same period, there are significant increases in the percent of population in the 45-54 years old group and marginal increases in the 55-59 years old groups. The changes in the 60-64 years old groups are mixed. Refer to Appendix A for the actual percentages 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 advance in their careers, particularly the 25-34 years old group.



Labor Force Participation Rates, 1991 and 2000

	Boone		Cabell		Lincoln		Logan		Mingo		Putnam		Wayne		WV		US	
	1991	2000	1991	2000	1991	2000	1991	2000	1991	2000	1991	2000	1991	2000	1991	2000	1991	2000
Overall	45.4	40.3	59.5	56.9	49.9	43.2	44.1	39.5	48.7	33.5	55.0	87.6	52.4	53.5	56.5	59.6	66.2	67.2
Male	62.5	55.2	70.6	67.4	62.3	53.9	57.1	51.0	67.4	46.3	66.6	105.8	64.4	65.6	68.9	72.3	75.8	74.7
Female	29.9	26.6	50.1	48.2	38.2	33.2	32.5	29.3	31.5	21.7	44.2	70.6	41.6	42.7	45.6	48.2	57.4	60.2

Source: http://www.state.wv.us/bep/lmi/AFFACT/Aapartic.htm and http://stats.bls.gov/emp/emplab1.htm.

Why Is This Important?

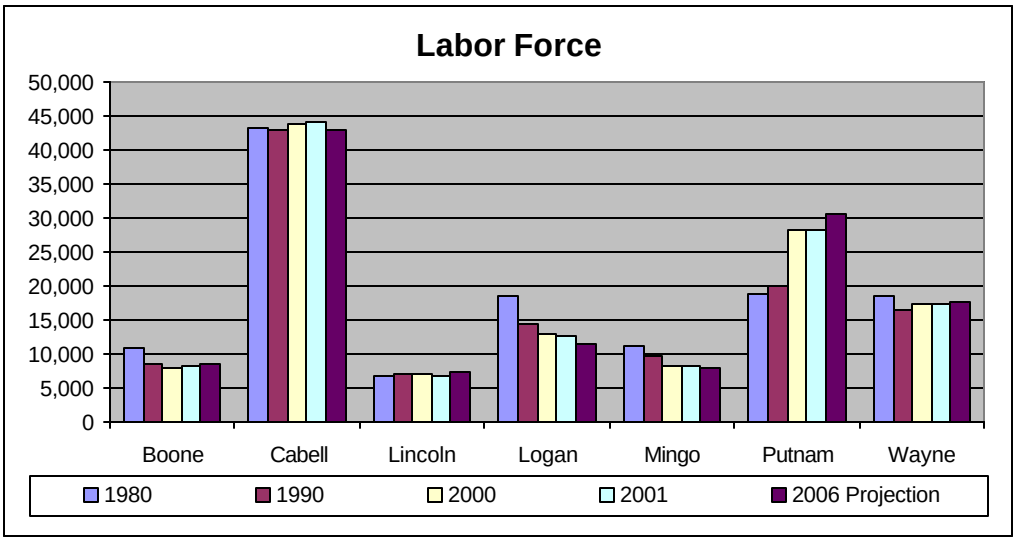
The labor force participation rate reports the percent of 16-year old and above noninstitutionalized civilian adults who are in the official labor force. By definition, the labor force includes those who are working and those unemployed and actively looking for a job.

How Are We Doing?

The overall, male, and female labor force participation rates in Putnam and Wayne counties rose during the 1990s, as did the state's. The other five counties experienced declines in all three rates. Only in Putnam county does the labor force participation rate exceeds the state's and nation's rates.

What Are The Implications?

Recall that the regional and state percentages of women are comparable. Further, the region has a larger percent of its population between 15-64 years old and a smaller percent of its population 65 years and above relative to the state. This suggests that regional and state differences in labor force participation rates are likely to be due to factor(s) other than gender or age.



Labor Force, 1980 to 2006

	Boone	Cabell	Lincoln	Logan	Mingo	Putnam	Wayne	WIA 2	W V	US
1980	11,010	43,100	6,640	18,650	11,310	18,890	18,610	128,210	788,000	106,940,000
1990	8,470	42,920	6,970	14,360	9,810	20,040	16,490	119,060	761,000	125,840,000
2000	7,990	43,810	6,970	12,850	8,260	28,380	17,240	125,500	825,000	140,863,000
2001	8,190	44,070	6,830	12,700	8,360	28,340	17,410	125,900	833,000	141,815,000
2006 Projection	8,588	43,084	7,405	11,616	7,968	30,562	17,517	126,739		

Source: http://www.state.wv.us/scripts/bep/lmi/cntydata.cfm, ftp://ftp.bls.gov/pub/special.requests/lf/aat1.txt, and Center for Business and Economic Research.

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.

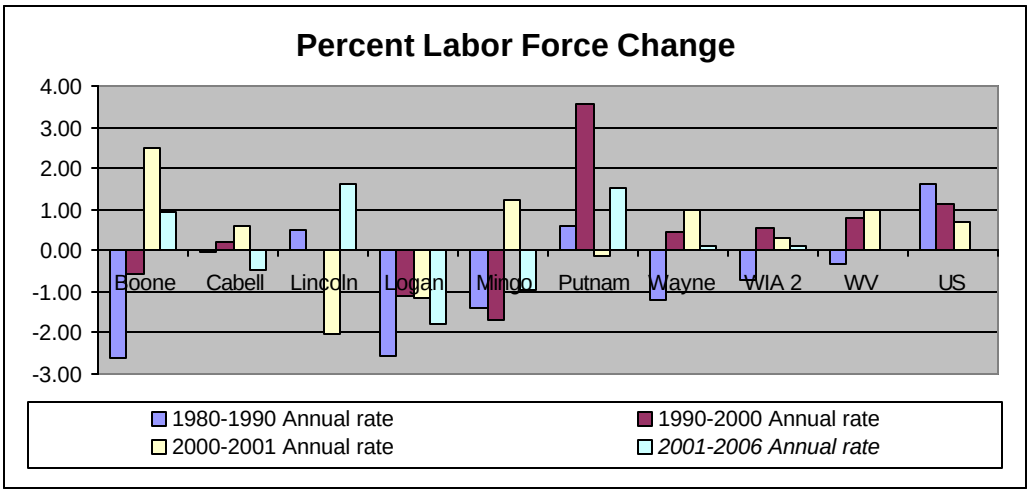
How Are We Doing?

Of the seven counties in the region, three have a labor force under 10,000, two between 10,000 and 20,000, one between 20,000 and 30,000, and one above 40,000. In 2001, the region's labor force is about 15.11 percent of the state's labor force, down from 15.64 percent in 1990 and 16.27 percent in 1980.

Projections for the 2000-2006 period show marginal increases in Boone, Lincoln, and Wayne county labor forces, and a strong increase in Putnam county.

What Are The Implications?

The county and regional labor forces are relatively small, and account for only 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 found earlier.



Percent Labor Force Change, 1980 to 2006

	Boone	Cabell	Lincoln	Logan	Mingo	Putnam	Wayne	WIA 2	WV	US
1980-1990	-23.07	-0.42	4.97	-23.00	-13.26	6.09	-11.39	-7.14	-3.43	17.67
1990-2000	-5.67	2.07	0.00	-10.52	-15.80	41.62	4.55	5.41	8.41	11.94
2000-2001	2.50	0.59	-2.01	-1.17	1.21	-0.14	0.99	0.32	0.97	0.68
2001-2006 Projection	4.85	-2.24	8.41	-8.53	-4.69	7.84	0.61	0.67		
1980-1990 Annual rate	-2.59	-0.04	0.49	-2.58	-1.41	0.59	-1.20	-0.74	-0.35	1.64
1990-2000 Annual rate	-0.58	0.21	0.00	-1.10	-1.71	3.54	0.45	0.53	0.81	1.13
2000-2001 Annual rate	2.50	0.59	-2.01	-1.17	1.21	-0.14	0.99	0.32	0.97	0.68
2001-2006 Annual rate	0.95	-0.45	1.63	-1.77	-0.96	1.52	0.12	0.13		

Source: http://www.state.wv.us/scripts/bep/lmi/cntydata.cfm, ftp://ftp.bls.gov/pub/special.requests/lf/aat1.txt, and Center for Business and Economic Research.

Why Is This Important?

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

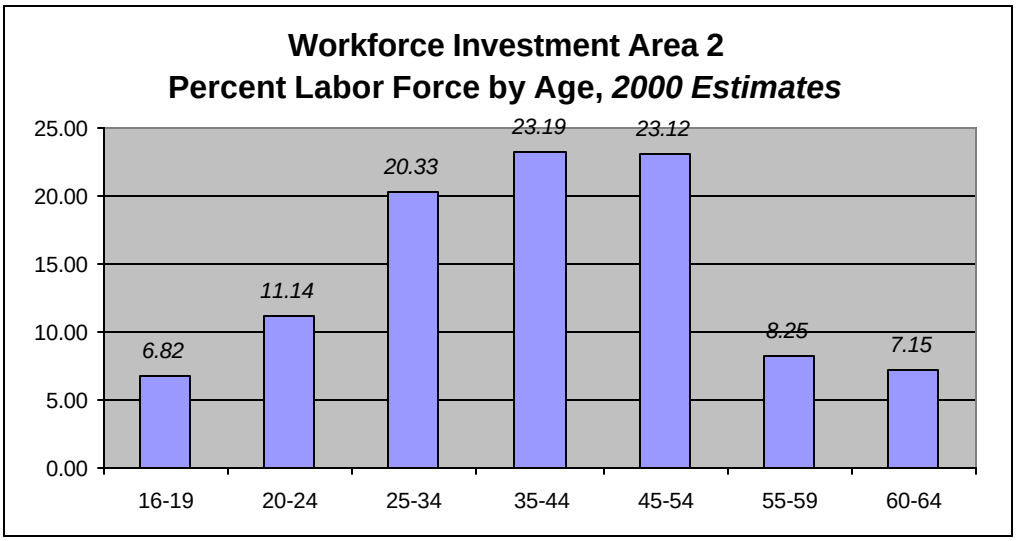
How Are We Doing?

After modest increases in its labor force in the 1980s, the labor force in Lincoln county stabilized in the 1990s, and appears to be on the decline today. After declines in the previous decade, the labor force in Cabell and Wayne counties grew marginally in the 1990s and remained relatively unchanged in the 2000-2001 period. Boone, Logan, and Mingo counties experienced significant labor force decreases in the 1980s, but the rates of decline slowed or reversed in all four counties after 1990. Putnam county on the other hand, continued to enjoy significant growth in its labor force, from 6.09 percent in the 1980s to 41.62 percent in the 1990s, although there was a nominal fall in the 2000-2001 period. Clearly, the turnaround in the region's labor force growth from negative in the 1980s to positive in the 1990s is due primarily to Putnam's performance. However, the region's performance is still below the state and national averages.

The 2000-2006 projections anticipate modest rates of decline in the labor forces of Cabell and Mingo counties, and modest rates of growth in the labor forces of Boone and Lincoln counties. The labor force in Putnam county is expected to continue to increase at a steady rate, but not the levels of the 1990s.

What Are The Implications?

Despite some favorable county trends and projections, there remains significant doubt about the future direction of the pool of labor force in much of the region.



Percent Labor Force by Age, *2000 Estimate*

	16 to 19 years	20 to 24 years	25 to 34 years	35 to 44 years	45 to 54 years	55 to 59 years	60 to 64 years
WIA 2	*6.82*	*11.14*	*20.33*	*23.19*	*23.12*	*8.25*	*7.15*

Source: Center for Business and Economic Research.

Why Is This Important?

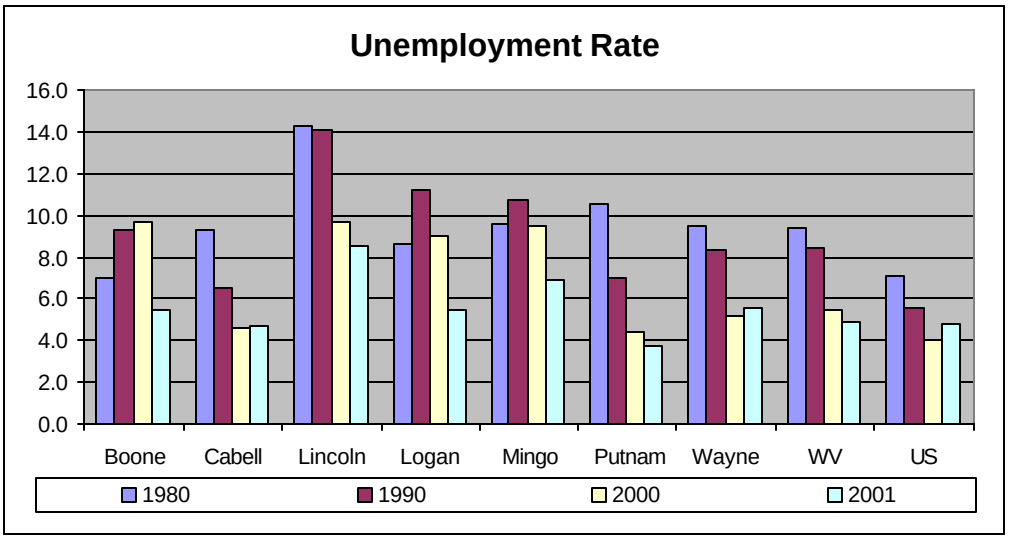
The labor force age distribution can indicate important changes in the labor force such as projected retirements, changes in career paths, and new entrants.

How Are We Doing?

Based on the 60-64 years old group, about 7.15 percent of the labor force in the region is expected to retire between year 2000 and 2005. Similarly, based on the 55-59 years old group, about 8.25 percent of the labor force is expected to retire between years 2006 and 2010.

What Are The Implications?

Earlier population age analyses suggest the region may have sufficient replacements pool of potential labor force to replace the retirees between the years 2000 and 2010, but not 2011 to 2020. This should be viewed with caution due to declining labor force participation rates and uncertainty about the size of the labor force in most of the region.



Unemployment Rate, 1980 to 2000

	Boone	Cabell	Lincoln	Logan	Mingo	Putnam	Wayne	WV	US
1980	7.0	9.3	14.3	8.6	9.6	10.5	9.5	9.4	7.1
1990	9.3	6.5	14.1	11.2	10.7	7.0	8.3	8.4	5.6
2000	9.7	4.6	9.7	9.0	9.5	4.4	5.2	5.5	4.0
2001	5.5	4.7	8.5	5.5	6.9	3.7	5.6	4.9	4.8

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

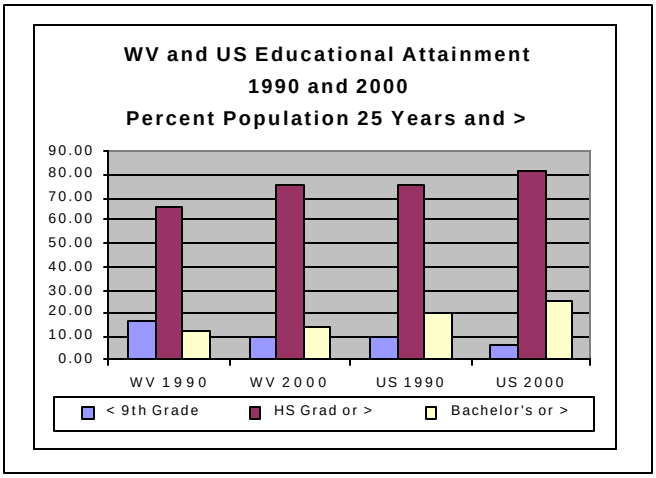
Except for very modest increases in Cabell and Wayne counties' unemployment rate in 2001, every county in the region is enjoying a lower unemployment rate today compared to the past twenty years. However, only the unemployment rates in Cabell and Putnam counties are below the state and national averages.

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. However, it should 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.

Educational Attainment Percent Population 25 years and Over, 1990 and 2000

	WV		US	
	1990	2000	1990	2000
Less than 9th grade	16.75	10.08	10.39	6.94
9th to 12th grade, no diploma	17.26	14.75	14.38	11.47
HS graduate (and equivalent)	36.62	39.88	29.99	29.53
Some college, no degree	13.24	16.86	18.74	20.53
Associate degree	3.80	4.31	6.16	6.47
Bachelor's degree	7.52	8.66	13.11	16.09
Graduate or professional degree	4.81	5.46	7.22	8.97
Percent HS graduate or >	65.99	75.17	75.24	81.59
Percent bachelor's degree or >	12.33	14.12	20.34	25.06



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?

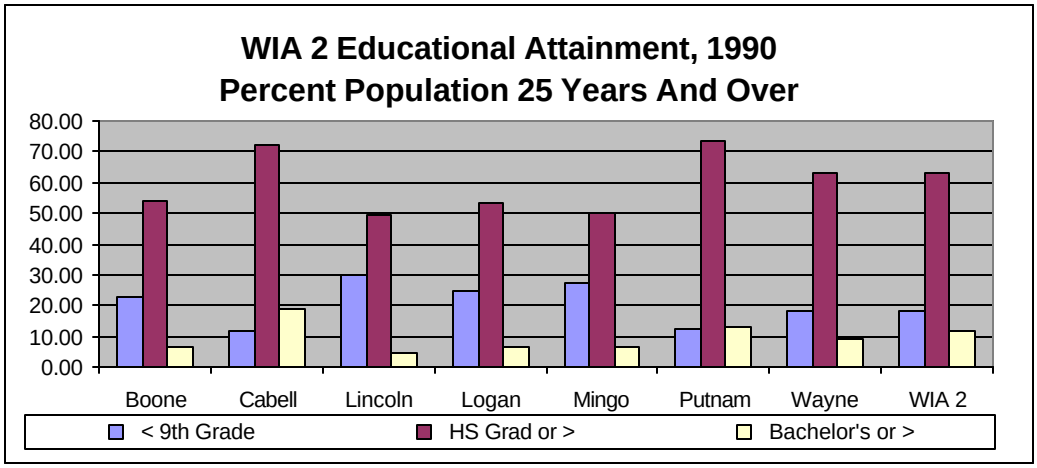
The educational attainment of the 25 years and older population is an important measure of the quality, and hence productivity and earnings of the workforce. Importantly, there is substantial evidence that education level and income are highly correlated.

How Are We Doing?

According to the 1990 Census, the overall educational attainment of the 25 years and older population in all but Cabell and Putman counties are lower than the state average, and all are below the national average. 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?

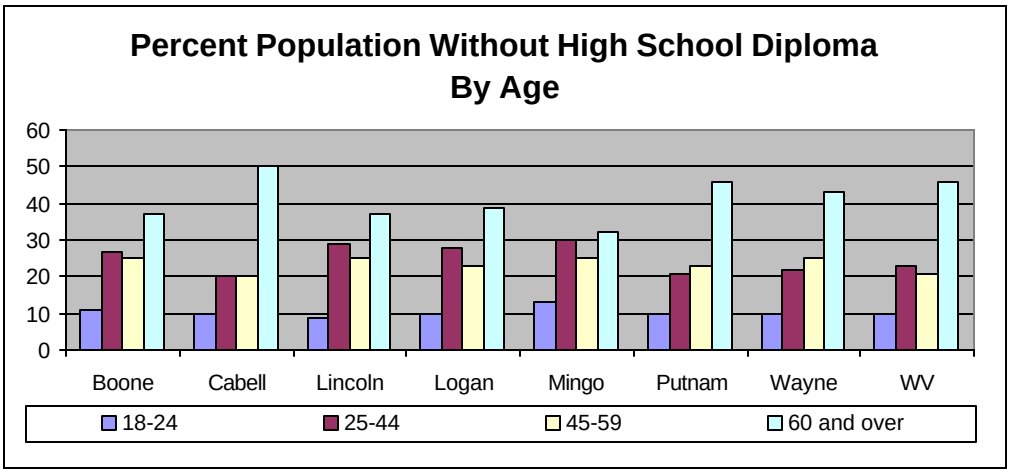
Relatively lower levels of education and productivity in the region's workforce not only translates directly to lower earnings, but may also deter potential employers from coming to the region. It is worthwhile to emphasize that while it is encouraging that the educational attainment of the state's 25 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 and region.



Educational Attainment Percent Population 25 years And Over, 1990

	Boone	Cabell	Lincoln	Logan	Mingo	Putnam	Wayne	WIA 2
Less than 9th grade	22.48	11.99	30.02	24.57	27.12	12.47	18.42	18.37
9th to 12th grade, no diploma	23.43	16.07	20.83	21.99	22.51	13.73	18.53	18.51
HS graduate (and equivalent)	35.89	31.55	35.36	32.77	31.53	40.95	37.62	34.52
Some college, no degree	9.74	17.03	7.62	11.11	9.64	15.41	13.50	13.47
Associate degree	2.03	4.49	1.44	3.25	2.61	4.15	2.91	3.44
Bachelor's degree	3.85	11.00	2.72	3.20	3.59	8.15	5.09	6.76
Graduate or professional degree	2.58	7.87	2.00	3.11	3.01	5.13	3.94	4.92
Percent HS graduate or higher	54.09	71.94	49.15	53.44	50.37	73.80	63.05	63.11
Percent bachelor's degree or higher	6.43	18.87	4.72	6.31	6.60	13.28	9.02	11.68

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



Percent of Population Without High School Diploma by Age

	Boone	Cabell	Lincoln	Logan	Mingo	Putnam	Wayne	WV
18 to 24 years	11	10	9	10	13	10	10	10
25 to 44 years	27	20	29	28	30	21	22	23
45 to 59 years	25	20	25	23	25	23	25	21
60 years and over	37	50	37	39	32	46	43	46

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

Why Is This Important?

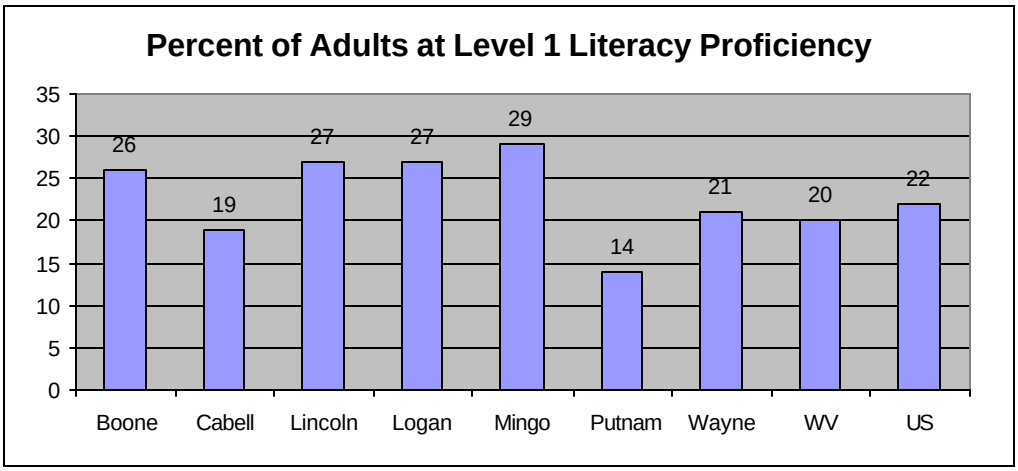
Information about the age distribution of those lacking a high school education highlights the age groups which may be most affected by lower education levels.

How Are We Doing?

Across the region and the state, those 60 years and older form the largest group in the population without a high school diploma. In Cabell, Putnam, and Wayne counties, the younger the age group, the smaller its share of the population without a high school diploma. In Boone, Lincoln, Logan, and Mingo counties, and the state, the 45-59 years old group makes up a smaller percent of the population without a high school diploma than the 24-44 years old group. The 18-24 years old group is the smallest group without a high school diploma.

What Are The Implications?

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



Source: http://wvabe.state.k12.wv.us/literacyestimates.htm ("The State of Literacy in America," published in 1998).

Why Is This Important?

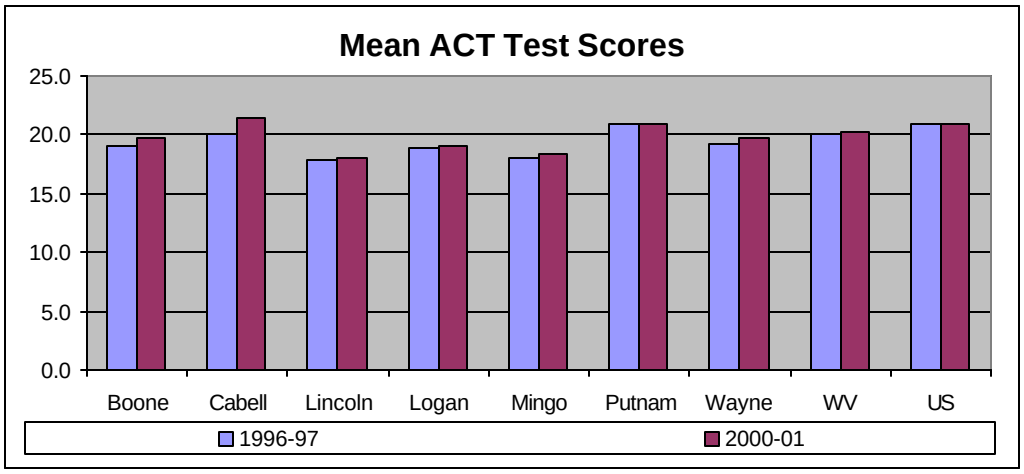
Adults who score at Level 1 literacy skills indicate difficulty performing such everyday tasks as locating an intersection on a street, map, reading and comprehending a short newspaper article, or calculating total cost on an order form. Therefore, lower percents of adults at Level 1 literacy proficiency 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. Three counties in the region, Cabell, Putnam, and Wayne scored lower than the nation.

What Are The Implications?

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



Mean ACT Scores

	Boone	Cabell	Lincoln	Logan	Mingo	Putnam	Wayne	WV	US
1996-97	19.1	20.0	17.9	18.9	18.1	20.9	19.2	20.0	21.0
1997-98	18.2	20.1	18.5	19.1	18.6	21.2	19.4	20.1	21.0
1998-99	19.8	20.3	18.5	19.6	18.8	21.1	19.8	20.2	21.0
1999-00	19.0	20.8	19.1	19.5	18.1	20.9	20.0	20.2	21.0
2000-01	19.8	21.5	18.1	19.0	18.3	21.0	19.8	20.2	21.0

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

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?

There have been some improvements in the region's and state's ACT composite (mean) scores since 1996-97. However, overall, the test scores still fall below the national average with the exception of Cabell county.

About one in every two children took the test in the school year 2000-01. The percent of students tested in Boone, Cabell, and Putnam counties have generally been rising.

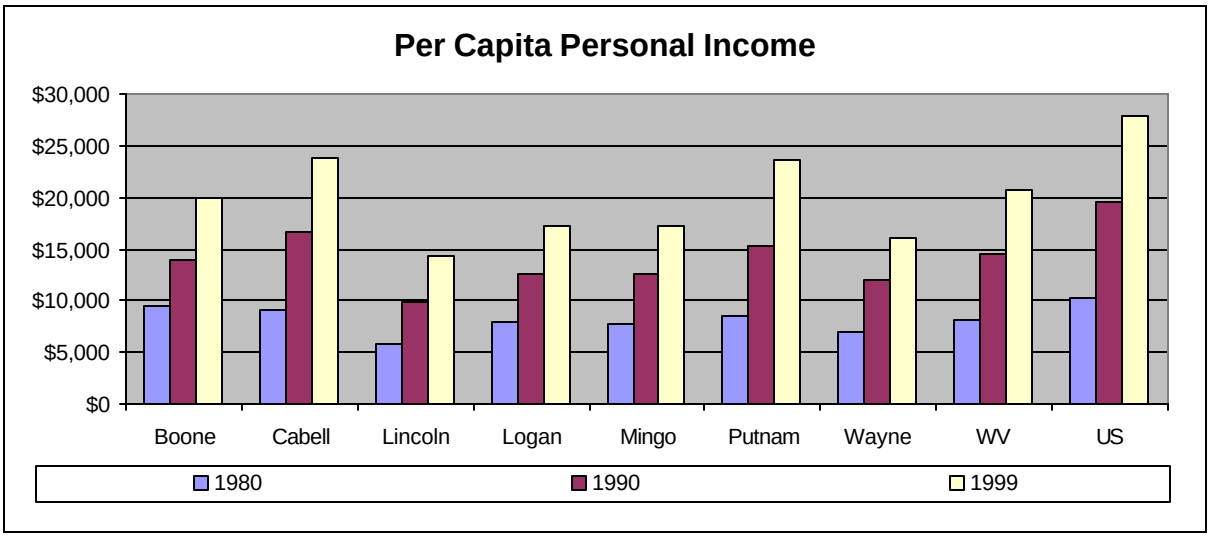
What Are The Implications?

Higher ACT test scores are encouraging because students who perform better, particularly in math and science, typically enjoy a broader range of career options. The composite score is representative of the average student performance only to the extent that the test takes are representative of the student population.

Percent Students Tested

	Boone	Cabell	Lincoln	Logan	Mingo	Putnam	Wayne	WV County Mean
1996-97	47.1	57.1	53.8	49.9	39.1	58.2	49.1	55.2
1997-98	51.0	58.7	40.4	42.4	36.1	61.3	42.0	53.5
1998-99	49.7	54.8	54.3	45.8	44.1	65.9	39.6	52.4
1999-00	52.5	59.3	35.7	44.8	51.6	71.1	52.9	56.7
2000-01	55.9	60.4	49.2	46.7	49.7	67.9	43.6	58.1

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



Per Capita Personal Income

	Boone	Cabell	Lincoln	Logan	Mingo	Putnam	Wayne	WV	US
1980	$9,503	$9,059	$5,776	$7,936	$7,829	$8,583	$6,988	$8,172	$10,183
1990	$13,855	$16,654	$9,780	$12,638	$12,629	$15,340	$12,084	$14,579	$19,584
1999	$19,843	$23,794	$14,261	$17,291	$17,268	$23,642	$15,988	$20,720	$27,859
2000								$21,767	$29,451

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

Why Is This Important?

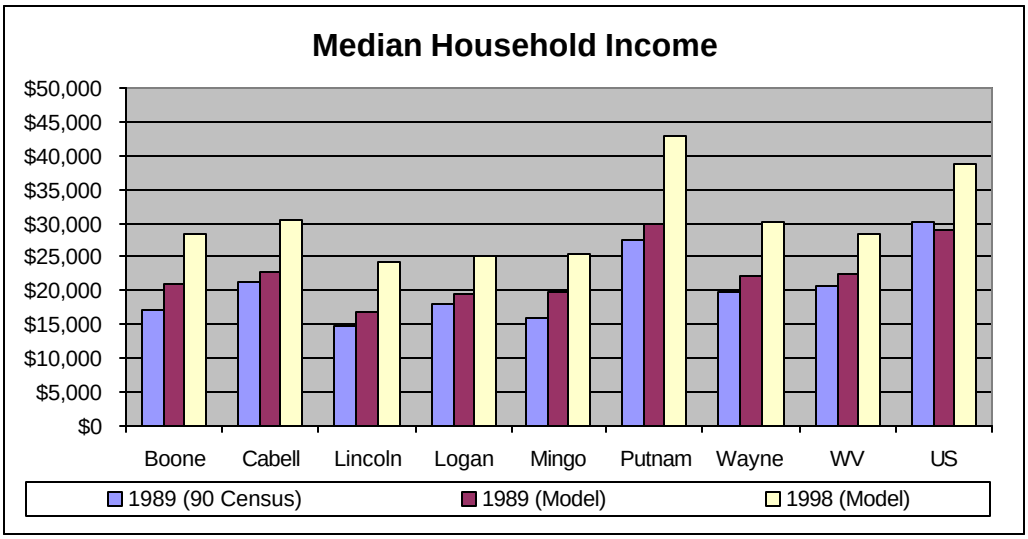
Per capita personal income measures the average current income received from all sources minus personal contributions for social insurance. The quality of jobs and training of workers are effectively gauged by this data. By way of caution, a relatively high number of retirees may bias this number downwards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

How Are We Doing?

In 1999, the per capita personal income of Cabell and Putnam counties exceed the state average, but the per capita personal income of all counties are below the national average. In many counties, the gap appears to be increasing.

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.



Median Household Income

	Boone	Cabell	Lincoln	Logan	Mingo	Putnam	Wayne	WV	US
1989 (90 Census)	$17,073	$21,255	$14,659	$17,942	$16,066	$27,405	$19,688	$20,795	$30,056
1989 (Model)	$21,003	$22,684	$16,881	$19,618	$19,775	$29,847	$22,092	$22,542	$28,906
1998 (Model)	$28,530	$30,565	$24,260	$25,061	$25,576	$43,000	$30,104	$28,460	$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?

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 the area's jobs and training of workers. As previously mentioned, it is cautioned that the high number of retirees may bias this number downwards.

How Are We Doing?

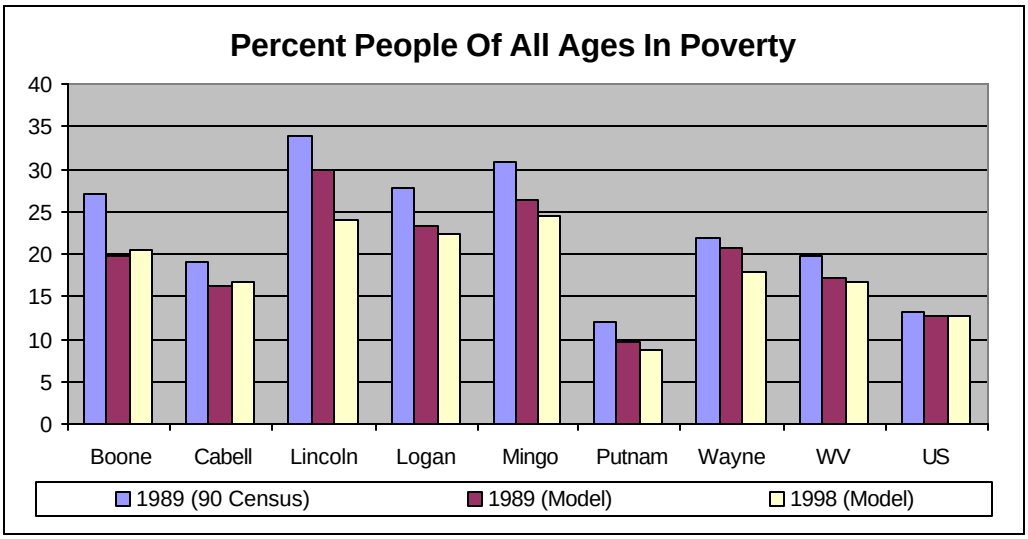
Data from the 1990 Census and the Current Population Survey Model Estimates are presented. Differences in the median income data results from the way in which data are collected and processed (for more detailed information, see http://www.census.gov/hhes/www/saipe/techdoc/centable.html). Both the Census 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 and modeled data for median income in 1989 show that the model consistently overestimates the actual median income in all counties. 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.

With the exception of Putnam county, the median household income in all the region's counties 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 household income.



Percent People of All Ages in Poverty

	Boone	Cabell	Lincoln	Logan	Mingo	Putnam	Wayne	WV	US
1989 (90 Census)	27.0	19.1	33.8	27.7	30.9	12.0	21.8	19.7	13.1
1989 (Model)	19.8	16.3	29.9	23.2	26.3	9.6	20.8	17.2	12.8
1998 (Model)	20.4	16.6	24.1	22.4	24.4	8.7	17.8	16.8	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?

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 personal income.

How Are We Doing?

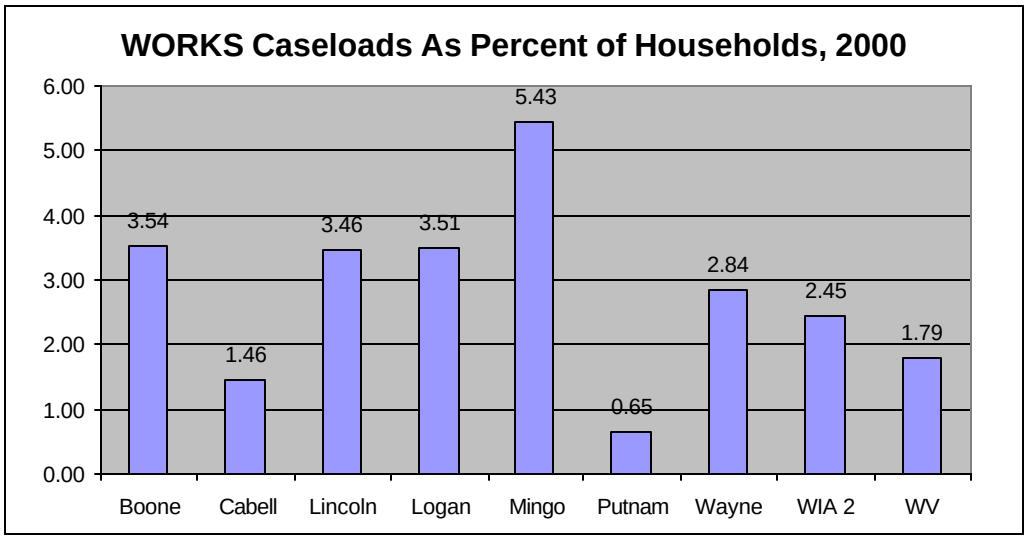
Again, data from the 1990 Census and the Current Population Survey Model Estimates are presented. Differences in the poverty data result from how the data is collected and processed, and differences in the definition of the "poverty universe" (for more detailed information on the differences, see http://www.census.gov/hhes/www/saipe/techdoc/centable.html).

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, the model contains consistent underestimates of the Census poverty rates in all the region's counties. Second, the 1998 model predictions of poverty rate reductions in all but Boone and Cabell counties, should be viewed cautiously.

Though the 1998 model data suggests some potential improvements, it is clear that poverty rates in every county, except Putnam, exceed the national rate. This suggests that for some counties, Boone, Lincoln, Logan, and Mingo, more than 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.



WORKS Caseloads, 2000

	Boone	Cabell	Lincoln	Logan	Mingo	Putnam	Wayne	WIA 2	WV
Number of cases	364.33	602.92	299.50	521.67	614.00	130.17	489.83	3,022.42	13,173.75
As a percent of households	3.54	1.46	3.46	3.51	5.43	0.65	2.84	2.45	1.79

Source: http://www.wwelfarereform.org/stats_numbers/caseload_00_1.html and http://quickfacts.census.gov/qfd/.

Why Is This Important?

WORKS Caseloads are essentially the number of households receiving government assistance in the form of *Temporary Assistance to Needy Families* (TANF), Medicaid and food stamps. Though a *Case Characteristics Study* of WORKS in the State has not been published, similar states (e.g. Tennessee) report that within their Appalachian counties the bulk of TANF cases are single mothers with a median age in the upper twenties. Many are recently divorced or separated, and are on the program temporarily. For example, since the introduction of the 60-month lifetime cap on benefits became operative recently, less than 1.5 percent of the recipients in 1996 are expected to use their full allotment of benefits by 2002.

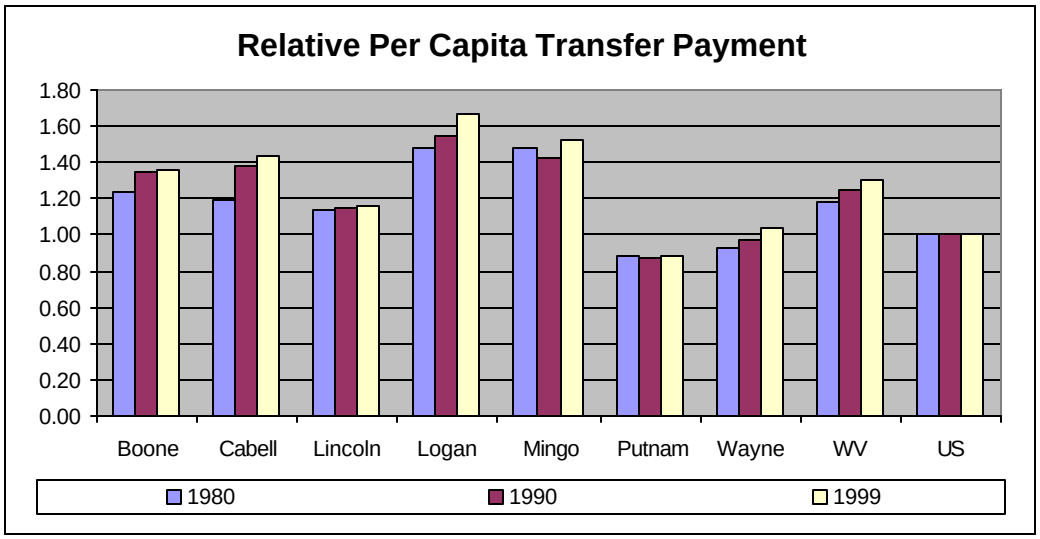
How are we doing?

In every county except Mingo, the number of household in WORKS is less than four percent of the county's total households. While these rates are low, many are above the state average.

Though any level of this type of need is too much, it is clear that the temporary nature of the program for most families and the relatively small number of families in the program, combined with dramatic reductions in the past five years, makes this one of the least compelling worries of the region.

What are the implications?

The fact that the state has seen roughly 40 percent increases in WORKS in the recent year suggests that with the profound reductions in cases in the late 1990's, there may be many families that are teetering near the brink of public assistance. This is another piece of data that, while not alarming, points to the dramatic need for educational improvements and workforce training in the region.



Relative Per Capita Transfer Payment (US=1.00)

	Boone	Cabell	Lincoln	Logan	Mingo	Putnam	Wayne	WV	US
1980	1.23	1.19	1.13	1.48	1.48	0.88	0.93	1.18	1.00
1990	1.34	1.38	1.14	1.55	1.42	0.87	0.97	1.25	1.00
1999	1.36	1.43	1.16	1.67	1.52	0.89	1.03	1.30	1.00
2000								1.31	1.00

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

Why Is This Important?

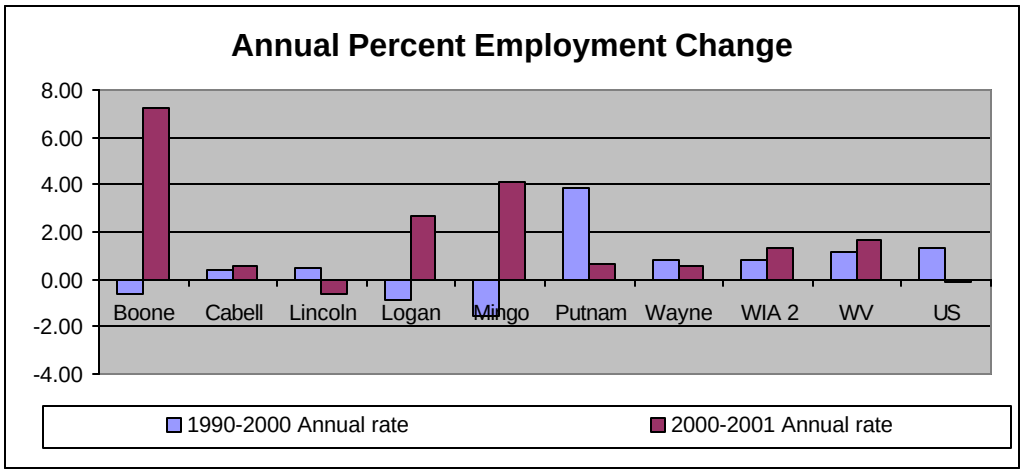
Transfer payments are payments that do not result from current production. Since retirement income is generally lower than working income, a relatively high number of retirees may bias this number upwards and bias the income data downward.

How Are We Doing?

The relative per capita transfer payment of all counties and the state has been rising since 1980, some faster than others. The per capita transfer payment in Lincoln, Wayne, and Putnam are lower than the state's average, but only Putnam's is below the national average.

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, dollars and as a percent of total transfer payment).



Employment, 1990 to 2001

	Boone	Cabell	Lincoln	Logan	Mingo	Putnam	Wayne	WIA 2	WV	US
1990	7,680	40,120	5,990	12,750	8,760	18,640	15,120	109,060	697,000	118,793,000
2000	7,210	41,780	6,290	11,690	7,480	27,130	16,340	117,920	779,000	135,208,000
2001	7,730	42,010	6,250	12,000	7,790	27,300	16,430	119,510	792,000	135,073,000
1990-2000 Percent change	-6.12	4.14	5.01	-8.31	-14.61	45.55	8.07	8.12	11.76	13.82
1990-2000 Annual rate	-0.63	0.41	0.49	-0.86	-1.57	3.82	0.78	0.78	1.12	1.30
2000-2001 Annual rate	7.21	0.55	-0.64	2.65	4.14	0.63	0.55	1.35	1.67	-0.10

Source: http://www.state.wv.us/bep/lmi/TABLE2 and ftp://ftp.bls.gov/pub/special.requests/lf/aat1.txt.

Why Is This Important?

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

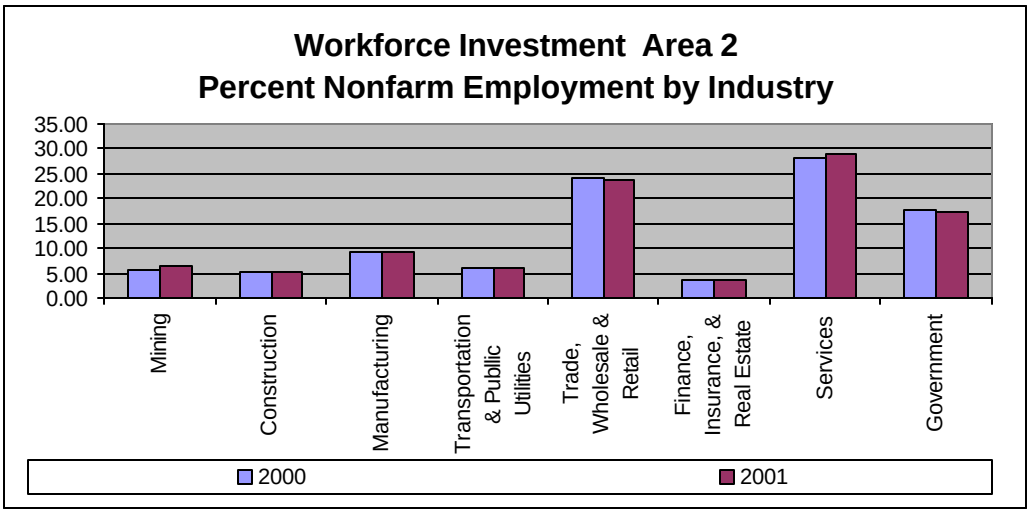
How Are We Doing?

Consistent with the labor force data, the levels of employment in three counties are below 10,000, two between 10,000 and 20,000, one between 20,000 and 30,000, and one above 40,000. In 2001, regional employment is about 15.09 percent of the state's, down from 15.65 percent in 1990.

Except for Putnam county employment growth in the region during the 1990s falls below the state and national averages. Boone, Logan, and Mingo experienced negative growth. The region and the state enjoyed net employment growths in 2001 despite the decline at the national level.

What Are The Implications?

Employment in both the individual counties and region are relatively small, accounting for only a small percent of the state's employment. The growth in the region and the state in 2001 illustrates how the area is relatively less affected by the national trend.



Why Is This Important?

Observing the employment share of major industry groups provide 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 28.83 percent, trade, wholesale and retail second at 23.56 percent, and the government third at 17.41 percent. This is true for many counties and the state as well, where services, trade, and government are the leading employers. Detailed data 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 data at the 1- and 2-digit level, and Appendix D presents the 1- and 2-digit level employment data accompanied by wage data.

What Are The Implications?

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

Nonfarm Employment by Industry, 2000 and 2001

	Boone		Cabell		Lincoln		Logan		Mingo		Putnam		Wayne		WIA 2		W V	
	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
TOTAL NONFARM PAYROLL	7,510	7,940	53,920	53,580	3,000	2,930	11,820	11,970	8,580	8,800	18,010	18,260	10,610	10,770	113,450	114,250	735,600	735,400
GOODS PRODUCING	3,040	3,420	8,500	7,910	490	500	1,960	2,170	2,830	3,050	4,190	4,350	2,100	2,150	23,110	23,550	135,000	133,600
MINING	2,730	3,110	40	50	180	190	780	980	2,150	2,300	30	30	550	510	6,460	7,170	20,500	22,400
COAL MINING	2,690	3,060	0	0			750	950	2,080	2,240	10	10	490	450	6,020	6,710	15,700	17,600
CONSTRUCTION	160	170	2,390	2,320	260	260	470	410	270	260	1,960	2,020	470	590	5,980	6,030	33,800	33,800
MANUFACTURING	140	140	6,070	5,550	60	50	710	790	410	500	2,200	2,310	1,080	1,060	10,670	10,400	80,700	77,400
DURABLE GOODS	130	120	4,370	3,920	40	40	550	640			1,250	1,390	300	270	6,640	6,380	48,400	46,200
NONDURABLE GOODS	20	20	1,700	1,630	10	10	160	150			960	910	780	780	3,630	3,500	32,300	31,200
SERVICE PRODUCING	4,480	4,530	45,430	45,670	2,510	2,430	9,860	9,800	5,750	5,750	13,810	13,910	8,510	8,610	90,350	90,700	600,600	601,800
TRANSPORTATION AND PUBLIC UTILITIES	230	220	2,160	2,230	210	180	430	420	1,150	1,160	1,850	1,680	910	950	6,940	6,840	37,400	37,000
TRADE, WHOLSLE & RETAIL	1,270	1,220	14,020	13,880	480	470	3,220	3,180	1,040	1,010	5,260	5,300	1,890	1,860	27,180	26,920	164,200	161,600
FINANCE, INSURANCE, AND REAL ESTATE	150	140	2,670	2,680	70	60	330	310	240	210	590	540	160	150	4,210	4,090	29,500	29,500
SERVICES	1,290	1,370	18,360	18,680	760	770	3,730	3,800	1,710	1,850	3,720	4,050	2,270	2,420	31,840	32,940	226,200	232,700
GOVERNMENT	1,540	1,570	8,220	8,200	990	940	2,150	2,090	1,600	1,520	2,400	2,330	3,280	3,240	20,180	19,890	143,300	141,000

Source: http://www.state.wv.us/bep/lmi/TABLE2.

Percent Nonfarm Employment by Industry, 2000 and 2001

	Boone		Cabell		Lincoln		Logan		Mingo		Putnam		Wayne		WIA 2		W V	
	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
TOTAL NONFARM PAYROLL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
GOODS PRODUCING	40.48	43.07	15.76	14.76	16.33	17.06	16.58	18.13	32.98	34.66	23.26	23.82	19.79	19.96	20.37	20.61	18.35	18.17
MINING	36.35	39.17	0.07	0.09	6.00	6.48	6.60	8.19	25.06	26.14	0.17	0.16	5.18	4.74	5.69	6.28	2.79	3.05
COAL MINING	35.82	38.54	0.00	0.00			6.35	7.94	24.24	25.45	0.06	0.05	4.62	4.18	5.31	5.87	2.13	2.39
CONSTRUCTION	2.13	2.14	4.43	4.33	8.67	8.87	3.98	3.43	3.15	2.95	10.88	11.06	4.43	5.48	5.27	5.28	4.59	4.60
MANUFACTURING	1.86	1.76	11.26	10.36	2.00	1.71	6.01	6.60	4.78	5.68	12.22	12.65	10.18	9.84	9.41	9.10	10.97	10.52
DURABLE GOODS	1.73	1.51	8.10	7.32	1.33	1.37	4.65	5.35			6.94	7.61	2.83	2.51	5.85	5.58	6.58	6.28
NONDURABLE GOODS	0.27	0.25	3.15	3.04	0.33	0.34	1.35	1.25			5.33	4.98	7.35	7.24	3.20	3.06	4.39	4.24
SERVICE PRODUCING	59.65	57.05	84.25	85.24	83.67	82.94	83.42	81.87	67.02	65.34	76.68	76.18	80.21	79.94	79.64	79.39	81.65	81.83
TRANSPORTATION AND PUBLIC UTILITIES	3.06	2.77	4.01	4.16	7.00	6.14	3.64	3.51	13.40	13.18	10.27	9.20	8.58	8.82	6.12	5.99	5.08	5.03
TRADE, WHOLSLE & RETAIL	16.91	15.37	26.00	25.91	16.00	16.04	27.24	26.57	12.12	11.48	29.21	29.03	17.81	17.27	23.96	23.56	22.32	21.97
FINANCE, INSURANCE, AND REAL ESTATE	2.00	1.76	4.95	5.00	2.33	2.05	2.79	2.59	2.80	2.39	3.28	2.96	1.51	1.39	3.71	3.58	4.01	4.01
SERVICES	17.18	17.25	34.05	34.86	25.33	26.28	31.56	31.75	19.93	21.02	20.66	22.18	21.39	22.47	28.07	28.83	30.75	31.64
GOVERNMENT	20.51	19.77	15.24	15.30	33.00	32.08	18.19	17.46	18.65	17.27	13.33	12.76	30.91	30.08	17.79	17.41	19.48	19.17

Source: http://www.state.wv.us/bep/lmi/TABLE2.

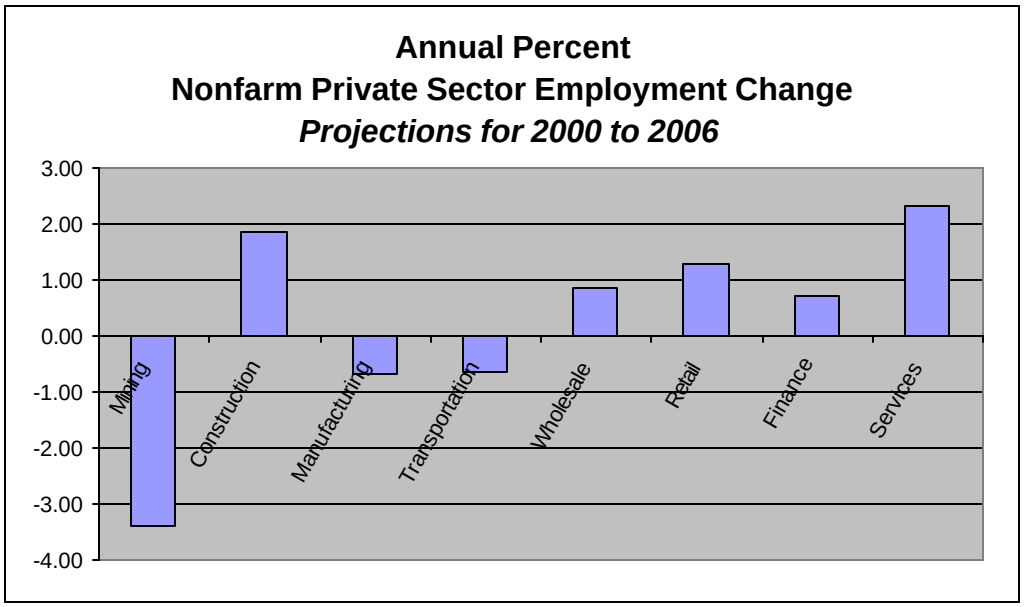
Total All Industries, Workforce Investment Area 2

	2000		2001	
Top Employing Industries	**Employment**	**Percent**	**Employment**	**Percent**
Health services	9,580	9.30	9,580	9.30
Educational services	8,890	8.70	8,890	8.70
Government	6,900	6.70	6,900	6.70
Eating and drinking places	6,530	6.40	6,530	6.40
Best Paying Industries*	**Mean Wage**	**Employment**	**Mean Wage**	**Employment**
Securities And Commodity Brokers, Dealers, Exchanges, and Services	$21.22		$21.68	
Chemicals And Allied Products	$20.49	880	$20.93	880
Coal Mining	$19.74	5,930	$20.17	5,930
Communications	$19.16	1,170	$19.58	1,170
Across All Industries and All Occupations	**Mean Wage**		**Mean Wage**	
Mean wage**	$27,117.00	$13.04	$27,705.00	$13.32
Entry wage	$13,245.00	$6.37	$13,532.00	$6.51
Experienced wage	$34,053.00	$16.37	$34,791.00	$16.72
Median wage	$21,830.00	$10.50	$22,303.00	$10.73

Source: http://www.state.wv.us/bep/lmi/ow2000/Page0024.htm and http://www.state.wv.us/bep/lmi/ow2001/Page0024.htm.

* See Appendix E for comparative occupational wages.

** Mean wage 1999: $12.55 and mean wage 1998: $12.14.



Workforce Investment Area 2

Percent Nonfarm Private Sector Employment Change by Industry, *Projections for 2000-2006**

	Mining	Construction	Manufacturing	Transportation	Wholesale	Retail	Finance	Services
2000-2006 Projection	*-18.70*	*11.77*	*-3.94*	*-3.83*	*5.18*	*7.91*	*4.39*	*14.82*
2000-2006 Annual rate	*-3.39*	*1.87*	*-0.67*	*-0.65*	*0.85*	*1.28*	*0.72*	*2.33*

Source: Center for Business and Economic Research.

* See Appendix F for occupational projections, 1998-2008, and Appendix G for occupational projections by total growth, 1998-2008.

Why Is This Important?

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

How Are We Doing?

The region's 2000-2006 projections anticipate current trends will continue. Services is expected to enjoy the highest growth rate in employment, followed by trade, retail and wholesale. Construction is expected to post strong growth as well. Finance is expected to experience nominal growth. Employment in the mining, manufacturing, and transportation sectors is expected to decline.

What Are The Implications?

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

Section III:

Labor Market Impacts of Small Business and the Shadow Economy

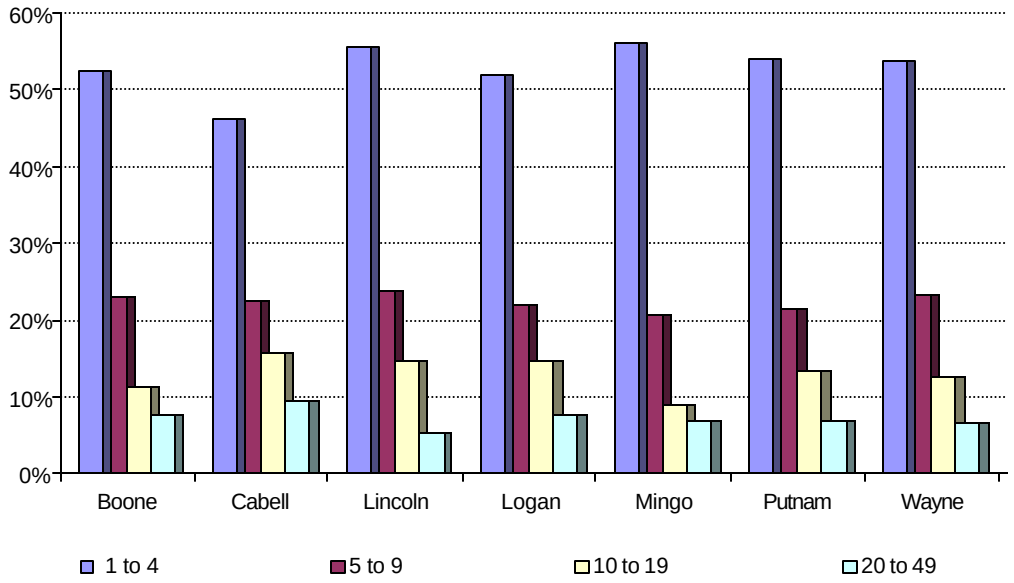
State of the Workforce Report
South Western West Virginia Region 2
Workforce Investment Board

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 2. 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 2. 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.

APPENDIX A

PERCENT POPULATION BY AGE, 1990

and

PERCENT POPULATION BY AGE, 1990 AND 2000

Percent Population by Age, 1990

	Boone	Cabell	Lincoln	Logan	Mingo	Putnam	Wayne	WIA 2	WV	US
Under 5 years	5.71	5.48	6.01	5.66	6.57	6.77	5.76	5.90	5.95	7.38
5 to 17 years	21.38	16.39	21.95	22.16	23.86	19.98	19.91	19.82	18.79	18.19
18 to 20 years	4.33	6.39	4.71	4.63	4.77	3.77	4.65	5.07	4.87	4.72
21 to 24 years	4.69	6.38	4.88	4.81	5.44	4.51	5.04	5.36	5.17	6.04
25 to 44 years	31.30	28.15	29.81	30.74	31.04	33.35	29.18	30.09	29.71	32.47
45 to 54 years	10.73	10.58	10.87	9.74	9.62	11.84	11.76	10.73	10.67	10.14
55 to 59 years	4.44	4.86	4.78	4.71	4.05	4.53	4.99	4.68	4.75	4.23
60 to 64 years	4.85	5.40	4.47	4.95	4.28	4.23	4.97	4.88	5.11	4.27
65 to 74 years	7.85	9.28	7.19	7.74	6.53	6.61	8.27	7.98	8.68	7.28
75 to 84 years	3.71	5.36	4.26	3.92	2.98	3.47	4.29	4.27	4.89	4.04
85 years and over	1.01	1.72	1.07	0.95	0.87	0.93	1.17	1.23	1.42	1.24

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

Percent Population by Age, 1990 and 2000

	Boone		Cabell		Lincoln		Logan		Mingo		Putnam		Wayne		WIA 2		WV		US	
	1990	**2000**	**1990**	**2000**	**1990**	**2000**	**1990**	**2000**	**1990**	**2000**	**1990**	**2000**	**1990**	**2000**	**1990**	**2000**	**1990**	**2000**	**1990**	**2000**
Under 5 years	5.7	6.3	5.5	5.4	6.0	6.0	5.7	5.7	6.6	5.8	6.8	6.5	5.8	5.8	5.9	5.9	5.9	5.6	7.4	6.8
5 to 24 years	30.4	25.9	29.2	28.1	31.5	27.0	31.6	25.7	34.1	27.6	28.3	25.9	29.6	26.4	30.3	26.9	28.8	26.0	28.9	28.5
25 to 44 years	31.3	28.0	28.2	26.7	29.8	29.1	30.7	28.0	31.0	29.2	33.4	30.4	29.2	27.7	30.1	28.2	29.7	27.8	32.5	30.2
45 to 54 years	10.7	16.5	10.6	13.8	10.9	14.7	9.7	16.3	9.6	15.6	11.8	15.5	11.8	14.4	10.7	15.0	10.7	15.0	10.1	13.4
55 to 59 years	4.4	5.3	4.9	5.2	4.8	5.3	4.7	5.1	4.0	5.1	4.5	5.7	5.0	5.7	4.7	5.3	4.8	5.5	4.2	4.8
60 to 64 years	4.9	4.5	5.4	4.6	4.5	5.0	5.0	4.6	4.3	4.3	4.2	4.3	5.0	5.2	4.9	4.6	5.1	4.8	4.3	3.8
65 to 74 years	7.8	7.5	9.3	8.4	7.2	7.7	7.7	8.4	6.5	7.2	6.6	6.7	8.3	8.6	8.0	7.9	8.7	8.2	7.3	6.5
75 to 84 years	3.7	4.7	5.4	5.8	4.3	4.0	3.9	4.8	3.0	4.1	3.5	3.8	4.3	5.0	4.3	4.9	4.9	5.3	4.0	4.4
85 years and over	1.0	1.4	1.7	1.8	1.1	1.4	0.9	1.3	0.9	1.1	0.9	1.1	1.2	1.3	1.2	1.4	1.4	1.8	1.2	1.5

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)).

APPENDIX B

TRANSFER PAYMENTS

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

	1980		1990		1999	
	$ (000)	%	$ (000)	%	$ (000)	%
Total transfer payments	46,263	100.00	82,519	100.00	130,156	100.00
Government payments to individuals	44,126	95.38	79,287	96.08	125,529	96.45
Retirement & disability insur. benefit pymts.	31,776	68.69	47,184	57.18	65,813	50.56
Old age, survivors, & disability ins. pymts.	17,392	37.59	31,805	38.54	51,127	39.28
Railroad retirement and disability payments	818	1.77	1,227	1.49	1,531	1.18
Worker's compensation payments (Fed & State)	2,031	4.39	4,563	5.53	5,998	4.61
Other govt. disability ins. & ret. pymts.	11,535	24.93	9,589	11.62	7,157	5.50
Medical payments	3,906	8.44	16,069	19.47	35,809	27.51
Medicare payments	3,436	7.43	11,046	13.39	20,363	15.65
Public assistance medical care	438	0.95	4,917	5.96	15,370	11.81
Military medical insurance payments			106	0.13	76	0.06
Income maintenance benefit payments	3,941	8.52	10,526	12.76	15,752	12.10
Supplemental security income (SSI) payments	978	2.11	2,490	3.02	6,484	4.98
Family assistance	1,036	2.24	2,627	3.18	853	0.66
Food stamps	1,319	2.85	4,213	5.11	4,424	3.40
Other income maintenance	608	1.31	1,196	1.45	3,991	3.07
Unemployment insurance benefit payments	2,121	4.58	2,987	3.62	4,610	3.54
State unemployment insurance compensation	1,978	4.28	2,887	3.50	4,528	3.48
Unemp. comp. for Fed. civilian empl. (UCFE)						
Unemp. compensation for railroad employees			61	0.07		
Unemployment compensation for veterans (UCX)						
Other unemployment compensation	59	0.13	0	0.00	0	0.00
Veterans benefit payments	2,211	4.78	2,254	2.73	3,133	2.41
Veterans pension and disability payments	1,881	4.07	1,987	2.41	2,968	2.28
Veterans readjustment payments	196	0.42	104	0.13	71	0.05
Veterans life insurance benefit payments	125	0.27	162	0.20	94	0.07
Other assistance to veterans					0	0.00
Fed ed.& train. assist. paymts.(excl.vets)	169	0.37	247	0.30	357	0.27
Other payments to individuals					55	0.04
Payments to nonprofit institutions	1,264	2.73	1,509	1.83	2,628	2.02
Federal government payments	438	0.95	413	0.50	700	0.54
State and local government payments	507	1.10	601	0.73	1,054	0.81
Business payments	319	0.69	495	0.60	874	0.67
Business payments to individuals	873	1.89	1,723	2.09	1,999	1.54

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

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

	1980		1990		1999	
	$ (000)	%	$ (000)	%	$ (000)	%
Total transfer payments	157,284	100.00	319,128	100.00	490,068	100.00
Government payments to individuals	149,792	95.24	307,027	96.21	473,568	96.63
Retirement & disability insur. benefit pymts.	93,624	59.53	177,653	55.67	227,873	46.50
Old age, survivors, & disability ins. pymts.	69,764	44.36	133,235	41.75	176,310	35.98
Railroad retirement and disability payments	13,142	8.36	20,982	6.57	23,108	4.72
Worker's compensation payments (Fed & State)	6,892	4.38	19,784	6.20	25,164	5.13
Other govt. disability ins. & ret. pymts.	3,826	2.43	3,652	1.14	3,291	0.67
Medical payments	20,574	13.08	76,369	23.93	169,472	34.58
Medicare payments	13,039	8.29	47,103	14.76	79,505	16.22
Public assistance medical care	7,350	4.67	28,614	8.97	89,455	18.25
Military medical insurance payments	185	0.12	652	0.20	512	0.10
Income maintenance benefit payments	13,192	8.39	26,458	8.29	40,694	8.30
Supplemental security income (SSI) payments	3,885	2.47	8,244	2.58	17,081	3.49
Family assistance	3,321	2.11	5,491	1.72	1,750	0.36
Food stamps	4,120	2.62	9,305	2.92	10,966	2.24
Other income maintenance	1,866	1.19	3,418	1.07	10,897	2.22
Unemployment insurance benefit payments	11,688	7.43	4,881	1.53	5,062	1.03
State unemployment insurance compensation	10,562	6.72	4,309	1.35	4,705	0.96
Unemp. comp. for Fed. civilian empl. (UCFE)						
Unemp. compensation for railroad employees	535	0.34	440	0.14	161	0.03
Unemployment compensation for veterans (UCX)	188	0.12	109	0.03	157	0.03
Other unemployment compensation	366	0.23			0	0.00
Veterans benefit payments	7,712	4.90	12,506	3.92	17,474	3.57
Veterans pension and disability payments	6,150	3.91	11,438	3.58	15,281	3.12
Veterans readjustment payments	901	0.57	391	0.12	1,312	0.27
Veterans life insurance benefit payments	619	0.39	674	0.21	874	0.18
Other assistance to veterans						
Fed ed.& train. assist. paymts.(excl.vets)	2,993	1.90	9,090	2.85	12,798	2.61
Other payments to individuals			70	0.02	195	0.04
Payments to nonprofit institutions	4,429	2.82	5,648	1.77	9,392	1.92
Federal government payments	1,534	0.98	1,548	0.49	2,489	0.51
State and local government payments	1,777	1.13	2,247	0.70	3,750	0.77
Business payments	1,118	0.71	1,853	0.58	3,153	0.64
Business payments to individuals	3,063	1.95	6,453	2.02	7,108	1.45

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

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

	1980		1990		1999	
	$ (000)	%	$ (000)	%	$ (000)	%
Total transfer payments	33,128	100.00	58,321	100.00	94,939	100.00
Government payments to individuals	31,466	94.98	55,643	95.41	91,009	95.86
Retirement & disability insur. benefit pymts.	17,974	54.26	29,216	50.10	45,966	48.42
Old age, survivors, & disability ins. pymts.	11,637	35.13	21,132	36.23	37,026	39.00
Railroad retirement and disability payments	1,054	3.18	1,744	2.99	2,284	2.41
Worker's compensation payments (Fed & State)	1,086	3.28	2,670	4.58	3,688	3.88
Other govt. disability ins. & ret. pymts.	4,197	12.67	3,670	6.29	2,968	3.13
Medical payments	2,260	6.82	8,957	15.36	20,711	21.82
Medicare payments	2,021	6.10	7,530	12.91	16,483	17.36
Public assistance medical care	214	0.65	1,331	2.28	4,160	4.38
Military medical insurance payments			96	0.16	68	0.07
Income maintenance benefit payments	6,264	18.91	12,891	22.10	18,193	19.16
Supplemental security income (SSI) payments	1,931	5.83	4,031	6.91	8,463	8.91
Family assistance	1,292	3.90	2,716	4.66	760	0.80
Food stamps	2,265	6.84	4,710	8.08	4,132	4.35
Other income maintenance	776	2.34	1,434	2.46	4,838	5.10
Unemployment insurance benefit payments	3,067	9.26	1,805	3.09	2,162	2.28
State unemployment insurance compensation	2,807	8.47	1,775	3.04	2,077	2.19
Unemp. comp. for Fed. civilian empl. (UCFE)						
Unemp. compensation for railroad employees	110	0.33	0	0.00		
Unemployment compensation for veterans (UCX)						
Other unemployment compensation	114	0.34				
Veterans benefit payments	1,768	5.34	2,554	4.38	3,629	3.82
Veterans pension and disability payments	1,587	4.79	2,362	4.05	3,280	3.45
Veterans readjustment payments	112	0.34	87	0.15	56	0.06
Veterans life insurance benefit payments	69	0.21	105	0.18	293	0.31
Other assistance to veterans	0	0.00	0	0.00	0	0.00
Fed ed.& train. assist. paymts.(excl.vets)	131	0.40	204	0.35	302	0.32
Other payments to individuals						
Payments to nonprofit institutions	983	2.97	1,250	2.14	2,232	2.35
Federal government payments	341	1.03	342	0.59	595	0.63
State and local government payments	394	1.19	498	0.85	895	0.94
Business payments	248	0.75	410	0.70	742	0.78
Business payments to individuals	679	2.05	1,428	2.45	1,698	1.79

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

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

	1980		1990		1999	
	$ (000)	%	$ (000)	%	$ (000)	%
Total transfer payments	92,403	100.00	158,327	100.00	244,955	100.00
Government payments to individuals	88,850	96.15	152,958	96.61	237,848	97.10
Retirement & disability insur. benefit pymts.	62,638	67.79	89,578	56.58	110,464	45.10
Old age, survivors, & disability ins. pymts.	34,404	37.23	60,118	37.97	84,286	34.41
Railroad retirement and disability payments	1,240	1.34	2,493	1.57	3,436	1.40
Worker's compensation payments (Fed & State)	2,917	3.16	6,651	4.20	7,872	3.21
Other govt. disability ins. & ret. pymts.	24,077	26.06	20,316	12.83	14,870	6.07
Medical payments	10,026	10.85	35,714	22.56	89,090	36.37
Medicare payments	6,157	6.66	20,981	13.25	43,423	17.73
Public assistance medical care	3,824	4.14	14,575	9.21	45,565	18.60
Military medical insurance payments			158	0.10	102	0.04
Income maintenance benefit payments	7,548	8.17	18,873	11.92	26,141	10.67
Supplemental security income (SSI) payments	1,986	2.15	4,544	2.87	10,807	4.41
Family assistance	1,957	2.12	4,705	2.97	1,192	0.49
Food stamps	2,640	2.86	7,430	4.69	6,867	2.80
Other income maintenance	965	1.04	2,194	1.39	7,275	2.97
Unemployment insurance benefit payments	4,610	4.99	3,043	1.92	4,133	1.69
State unemployment insurance compensation	3,682	3.98	2,924	1.85	4,046	1.65
Unemp. comp. for Fed. civilian empl. (UCFE)						
Unemp. compensation for railroad employees	94	0.10	74	0.05		
Unemployment compensation for veterans (UCX)						
Other unemployment compensation	750	0.81			0	0.00
Veterans benefit payments	3,743	4.05	4,225	2.67	5,858	2.39
Veterans pension and disability payments	3,161	3.42	3,798	2.40	5,312	2.17
Veterans readjustment payments	345	0.37	176	0.11	146	0.06
Veterans life insurance benefit payments	221	0.24	249	0.16	400	0.16
Other assistance to veterans					0	0.00
Fed ed.& train. assist. paymts.(excl.vets)	281	0.30	1,493	0.94	2,078	0.85
Other payments to individuals					84	0.03
Payments to nonprofit institutions	2,101	2.27	2,506	1.58	4,053	1.65
Federal government payments	728	0.79	686	0.43	1,069	0.44
State and local government payments	843	0.91	998	0.63	1,610	0.66
Business payments	530	0.57	822	0.52	1,374	0.56
Business payments to individuals	1,452	1.57	2,863	1.81	3,054	1.25

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

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

	1980		1990		1999	
	$ (000)	%	$ (000)	%	$ (000)	%
Total transfer payments	68,261	100.00	114,164	100.00	174,685	100.00
Government payments to individuals	65,639	96.16	109,950	96.31	169,126	96.82
Retirement & disability insur. benefit pymts.	45,259	66.30	63,249	55.40	82,550	47.26
Old age, survivors, & disability ins. pymts.	23,379	34.25	40,430	35.41	61,990	35.49
Railroad retirement and disability payments	2,192	3.21	3,583	3.14	4,509	2.58
Worker's compensation payments (Fed & State)	2,053	3.01	4,970	4.35	5,469	3.13
Other govt. disability ins. & ret. pymts.	17,635	25.83	14,266	12.50	10,582	6.06
Medical payments	5,149	7.54	21,464	18.80	49,583	28.38
Medicare payments	4,224	6.19	14,418	12.63	27,837	15.94
Public assistance medical care	891	1.31	6,933	6.07	21,675	12.41
Military medical insurance payments			113	0.10	71	0.04
Income maintenance benefit payments	8,889	13.02	19,600	17.17	28,517	16.32
Supplemental security income (SSI) payments	2,065	3.03	4,835	4.24	12,557	7.19
Family assistance	2,624	3.84	5,147	4.51	1,673	0.96
Food stamps	3,181	4.66	7,404	6.49	6,757	3.87
Other income maintenance	1,019	1.49	2,214	1.94	7,530	4.31
Unemployment insurance benefit payments	2,972	4.35	2,403	2.10	3,595	2.06
State unemployment insurance compensation	2,326	3.41	2,100	1.84	3,509	2.01
Unemp. comp. for Fed. civilian empl. (UCFE)						
Unemp. compensation for railroad employees	248	0.36	269	0.24		
Unemployment compensation for veterans (UCX)						
Other unemployment compensation	348	0.51	0	0.00	0	0.00
Veterans benefit payments	2,855	4.18	2,808	2.46	4,277	2.45
Veterans pension and disability payments	2,514	3.68	2,523	2.21	4,053	2.32
Veterans readjustment payments	203	0.30	135	0.12	89	0.05
Veterans life insurance benefit payments	129	0.19	149	0.13	135	0.08
Other assistance to veterans					0	0.00
Fed ed.& train. assist. paymts.(excl.vets)	512	0.75	400	0.35	540	0.31
Other payments to individuals					64	0.04
Payments to nonprofit institutions	1,550	2.27	1,967	1.72	3,167	1.81
Federal government payments	537	0.79	539	0.47	838	0.48
State and local government payments	622	0.91	783	0.69	1,261	0.72
Business payments	391	0.57	645	0.56	1,068	0.61
Business payments to individuals	1,072	1.57	2,247	1.97	2,392	1.37

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

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

	1980		1990		1999	
	$ (000)	%	$ (000)	%	$ (000)	%
Total transfer payments	41,587	100.00	89,285	100.00	168,188	100.00
Government payments to individuals	38,904	93.55	83,896	93.96	159,067	94.58
Retirement & disability insur. benefit pymts.	20,944	50.36	52,256	58.53	96,111	57.14
Old age, survivors, & disability ins. pymts.	15,365	36.95	38,368	42.97	73,652	43.79
Railroad retirement and disability payments	914	2.20	1,529	1.71	1,832	1.09
Worker's compensation payments (Fed & State)	2,931	7.05	10,827	12.13	19,181	11.40
Other govt. disability ins. & ret. pymts.	1,734	4.17	1,532	1.72	1,446	0.86
Medical payments	3,290	7.91	17,840	19.98	43,506	25.87
Medicare payments	3,051	7.34	12,328	13.81	26,735	15.90
Public assistance medical care	188	0.45	5,287	5.92	16,529	9.83
Military medical insurance payments	51	0.12	225	0.25	242	0.14
Income maintenance benefit payments	3,119	7.50	7,028	7.87	10,243	6.09
Supplemental security income (SSI) payments	882	2.12	1,992	2.23	3,795	2.26
Family assistance	673	1.62	1,283	1.44	305	0.18
Food stamps	1,116	2.68	2,648	2.97	2,429	1.44
Other income maintenance	448	1.08	1,105	1.24	3,714	2.21
Unemployment insurance benefit payments	9,161	22.03	3,082	3.45	3,917	2.33
State unemployment insurance compensation	7,351	17.68	3,003	3.36	3,803	2.26
Unemp. comp. for Fed. civilian empl. (UCFE)						
Unemp. compensation for railroad employees	138	0.33				
Unemployment compensation for veterans (UCX)						
Other unemployment compensation	1,624	3.91				
Veterans benefit payments	2,174	5.23	3,155	3.53	4,486	2.67
Veterans pension and disability payments	1,660	3.99	2,685	3.01	4,095	2.43
Veterans readjustment payments	336	0.81	178	0.20	245	0.15
Veterans life insurance benefit payments	169	0.41	291	0.33	146	0.09
Other assistance to veterans					0	0.00
Fed ed.& train. assist. paymts.(excl.vets)	213	0.51	409	0.46	697	0.41
Other payments to individuals			126	0.14	107	0.06
Payments to nonprofit institutions	1,587	3.82	2,515	2.82	5,174	3.08
Federal government payments	550	1.32	689	0.77	1,382	0.82
State and local government payments	637	1.53	1,001	1.12	2,081	1.24
Business payments	400	0.96	825	0.92	1,711	1.02
Business payments to individuals	1,096	2.64	2,874	3.22	3,947	2.35

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

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

	1980		1990		1999	
	$ (000)	%	$ (000)	%	$ (000)	%
Total transfer payments	52,485	100.00	96,358	100.00	158,075	100.00
Government payments to individuals	49,255	93.85	91,140	94.58	150,699	95.33
Retirement & disability insur. benefit pymts.	27,145	51.72	53,530	55.55	86,953	55.01
Old age, survivors, & disability ins. pymts.	18,234	34.74	38,575	40.03	70,029	44.30
Railroad retirement and disability payments	2,498	4.76	4,245	4.41	5,603	3.54
Worker's compensation payments (Fed & State)	2,592	4.94	7,068	7.34	8,499	5.38
Other govt. disability ins. & ret. pymts.	3,821	7.28	3,642	3.78	2,822	1.79
Medical payments	3,396	6.47	13,267	13.77	27,879	17.64
Medicare payments	3,052	5.81	11,969	12.42	24,295	15.37
Public assistance medical care	268	0.51	1,096	1.14	3,425	2.17
Military medical insurance payments	76	0.14	202	0.21	159	0.10
Income maintenance benefit payments	7,343	13.99	14,940	15.50	24,104	15.25
Supplemental security income (SSI) payments	2,382	4.54	5,158	5.35	9,963	6.30
Family assistance	1,243	2.37	2,576	2.67	975	0.62
Food stamps	2,772	5.28	5,224	5.42	5,888	3.72
Other income maintenance	946	1.80	1,982	2.06	7,278	4.60
Unemployment insurance benefit payments	5,058	9.64	2,734	2.84	2,918	1.85
State unemployment insurance compensation	4,700	8.95	2,628	2.73	2,805	1.77
Unemp. comp. for Fed. civilian empl. (UCFE)						
Unemp. compensation for railroad employees	176	0.34	59	0.06		
Unemployment compensation for veterans (UCX)	62	0.12			52	0.03
Other unemployment compensation	83	0.16	0	0.00	0	0.00
Veterans benefit payments	6,055	11.54	6,241	6.48	8,190	5.18
Veterans pension and disability payments	5,428	10.34	5,781	6.00	7,621	4.82
Veterans readjustment payments	382	0.73	172	0.18	276	0.17
Veterans life insurance benefit payments	229	0.44	286	0.30	293	0.19
Other assistance to veterans					0	0.00
Fed ed.& train. assist. paymts.(excl.vets)	255	0.49	396	0.41	569	0.36
Other payments to individuals					86	0.05
Payments to nonprofit institutions	1,910	3.64	2,436	2.53	4,195	2.65
Federal government payments	662	1.26	667	0.69	1,114	0.70
State and local government payments	766	1.46	970	1.01	1,678	1.06
Business payments	482	0.92	799	0.83	1,403	0.89
Business payments to individuals	1,320	2.52	2,782	2.89	3,181	2.01

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 BY 1- AND 2-DIGIT INDUSTRY CODES, 2000

Employment, 2000

	Boone	Cabell	Lincoln	Logan	Mingo	Putnam	Wayne	WIA 2	WV
TOTAL, ALL INDUSTRIES	7,091	51,525	2,611	11,325	7,979	17,209	9,489	107,228	686,664
AGRICULTURE		136				191		441	4,332
01 Agricultural Production-Crops									702
02 Agricultural Production-Livestock									342
07 Agricultural Services		124				133		350	3,169
08 Forestry						30			106
MINING	2,748	45		779	2,199		547	6,522	20,447
10 Metal Mining									63
12 Coal Mining	2,700			747	2,135		483	6,091	15,747
13 Oil and Gas Extraction	48	44					38	355	3,702
14 Nonmetallic Minerals, except Fuels									935
CONSTRUCTION	159	2,381	254	470	260	1,931	463	5,917	33,577
15 General Building Contractors	21	737	83	77	50	433	66	1,468	9,811
16 Heavy Construction, exc. Building	50	496		213	98	375	121	1,420	7,355
17 Special Trade Contractors	87	1,147	103	180	112	1,124	276	3,029	16,411
MANUFACTURING	142	6,076	54	718	409	2,199	1,095	10,694	80,675
20 Food and Kindred Products		429						703	4,588
22 Textile Mill Products									828
23 Apparel and Other Textile Products		34						548	1,037
24 Lumber and Wood Products	99	36	37		267	79		685	11,282
25 Furniture and Fixtures									639
26 Paper and Allied Products								270	1,217
27 Printing and Publishing		437		43				606	5,779
28 Chemicals and Allied Products		312				460	291	1,063	14,179
29 Petroleum and Coal Products								120	690
30 Rubber and Misc. Plastics Products								442	3,717
32 Stone, Clay, and Glass Products		229		24		94		449	6,387
33 Primary Metal Industries		1,818						1,821	10,681
34 Fabricated Metal Products		320						503	6,010
35 Industrial Machinery and Equipment		666		490			55	1,325	5,290
36 Electronic & other Electric Equipment								294	1,671
37 Transportation Equipment		645						1,280	3,906
38 Instruments and Related Products						57			1,504
39 Miscellaneous Manufacturing Industries								24	1,005
TRANSPORTATION AND PUBLIC UTILITIES	189	1,715	138	371	914	1,742	705	5,774	34,191
41 Local and Interurban Passenger		84			38			253	1,566
42 Trucking and Warehousing	82	397	65	114	712	793	244	2,408	11,122
44 Water Transportation									1,137
45 Transportation By Air		236						431	2,178
47 Transportation Services		66				38		147	644
48 Communications	27	553		102	39	210		1,012	8,046
49 Electric, Gas, and Sanitary Services	41	358		113	102	635	74	1,334	9,463

Employment, 2000

	Boone	Cabell	Lincoln	Logan	Mingo	Putnam	Wayne	WIA 2	WV
WHOLESALE TRADE	142	2,815	49	428	188	1,584	276	5,482	30,578
50 Wholesale Trade-Durable Goods	121	1,627		259	130	923	191	3,280	18,833
51 Wholesale Trade-Nondurable Goods	21	1,187	21	169	58	661		2,202	11,745
RETAIL TRADE	1,131	11,323	437	2,776	853	3,677	1,639	21,836	133,757
52 Building Materials & Garden Supplies	123	398		192	51	96	102	972	6,249
53 General Merchandise Stores	90	1,549			29	333		2,875	20,282
54 Food Stores	370	1,278	217	410	104	556	365	3,300	21,171
55 Automotive Dealers & Service Stations	166	1,070	54	428	261	566	220	2,765	16,978
56 Apparel and Accessory Stores		688		66		32	35	850	5,009
57 Furniture & Homefurnishings Stores		629		72	45		39	954	4,716
58 Eating and Drinking Places	274	4,337	92	760	249	1,230	472	7,414	44,476
59 Miscellaneous Retail	77	1,373		251	97		149	2,705	14,876
FINANCE, INSURANCE, AND REAL ESTATE	147	2,743	68	334	240	588	158	4,278	26,770
60 Depository Institutions	105	703	31	132	168	306	102	1,548	11,248
61 Nondepository Institutions						42			1,783
62 Security and Commodity Brokers									779
63 Insurance Carriers		133				32		204	3,101
64 Insurance Agents, Brokers, & Service		339		56		122	27	597	4,419
65 Real Estate		437		111	52	77	24	723	4,889
67 Holding and other Investment Offices									551
SERVICES	930	17,167	499	3,331	1,370	2,931	1,324	27,552	186,493
70 Hotels and Other Lodging Places	34	435		38	52	118		681	9,755
72 Personal Services		570	23	84	47	180		1,138	6,242
73 Business Services	113	3,190		657	174	403	68	4,618	31,323
75 Auto Repair, Services, and Parking	39	427		78		142	75	811	5,143
76 Miscellaneous Repair Services	40	165		198	109	69	50	638	2,933
78 Motion Pictures		218				38	23	302	1,578
79 Amusement & Recreation Services		290		68		142	121	644	8,505
80 Health Services	180	7,788	162	1,544	554	989	228	11,445	72,662
81 Legal Services	37	500		72		42		727	5,424
82 Educational Services		120						149	4,109
83 Social Services	244	1,478	213	327	174	109	395	2,941	19,129
84 Museums, Botanical, Zoological Gardens									168
86 Membership Organizations	65	498		74	30	105	47	820	5,552
87 Engineering & Management Services	116	1,337		155	116	544	73	2,389	12,177
88 Private Households		123				22		182	1,681
89 Services, n.e.c.									115
NONCLASSIFIABLE ESTABLISHMENTS								58	604
99 Nonclassifiable Establishments								58	604
GOVERNMENT	1,491	7,114	937	2,067	1,524	2,324	3,219	18,676	135,240
Federal Government	99	1,150	66	139	108	172	937	2,671	22,463
State Government	144	2,612	134	559	248	333	170	4,200	40,214
Local Government	1,247	3,353	737	1,369	1,169	1,819	2,112	11,806	72,562

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

APPENDIX D

EMPLOYMENT, TOTAL WAGES, AND AVERAGE ANNUAL WAGE, 2000

Employment, Total Wages, and Average Wage, 2000 **Boone**

INDUSTRY	Employment	Total Wages	Average Annual Wage
TOTAL, ALL INDUSTRIES	7,091	252,683,985	35,634
AGRICULTURE			
01 Agricultural Production-Crops			
02 Agricultural Production-Livestock			
07 Agricultural Services			
08 Forestry			
MINING	2,748	161,241,776	58,676
10 Metal Mining			
12 Coal Mining	2,700	159,130,732	58,937
13 Oil and Gas Extraction	48	2,111,044	43,980
14 Nonmetallic Minerals, except Fuels			
CONSTRUCTION	159	2,961,871	18,628
15 General Building Contractors	21	269,740	12,844
16 Heavy Construction, exc. Building	50	1,239,545	24,790
17 Special Trade Contractors	87	1,452,586	16,696
MANUFACTURING	142	3,178,085	22,380
20 Food and Kindred Products			
22 Textile Mill Products			
23 Apparel and Other Textile Products			
24 Lumber and Wood Products	99	2,219,892	22,423
25 Furniture and Fixtures			
26 Paper and Allied Products			
27 Printing and Publishing			
28 Chemicals and Allied Products			
29 Petroleum and Coal Products			
30 Rubber and Misc. Plastics Products			
32 Stone, Clay, and Glass Products			
33 Primary Metal Industries			
34 Fabricated Metal Products			
35 Industrial Machinery and Equipment			
36 Electronic & other Electric Equipment			
37 Transportation Equipment			
38 Instruments and Related Products			
39 Miscellaneous Manufacturing Industries			
TRANSPORTATION AND PUBLIC UTILITIES	189	5,876,281	31,091
41 Local and Interurban Passenger			
42 Trucking and Warehousing	82	1,839,540	22,433
44 Water Transportation			
45 Transportation By Air			
47 Transportation Services			
48 Communications	27	1,545,031	57,223
49 Electric, Gas, and Sanitary Services	41	2,058,036	50,196

Employment, Total Wages, and Average Wage, 2000 **Boone**

INDUSTRY	Employment	Total Wages	Average Annual Wage
WHOLESALE TRADE	142	4,302,118	30,296
50 Wholesale Trade-Durable Goods	121	3,807,792	31,469
51 Wholesale Trade-Nondurable Goods	21	494,326	23,539
RETAIL TRADE	1,131	16,088,178	14,224
52 Building Materials & Garden Supplies	123	2,573,629	20,923
53 General Merchandise Stores	90	1,125,225	12,502
54 Food Stores	370	4,881,677	13,193
55 Automotive Dealers & Service Stations	166	3,045,362	18,345
56 Apparel and Accessory Stores			
57 Furniture & Homefurnishings Stores			
58 Eating and Drinking Places	274	2,362,075	8,620
59 Miscellaneous Retail	77	1,663,344	21,601
FINANCE, INSURANCE, AND REAL ESTATE	147	2,828,733	19,243
60 Depository Institutions	105	2,159,061	20,562
61 Nondepository Institutions			
62 Security and Commodity Brokers			
63 Insurance Carriers			
64 Insurance Agents, Brokers, & Service			
65 Real Estate			
67 Holding and other Investment Offices			
SERVICES	930	17,290,692	18,592
70 Hotels and Other Lodging Places	34	574,831	16,906
72 Personal Services			
73 Business Services	113	1,731,998	15,327
75 Auto Repair, Services, and Parking	39	695,872	17,842
76 Miscellaneous Repair Services	40	578,034	14,450
78 Motion Pictures			
79 Amusement & Recreation Services			
80 Health Services	180	3,675,318	20,418
81 Legal Services	37	1,113,191	30,086
82 Educational Services			
83 Social Services	244	2,617,077	10,725
84 Museums, Botanical, Zoological Gardens			
86 Membership Organizations	65	396,632	6,102
87 Engineering & Management Services	116	4,686,744	40,402
88 Private Households			
89 Services, n.e.c.			
NONCLASSIFIABLE ESTABLISHMENTS			
99 Nonclassifiable Establishments			
GOVERNMENT	1,491	38,701,495	25,956
Federal Government	99	3,385,761	34,199
State Government	144	3,312,722	23,005
Local Government	1,247	32,003,012	25,664

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

Employment, Total Wages, and Average Wage, 2000 **Cabell**

INDUSTRY	Employment	Total Wages	Average Annual Wage
TOTAL, ALL INDUSTRIES	51,525	1,363,995,508	26,472
AGRICULTURE	136	2,111,321	15,524
01 Agricultural Production-Crops			
02 Agricultural Production-Livestock			
07 Agricultural Services	124	1,959,403	15,801
08 Forestry			
MINING	45	944,982	20,999
10 Metal Mining			
12 Coal Mining			
13 Oil and Gas Extraction	44	854,577	19,422
14 Nonmetallic Minerals, except Fuels			
CONSTRUCTION	2,381	70,963,911	29,804
15 General Building Contractors	737	17,956,035	24,363
16 Heavy Construction, exc. Building	496	17,950,355	36,190
17 Special Trade Contractors	1,147	35,057,521	30,564
MANUFACTURING	6,076	219,276,915	36,089
20 Food and Kindred Products	429	13,537,748	31,556
22 Textile Mill Products			
23 Apparel and Other Textile Products	34	505,754	14,875
24 Lumber and Wood Products	36	626,140	17,392
25 Furniture and Fixtures			
26 Paper and Allied Products			
27 Printing and Publishing	437	11,806,988	27,018
28 Chemicals and Allied Products	312	10,903,579	34,947
29 Petroleum and Coal Products			
30 Rubber and Misc. Plastics Products			
32 Stone, Clay, and Glass Products	229	5,528,267	24,140
33 Primary Metal Industries	1,818	83,577,040	45,971
34 Fabricated Metal Products	320	9,987,097	31,209
35 Industrial Machinery and Equipment	666	25,120,746	37,718
36 Electronic & other Electric Equipment			
37 Transportation Equipment	645	22,124,966	34,302
38 Instruments and Related Products			
39 Miscellaneous Manufacturing Industries			
TRANSPORTATION AND PUBLIC UTILITIES	1,715	59,280,332	34,565
41 Local and Interurban Passenger	84	1,340,280	15,955
42 Trucking and Warehousing	397	10,675,475	26,890
44 Water Transportation			
45 Transportation By Air	236	5,939,426	25,167
47 Transportation Services	66	1,770,444	26,824
48 Communications	553	20,281,120	36,674
49 Electric, Gas, and Sanitary Services	358	18,979,907	53,016

Employment, Total Wages, and Average Wage, 2000 **Cabell**

INDUSTRY	Employment	Total Wages	Average Annual Wage
WHOLESALE TRADE	2,815	89,749,052	31,882
50 Wholesale Trade-Durable Goods	1,627	53,720,598	33,018
51 Wholesale Trade-Nondurable Goods	1,187	36,028,454	30,352
RETAIL TRADE	11,323	158,876,277	14,031
52 Building Materials & Garden Supplies	398	9,172,185	23,045
53 General Merchandise Stores	1,549	21,498,856	13,879
54 Food Stores	1,278	16,526,447	12,931
55 Automotive Dealers & Service Stations	1,070	23,573,468	22,031
56 Apparel and Accessory Stores	688	7,245,252	10,530
57 Furniture & Homefurnishings Stores	629	12,968,126	20,617
58 Eating and Drinking Places	4,337	43,164,150	9,952
59 Miscellaneous Retail	1,373	24,727,793	18,010
FINANCE, INSURANCE, AND REAL ESTATE	2,743	84,514,997	30,811
60 Depository Institutions	703	19,342,248	27,513
61 Nondepository Institutions			
62 Security and Commodity Brokers			
63 Insurance Carriers	133	4,597,470	34,567
64 Insurance Agents, Brokers, & Service	339	10,873,611	32,075
65 Real Estate	437	9,433,563	21,587
67 Holding and other Investment Offices			
SERVICES	17,167	446,198,718	25,991
70 Hotels and Other Lodging Places	435	4,868,332	11,191
72 Personal Services	570	9,132,811	16,022
73 Business Services	3,190	48,438,763	15,184
75 Auto Repair, Services, and Parking	427	8,988,066	21,049
76 Miscellaneous Repair Services	165	4,555,950	27,611
78 Motion Pictures	218	1,697,076	7,784
79 Amusement & Recreation Services	290	3,327,174	11,473
80 Health Services	7,788	284,529,676	36,534
81 Legal Services	500	16,177,133	32,354
82 Educational Services	120	2,843,774	23,698
83 Social Services	1,478	24,964,946	16,891
84 Museums, Botanical, Zoological Gardens			
86 Membership Organizations	498	6,351,903	12,754
87 Engineering & Management Services	1,337	28,194,756	21,088
88 Private Households	123	1,392,751	11,323
89 Services, n.e.c.			
NONCLASSIFIABLE ESTABLISHMENTS			
99 Nonclassifiable Establishments			
GOVERNMENT	7,114	231,796,540	32,583
Federal Government	1,150	51,741,556	44,992
State Government	2,612	88,406,458	33,846
Local Government	3,353	91,648,526	27,333

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

Employment, Total Wages, and Average Wage, 2000 **Lincoln**

INDUSTRY	Employment	Total Wages	Average Annual Wage
TOTAL, ALL INDUSTRIES	2,611	55,628,788	21,305
AGRICULTURE			
01 Agricultural Production-Crops			
02 Agricultural Production-Livestock			
07 Agricultural Services			
08 Forestry			
MINING			
10 Metal Mining			
12 Coal Mining			
13 Oil and Gas Extraction			
14 Nonmetallic Minerals, except Fuels			
CONSTRUCTION	254	4,166,535	16,403
15 General Building Contractors	83	1,131,625	13,634
16 Heavy Construction, exc. Building			
17 Special Trade Contractors	103	1,525,932	14,814
MANUFACTURING	54	809,978	14,999
20 Food and Kindred Products			
22 Textile Mill Products			
23 Apparel and Other Textile Products			
24 Lumber and Wood Products	37	575,009	15,540
25 Furniture and Fixtures			
26 Paper and Allied Products			
27 Printing and Publishing			
28 Chemicals and Allied Products			
29 Petroleum and Coal Products			
30 Rubber and Misc. Plastics Products			
32 Stone, Clay, and Glass Products			
33 Primary Metal Industries			
34 Fabricated Metal Products			
35 Industrial Machinery and Equipment			
36 Electronic & other Electric Equipment			
37 Transportation Equipment			
38 Instruments and Related Products			
39 Miscellaneous Manufacturing Industries			
TRANSPORTATION AND PUBLIC UTILITIES	138	3,223,933	23,361
41 Local and Interurban Passenger			
42 Trucking and Warehousing	65	1,387,397	21,344
44 Water Transportation			
45 Transportation By Air			
47 Transportation Services			
48 Communications			
49 Electric, Gas, and Sanitary Services			

Employment, Total Wages, and Average Wage, 2000 **Lincoln**

INDUSTRY	Employment	Total Wages	Average Annual Wage
WHOLESALE TRADE	49	1,357,095	27,695
50 Wholesale Trade-Durable Goods			
51 Wholesale Trade-Nondurable Goods	21	383,048	18,240
RETAIL TRADE	437	4,967,172	11,366
52 Building Materials & Garden Supplies			
53 General Merchandise Stores			
54 Food Stores	217	2,282,811	10,519
55 Automotive Dealers & Service Stations	54	679,842	12,589
56 Apparel and Accessory Stores			
57 Furniture & Homefurnishings Stores			
58 Eating and Drinking Places	92	814,270	8,850
59 Miscellaneous Retail			
FINANCE, INSURANCE, AND REAL ESTATE	68	1,408,303	20,710
60 Depository Institutions	31	684,771	22,089
61 Nondepository Institutions			
62 Security and Commodity Brokers			
63 Insurance Carriers			
64 Insurance Agents, Brokers, & Service			
65 Real Estate			
67 Holding and other Investment Offices			
SERVICES	499	9,047,034	18,130
70 Hotels and Other Lodging Places			
72 Personal Services	23	522,161	22,702
73 Business Services			
75 Auto Repair, Services, and Parking			
76 Miscellaneous Repair Services			
78 Motion Pictures			
79 Amusement & Recreation Services			
80 Health Services	162	3,714,530	22,929
81 Legal Services			
82 Educational Services			
83 Social Services	213	2,775,916	13,032
84 Museums, Botanical, Zoological Gardens			
86 Membership Organizations			
87 Engineering & Management Services			
88 Private Households			
89 Services, n.e.c.			
NONCLASSIFIABLE ESTABLISHMENTS			
99 Nonclassifiable Establishments			
GOVERNMENT	937	24,187,418	25,813
Federal Government	66	1,756,459	26,613
State Government	134	3,370,758	25,154
Local Government	737	19,060,201	25,861

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

Employment, Total Wages, and Average Wage, 2000 **Logan**

INDUSTRY	Employment	Total Wages	Average Annual Wage
TOTAL, ALL INDUSTRIES	11,325	288,561,945	25,480
AGRICULTURE			
01 Agricultural Production-Crops			
02 Agricultural Production-Livestock			
07 Agricultural Services			
08 Forestry			
MINING	779	41,596,345	53,397
10 Metal Mining			
12 Coal Mining	747	39,759,242	53,225
13 Oil and Gas Extraction			
14 Nonmetallic Minerals, except Fuels			
CONSTRUCTION	470	11,990,485	25,511
15 General Building Contractors	77	1,170,358	15,199
16 Heavy Construction, exc. Building	213	7,422,054	34,845
17 Special Trade Contractors	180	3,398,073	18,878
MANUFACTURING	718	18,987,008	26,444
20 Food and Kindred Products			
22 Textile Mill Products			
23 Apparel and Other Textile Products			
24 Lumber and Wood Products			
25 Furniture and Fixtures			
26 Paper and Allied Products			
27 Printing and Publishing	43	765,919	17,812
28 Chemicals and Allied Products			
29 Petroleum and Coal Products			
30 Rubber and Misc. Plastics Products			
32 Stone, Clay, and Glass Products	24	657,077	27,378
33 Primary Metal Industries			
34 Fabricated Metal Products			
35 Industrial Machinery and Equipment	490	14,600,922	29,797
36 Electronic & other Electric Equipment			
37 Transportation Equipment			
38 Instruments and Related Products			
39 Miscellaneous Manufacturing Industries			
TRANSPORTATION AND PUBLIC UTILITIES	371	14,375,123	38,746
41 Local and Interurban Passenger			
42 Trucking and Warehousing	114	2,920,252	25,616
44 Water Transportation			
45 Transportation By Air			
47 Transportation Services			
48 Communications	102	4,740,528	46,475
49 Electric, Gas, and Sanitary Services	113	4,932,003	43,646

Employment, Total Wages, and Average Wage, 2000 **Logan**

INDUSTRY	Employment	Total Wages	Average Annual Wage
WHOLESALE TRADE	428	13,009,795	30,396
50 Wholesale Trade-Durable Goods	259	8,622,601	33,291
51 Wholesale Trade-Nondurable Goods	169	4,387,194	25,959
RETAIL TRADE	2,776	40,796,417	14,696
52 Building Materials & Garden Supplies	192	3,926,566	20,450
53 General Merchandise Stores			
54 Food Stores	410	5,261,737	12,833
55 Automotive Dealers & Service Stations	428	9,258,290	21,631
56 Apparel and Accessory Stores	66	741,988	11,242
57 Furniture & Homefurnishings Stores	72	1,146,617	15,925
58 Eating and Drinking Places	760	7,107,370	9,351
59 Miscellaneous Retail	251	4,717,735	18,795
FINANCE, INSURANCE, AND REAL ESTATE	334	8,182,607	24,498
60 Depository Institutions	132	2,832,676	21,459
61 Nondepository Institutions			
62 Security and Commodity Brokers			
63 Insurance Carriers			
64 Insurance Agents, Brokers, & Service	56	1,339,625	23,921
65 Real Estate	111	2,889,733	26,033
67 Holding and other Investment Offices			
SERVICES	3,331	83,026,915	24,925
70 Hotels and Other Lodging Places	38	372,129	9,792
72 Personal Services	84	1,147,045	13,655
73 Business Services	657	12,717,774	19,357
75 Auto Repair, Services, and Parking	78	1,602,470	20,544
76 Miscellaneous Repair Services	198	5,310,423	26,820
78 Motion Pictures			
79 Amusement & Recreation Services	68	1,325,504	19,492
80 Health Services	1,544	49,418,580	32,006
81 Legal Services	72	2,160,023	30,000
82 Educational Services			
83 Social Services	327	4,279,821	13,088
84 Museums, Botanical, Zoological Gardens			
86 Membership Organizations	74	391,543	5,291
87 Engineering & Management Services	155	4,152,503	26,790
88 Private Households			
89 Services, n.e.c.			
NONCLASSIFIABLE ESTABLISHMENTS			
99 Nonclassifiable Establishments			
GOVERNMENT	2,067	55,552,559	26,875
Federal Government	139	4,942,840	35,560
State Government	559	14,397,121	25,755
Local Government	1,369	36,212,598	26,451

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

Employment, Total Wages, and Average Wage, 2000 **Mingo**

INDUSTRY	Employment	Total Wages	Average Annual Wage
TOTAL, ALL INDUSTRIES	7,979	244,488,300	30,641
AGRICULTURE			
01 Agricultural Production-Crops			
02 Agricultural Production-Livestock			
07 Agricultural Services			
08 Forestry			
MINING	2,199	105,456,564	47,956
10 Metal Mining			
12 Coal Mining	2,135	103,161,463	48,319
13 Oil and Gas Extraction			
14 Nonmetallic Minerals, except Fuels			
CONSTRUCTION	260	4,864,333	18,708
15 General Building Contractors	50	517,269	10,345
16 Heavy Construction, exc. Building	98	2,299,300	23,462
17 Special Trade Contractors	112	2,047,764	18,283
MANUFACTURING	409	10,311,840	25,212
20 Food and Kindred Products			
22 Textile Mill Products			
23 Apparel and Other Textile Products			
24 Lumber and Wood Products	267	5,835,207	21,854
25 Furniture and Fixtures			
26 Paper and Allied Products			
27 Printing and Publishing			
28 Chemicals and Allied Products			
29 Petroleum and Coal Products			
30 Rubber and Misc. Plastics Products			
32 Stone, Clay, and Glass Products			
33 Primary Metal Industries			
34 Fabricated Metal Products			
35 Industrial Machinery and Equipment			
36 Electronic & other Electric Equipment			
37 Transportation Equipment			
38 Instruments and Related Products			
39 Miscellaneous Manufacturing Industries			
TRANSPORTATION AND PUBLIC UTILITIES	914	24,681,612	27,003
41 Local and Interurban Passenger	38	552,903	14,550
42 Trucking and Warehousing	712	17,041,564	23,934
44 Water Transportation			
45 Transportation By Air			
47 Transportation Services			
48 Communications	39	1,782,348	45,701
49 Electric, Gas, and Sanitary Services	102	4,594,730	45,046

Employment, Total Wages, and Average Wage, 2000 **Mingo**

INDUSTRY	Employment	Total Wages	Average Annual Wage
WHOLESALE TRADE	188	5,409,123	28,771
50 Wholesale Trade-Durable Goods	130	3,323,686	25,566
51 Wholesale Trade-Nondurable Goods	58	2,085,437	35,955
RETAIL TRADE	853	13,202,163	15,477
52 Building Materials & Garden Supplies	51	931,991	18,274
53 General Merchandise Stores	29	315,259	10,871
54 Food Stores	104	1,194,221	11,482
55 Automotive Dealers & Service Stations	261	5,331,828	20,428
56 Apparel and Accessory Stores			
57 Furniture & Homefurnishings Stores	45	826,842	18,374
58 Eating and Drinking Places	249	2,046,555	8,219
59 Miscellaneous Retail	97	2,304,390	23,756
FINANCE, INSURANCE, AND REAL ESTATE	240	6,179,594	25,748
60 Depository Institutions	168	4,577,784	27,248
61 Nondepository Institutions			
62 Security and Commodity Brokers			
63 Insurance Carriers			
64 Insurance Agents, Brokers, & Service			
65 Real Estate	52	797,095	15,328
67 Holding and other Investment Offices			
SERVICES	1,370	33,073,629	24,141
70 Hotels and Other Lodging Places	52	546,377	10,507
72 Personal Services	47	817,714	17,398
73 Business Services	174	2,503,997	14,390
75 Auto Repair, Services, and Parking			
76 Miscellaneous Repair Services	109	2,773,374	25,443
78 Motion Pictures			
79 Amusement & Recreation Services			
80 Health Services	554	17,261,048	31,157
81 Legal Services			
82 Educational Services			
83 Social Services	174	2,318,535	13,324
84 Museums, Botanical, Zoological Gardens			
86 Membership Organizations	30	191,641	6,388
87 Engineering & Management Services	116	3,589,423	30,943
88 Private Households			
89 Services, n.e.c.			
NONCLASSIFIABLE ESTABLISHMENTS			
99 Nonclassifiable Establishments			
GOVERNMENT	1,524	41,025,154	26,919
Federal Government	108	3,453,076	31,972
State Government	248	6,313,213	25,456
Local Government	1,169	31,258,865	26,739

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

Employment, Total Wages, and Average Wage, 2000 **Putnam**

INDUSTRY	Employment	Total Wages	Average Annual Wage
TOTAL, ALL INDUSTRIES	17,209	513,698,114	29,850
AGRICULTURE	191	3,187,646	16,689
01 Agricultural Production-Crops			
02 Agricultural Production-Livestock			
07 Agricultural Services	133	2,229,752	16,765
08 Forestry	30	617,626	20,587
MINING			
10 Metal Mining			
12 Coal Mining			
13 Oil and Gas Extraction			
14 Nonmetallic Minerals, except Fuels			
CONSTRUCTION	1,931	63,818,924	33,049
15 General Building Contractors	433	11,802,706	27,257
16 Heavy Construction, exc. Building	375	15,591,223	41,576
17 Special Trade Contractors	1,124	36,424,995	32,406
MANUFACTURING	2,199	104,910,549	47,708
20 Food and Kindred Products			
22 Textile Mill Products			
23 Apparel and Other Textile Products			
24 Lumber and Wood Products	79	2,115,440	26,777
25 Furniture and Fixtures			
26 Paper and Allied Products			
27 Printing and Publishing			
28 Chemicals and Allied Products	460	27,828,546	60,496
29 Petroleum and Coal Products			
30 Rubber and Misc. Plastics Products			
32 Stone, Clay, and Glass Products	94	2,768,099	29,447
33 Primary Metal Industries			
34 Fabricated Metal Products			
35 Industrial Machinery and Equipment			
36 Electronic & other Electric Equipment			
37 Transportation Equipment			
38 Instruments and Related Products	57	2,853,094	50,054
39 Miscellaneous Manufacturing Industries			
TRANSPORTATION AND PUBLIC UTILITIES	1,742	67,066,709	38,499
41 Local and Interurban Passenger			
42 Trucking and Warehousing	793	22,858,355	28,825
44 Water Transportation			
45 Transportation By Air			
47 Transportation Services	38	1,021,814	26,889
48 Communications	210	11,173,758	53,208
49 Electric, Gas, and Sanitary Services	635	30,433,899	47,927

Employment, Total Wages, and Average Wage, 2000 **Putnam**

INDUSTRY	Employment	Total Wages	Average Annual Wage
WHOLESALE TRADE	1,584	56,143,572	35,444
50 Wholesale Trade-Durable Goods	923	33,874,440	36,700
51 Wholesale Trade-Nondurable Goods	661	22,269,132	33,690
RETAIL TRADE	3,677	59,727,146	16,243
52 Building Materials & Garden Supplies	96	2,557,153	26,637
53 General Merchandise Stores	333	4,174,895	12,537
54 Food Stores	556	8,174,467	14,702
55 Automotive Dealers & Service Stations	566	11,287,298	19,942
56 Apparel and Accessory Stores	32	323,696	10,115
57 Furniture & Homefurnishings Stores			
58 Eating and Drinking Places	1,230	11,193,757	9,100
59 Miscellaneous Retail			
FINANCE, INSURANCE, AND REAL ESTATE	588	16,409,525	27,907
60 Depository Institutions	306	8,080,814	26,407
61 Nondepository Institutions	42	1,488,228	35,434
62 Security and Commodity Brokers			
63 Insurance Carriers	32	1,979,691	61,865
64 Insurance Agents, Brokers, & Service	122	2,772,613	22,726
65 Real Estate	77	1,456,237	18,912
67 Holding and other Investment Offices			
SERVICES	2,931	77,988,080	26,608
70 Hotels and Other Lodging Places	118	1,197,891	10,151
72 Personal Services	180	3,419,630	18,997
73 Business Services	403	12,399,553	30,768
75 Auto Repair, Services, and Parking	142	3,861,976	27,197
76 Miscellaneous Repair Services	69	2,568,362	37,222
78 Motion Pictures	38	338,608	8,910
79 Amusement & Recreation Services	142	1,720,608	12,116
80 Health Services	989	25,872,484	26,160
81 Legal Services	42	927,807	22,090
82 Educational Services			
83 Social Services	109	1,785,178	16,377
84 Museums, Botanical, Zoological Gardens			
86 Membership Organizations	105	1,481,437	14,108
87 Engineering & Management Services	544	21,418,425	39,372
88 Private Households	22	250,743	11,397
89 Services, n.e.c.			
NONCLASSIFIABLE ESTABLISHMENTS			
99 Nonclassifiable Establishments			
GOVERNMENT	2,324	63,570,745	27,354
Federal Government	172	6,267,213	36,437
State Government	333	10,314,570	30,974
Local Government	1,819	46,988,962	25,832

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

Employment, Total Wages, and Average Wage, 2000 **Wayne**

INDUSTRY	Employment	Total Wages	Average Annual Wage
TOTAL, ALL INDUSTRIES	9,489	250,938,296	26,445
AGRICULTURE			
01 Agricultural Production-Crops			
02 Agricultural Production-Livestock			
07 Agricultural Services			
08 Forestry			
MINING	547	28,487,469	52,079
10 Metal Mining			
12 Coal Mining	483	25,913,431	53,651
13 Oil and Gas Extraction	38	1,719,117	45,239
14 Nonmetallic Minerals, except Fuels			
CONSTRUCTION	463	12,695,472	27,420
15 General Building Contractors	66	974,023	14,757
16 Heavy Construction, exc. Building	121	4,476,785	36,998
17 Special Trade Contractors	276	7,244,664	26,248
MANUFACTURING	1,095	33,973,530	31,026
20 Food and Kindred Products			
22 Textile Mill Products			
23 Apparel and Other Textile Products			
24 Lumber and Wood Products			
25 Furniture and Fixtures			
26 Paper and Allied Products			
27 Printing and Publishing			
28 Chemicals and Allied Products	291	13,111,479	45,056
29 Petroleum and Coal Products			
30 Rubber and Misc. Plastics Products			
32 Stone, Clay, and Glass Products			
33 Primary Metal Industries			
34 Fabricated Metal Products			
35 Industrial Machinery and Equipment	55	1,711,710	31,122
36 Electronic & other Electric Equipment			
37 Transportation Equipment			
38 Instruments and Related Products			
39 Miscellaneous Manufacturing Industries			
TRANSPORTATION AND PUBLIC UTILITIES	705	24,692,891	35,025
41 Local and Interurban Passenger			
42 Trucking and Warehousing	244	7,680,319	31,476
44 Water Transportation			
45 Transportation By Air			
47 Transportation Services			
48 Communications			
49 Electric, Gas, and Sanitary Services	74	2,521,472	34,073

Employment, Total Wages, and Average Wage, 2000 **Wayne**

INDUSTRY	Employment	Total Wages	Average Annual Wage
WHOLESALE TRADE	276	9,078,909	32,894
50 Wholesale Trade-Durable Goods	191	5,812,272	30,430
51 Wholesale Trade-Nondurable Goods			
RETAIL TRADE	1,639	22,076,255	13,469
52 Building Materials & Garden Supplies	102	2,182,160	21,393
53 General Merchandise Stores			
54 Food Stores	365	4,384,655	12,012
55 Automotive Dealers & Service Stations	220	3,503,429	15,924
56 Apparel and Accessory Stores	35	451,039	12,886
57 Furniture & Homefurnishings Stores	39	644,719	16,531
58 Eating and Drinking Places	472	4,501,584	9,537
59 Miscellaneous Retail	149	3,175,794	21,314
FINANCE, INSURANCE, AND REAL ESTATE	158	3,010,443	19,053
60 Depository Institutions	102	2,053,543	20,132
61 Nondepository Institutions			
62 Security and Commodity Brokers			
63 Insurance Carriers			
64 Insurance Agents, Brokers, & Service	27	568,189	21,044
65 Real Estate	24	216,747	9,031
67 Holding and other Investment Offices			
SERVICES	1,324	24,224,048	18,296
70 Hotels and Other Lodging Places			
72 Personal Services			
73 Business Services	68	1,125,422	16,550
75 Auto Repair, Services, and Parking	75	1,092,059	14,560
76 Miscellaneous Repair Services	50	1,386,709	27,734
78 Motion Pictures	23	241,682	10,507
79 Amusement & Recreation Services	121	1,233,071	10,190
80 Health Services	228	5,883,256	25,803
81 Legal Services			
82 Educational Services			
83 Social Services	395	5,081,412	12,864
84 Museums, Botanical, Zoological Gardens			
86 Membership Organizations	47	618,862	13,167
87 Engineering & Management Services	73	2,384,830	32,668
88 Private Households			
89 Services, n.e.c.			
NONCLASSIFIABLE ESTABLISHMENTS			
99 Nonclassifiable Establishments			
GOVERNMENT	3,219	91,852,836	28,534
Federal Government	937	47,655,781	50,859
State Government	170	4,158,260	24,460
Local Government	2,112	40,038,795	18,957

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

Employment, Total Wages, and Average Wage, 2000 **Workforce Investment Area 2**

INDUSTRY	Employment	Total Wages	Average Annual Wage
TOTAL, ALL INDUSTRIES	107,228	2,969,994,936	27,697
AGRICULTURE	441	6,908,438	15,665
01 Agricultural Production-Crops			
02 Agricultural Production-Livestock			
07 Agricultural Services	350	5,505,770	15,730
08 Forestry			
MINING	6,522	344,806,082	52,868
10 Metal Mining			
12 Coal Mining	6,091	328,877,792	53,994
13 Oil and Gas Extraction	355	12,590,771	35,466
14 Nonmetallic Minerals, except Fuels			
CONSTRUCTION	5,917	171,461,531	28,977
15 General Building Contractors	1,468	33,821,756	23,039
16 Heavy Construction, exc. Building	1,420	50,488,240	35,555
17 Special Trade Contractors	3,029	87,151,535	28,772
MANUFACTURING	10,694	391,447,905	36,604
20 Food and Kindred Products	703	23,845,613	33,919
22 Textile Mill Products			
23 Apparel and Other Textile Products	548	9,889,607	18,046
24 Lumber and Wood Products	685	16,090,785	23,490
25 Furniture and Fixtures			
26 Paper and Allied Products	270	8,206,584	30,394
27 Printing and Publishing	606	14,380,640	23,730
28 Chemicals and Allied Products	1,063	51,843,604	48,771
29 Petroleum and Coal Products	120	6,075,608	50,630
30 Rubber and Misc. Plastics Products	442	12,631,333	28,577
32 Stone, Clay, and Glass Products	449	11,190,959	24,924
33 Primary Metal Industries	1,821	83,619,467	45,919
34 Fabricated Metal Products	503	17,828,517	35,444
35 Industrial Machinery and Equipment	1,325	46,421,134	35,034
36 Electronic & other Electric Equipment	294	8,774,270	29,844
37 Transportation Equipment	1,280	61,123,054	47,752
38 Instruments and Related Products			
39 Miscellaneous Manufacturing Industries	24	440,987	18,374
TRANSPORTATION AND PUBLIC UTILITIES	5,774	199,196,881	34,498
41 Local and Interurban Passenger	253	3,662,467	14,476
42 Trucking and Warehousing	2,408	64,402,902	26,745
44 Water Transportation			
45 Transportation By Air	431	12,096,243	28,065
47 Transportation Services	147	4,015,393	27,315
48 Communications	1,012	43,674,706	43,156
49 Electric, Gas, and Sanitary Services	1,334	64,177,057	48,108

Employment, Total Wages, and Average Wage, 2000 **Workforce Investment Area 2**

INDUSTRY	Employment	Total Wages	Average Annual Wage
WHOLESALE TRADE	5,482	179,049,664	32,661
50 Wholesale Trade-Durable Goods	3,280	110,135,436	33,577
51 Wholesale Trade-Nondurable Goods	2,202	68,914,228	31,296
RETAIL TRADE	21,836	315,733,608	14,459
52 Building Materials & Garden Supplies	972	21,464,940	22,083
53 General Merchandise Stores	2,875	39,195,232	13,633
54 Food Stores	3,300	42,706,015	12,941
55 Automotive Dealers & Service Stations	2,765	56,679,517	20,498
56 Apparel and Accessory Stores	850	9,132,818	10,744
57 Furniture & Homefurnishings Stores	954	19,549,537	20,492
58 Eating and Drinking Places	7,414	71,189,761	9,602
59 Miscellaneous Retail	2,705	55,815,788	20,634
FINANCE, INSURANCE, AND REAL ESTATE	4,278	122,534,202	28,642
60 Depository Institutions	1,548	39,730,897	25,665
61 Nondepository Institutions			
62 Security and Commodity Brokers			
63 Insurance Carriers	204	7,613,392	37,320
64 Insurance Agents, Brokers, & Service	597	16,909,397	28,323
65 Real Estate	723	15,221,128	21,052
67 Holding and other Investment Offices			
SERVICES	27,552	690,849,116	25,074
70 Hotels and Other Lodging Places	681	7,584,157	11,136
72 Personal Services	1,138	20,162,473	17,717
73 Business Services	4,618	79,001,798	17,107
75 Auto Repair, Services, and Parking	811	17,430,649	21,492
76 Miscellaneous Repair Services	638	17,284,398	27,091
78 Motion Pictures	302	2,407,120	7,970
79 Amusement & Recreation Services	644	7,839,350	12,172
80 Health Services	11,445	390,354,892	34,107
81 Legal Services	727	22,721,841	31,254
82 Educational Services	149	3,593,151	24,115
83 Social Services	2,941	43,822,885	14,900
84 Museums, Botanical, Zoological Gardens			
86 Membership Organizations	820	9,445,691	11,519
87 Engineering & Management Services	2,389	65,789,812	27,538
88 Private Households	182	2,011,652	11,053
89 Services, n.e.c.			
NONCLASSIFIABLE ESTABLISHMENTS	58	1,320,762	22,771
99 Nonclassifiable Establishments	58	1,320,762	22,771
GOVERNMENT	18,676	546,686,747	29,272
Federal Government	2,671	119,202,686	44,628
State Government	4,200	130,273,102	31,017
Local Government	11,806	297,210,959	25,174

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

Employment, Total Wages, and Average Wage, 2000 **West Virginia**

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

Employment, Total Wages, and Average Wage, 2000 **West Virginia**

INDUSTRY	Employment	Total Wages	Average Annual Wage
WHOLESALE TRADE	30,578	1,015,619,603	33,214
50 Wholesale Trade-Durable Goods	18,833	645,460,626	34,272
51 Wholesale Trade-Nondurable Goods	11,745	370,158,977	31,516
RETAIL TRADE	133,757	1,909,252,123	14,274
52 Building Materials & Garden Supplies	6,249	131,603,724	21,059
53 General Merchandise Stores	20,282	287,707,378	14,185
54 Food Stores	21,171	278,142,725	13,137
55 Automotive Dealers & Service Stations	16,978	368,488,879	21,703
56 Apparel and Accessory Stores	5,009	59,153,608	11,809
57 Furniture & Homefurnishings Stores	4,716	90,881,068	19,270
58 Eating and Drinking Places	44,476	429,618,923	9,659
59 Miscellaneous Retail	14,876	263,655,818	17,723
FINANCE, INSURANCE, AND REAL ESTATE	26,770	787,496,427	29,417
60 Depository Institutions	11,248	300,433,877	26,709
61 Nondepository Institutions	1,783	53,001,403	29,725
62 Security and Commodity Brokers	779	66,876,345	85,848
63 Insurance Carriers	3,101	115,976,360	37,399
64 Insurance Agents, Brokers, & Service	4,419	121,872,545	27,579
65 Real Estate	4,889	97,765,962	19,997
67 Holding and other Investment Offices	551	31,569,935	57,295
SERVICES	186,493	4,377,385,383	23,472
70 Hotels and Other Lodging Places	9,755	151,133,849	15,492
72 Personal Services	6,242	96,869,359	15,518
73 Business Services	31,323	567,149,015	18,106
75 Auto Repair, Services, and Parking	5,143	98,943,224	19,238
76 Miscellaneous Repair Services	2,933	84,088,443	28,669
78 Motion Pictures	1,578	17,334,872	10,985
79 Amusement & Recreation Services	8,505	112,916,253	13,276
80 Health Services	72,662	2,190,044,643	30,140
81 Legal Services	5,424	170,550,481	31,443
82 Educational Services	4,109	100,673,173	24,500
83 Social Services	19,129	285,964,037	14,949
84 Museums, Botanical, Zoological Gardens	168	2,771,710	16,498
86 Membership Organizations	5,552	77,519,904	13,962
87 Engineering & Management Services	12,177	399,628,942	32,818
88 Private Households	1,681	19,690,194	11,713
89 Services, n.e.c.	115	2,107,284	18,324
NONCLASSIFIABLE ESTABLISHMENTS	604	17,459,921	28,907
99 Nonclassifiable Establishments	604	17,459,921	28,907
GOVERNMENT	135,240	3,965,245,441	29,320
Federal Government	22,463	972,069,159	43,274
State Government	40,214	1,174,536,078	29,207
Local Government	72,562	1,818,640,204	25,063

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

APPENDIX E

WORKFORCE INVESTMENT AREA 2

COMPARATIVE OCCUPATIONAL WAGES, 2001

Total All Occupations

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
	101,990	27,705	13,532	34,791	22,303
TOTAL ALL OCCUPATIONS		13.32	6.51	16.72	10.73

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC002.htm.

Management Occupations

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
		53,633	27,229	66,835	45,915
MANAGEMENT OCCUPATIONS		25.79	13.09	32.13	22.08
	230	38,300	23,974	45,462	34,392
Administrative Services Managers		18.41	11.53	21.86	16.53
	40	42,425	27,915	49,679	36,610
Advertising and Promotions Managers		20.4	13.42	23.88	17.6
	440	77,981	41,970	95,987	70,029
Chief Executives		37.49	20.18	46.15	33.67
	90	54,774	31,346	66,487	51,689
Computer and Information Systems Managers		26.33	15.07	31.96	24.85
	160	50,750	33,559	59,346	48,154
Construction Managers		24.4	16.13	28.53	23.15
Education Administrators, Elementary and Secondary School	230	51,740	46,154	54,534	52,256
Education Administrators, Preschool and Child Care	10	40,932	25,588	48,604	32,017
Center/Program		19.68	12.31	23.36	15.39
	130	70,227	49,924	80,379	74,314
Engineering Managers		33.77	24.01	38.64	35.73
	450	48,735	30,065	58,070	42,808
Financial Managers		23.43	14.45	27.91	20.58
	220	26,923	18,140	31,314	24,936
Food Service Managers		12.94	8.73	15.06	11.99
		48,995	39,348	53,819	46,234
Funeral Directors		23.56	18.91	25.88	22.23
	2,820	58,376	27,982	73,572	46,934
General and Operations Managers		28.07	13.45	35.37	22.56
	130	47,252	29,642	56,058	37,581
Human Resources Managers		22.72	14.25	26.95	18.06
	150	55,418	32,615	66,820	51,402
Industrial Production Managers		26.65	15.68	32.13	24.71
		20,409	12,668	24,279	13,968
Legislators		9.81	6.09	11.67	6.72
		33,041	23,120	38,002	31,903
Lodging Managers		15.89	11.12	18.27	15.34
	370	51,935	30,177	62,814	49,271
Managers, All Other		24.97	14.5	30.2	23.69
	50	72,773	42,437	87,941	66,501
Marketing Managers		34.98	20.41	42.28	31.98
		50,624	32,913	59,480	43,899
Medical and Health Services Managers		24.33	15.82	28.6	21.1
	10	61,834	45,993	69,755	58,528
Natural Sciences Managers		29.72	22.11	33.54	28.14
	130	43,367	36,279	46,910	42,153
Postmasters and Mail Superintendents		20.85	17.44	22.55	20.26
Property, Real Estate, and Community Association		28,623	21,971	31,949	26,663
Managers		13.76	10.57	15.36	12.82
	20	29,890	22,267	33,702	31,498
Public Relations Managers		14.37	10.71	16.2	15.14
	130	48,379	32,390	56,373	48,419
Purchasing Managers		23.26	15.57	27.11	23.28
	170	65,702	35,371	80,868	57,772
Sales Managers		31.59	17.01	38.88	27.77
	130	30,395	17,259	36,963	28,813
Social and Community Service Managers		14.62	8.3	17.77	13.85
	70	61,186	42,085	70,737	62,963
Transportation, Storage, and Distribution Managers		29.42	20.23	34.01	30.27

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC002.htm.

Business and Financial Operations Occupations

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
BUSINESS AND FINANCIAL OPERATIONS OCCUPATIONS		39,390	23,647	47,261	35,636
		18.94	11.37	22.72	17.13
Accountants and Auditors	560	38,015	23,772	45,136	32,813
		18.28	11.43	21.7	15.77
Appraisers and Assessors of Real Estate	50	26,862	13,405	33,590	20,521
		12.92	6.44	16.15	9.87
Budget Analysts	20	53,252	37,346	61,205	47,912
		25.6	17.95	29.43	23.04
Business Operations Specialists, All Other	350	45,064	30,440	52,375	42,252
		21.66	14.64	25.18	20.31
Claims Adjusters, Examiners, and Investigators	30	50,272	28,680	61,068	50,867
		24.17	13.78	29.36	24.46
Compensation, Benefits, and Job Analysis Specialists	20	35,221	22,836	41,413	33,011
		16.93	10.98	19.91	15.88
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	120	33,461	23,610	38,388	31,416
		16.09	11.35	18.45	15.11
Cost Estimators	130	37,303	26,597	42,656	34,510
		17.93	12.79	20.51	16.59
Credit Analysts	50	27,689	23,620	29,724	26,523
		13.31	11.35	14.29	12.76
Employment, Recruitment, and Placement Specialists	30	26,526	17,586	30,995	26,320
		12.76	8.46	14.9	12.65
Financial Examiners	10	63,497	47,724	71,383	64,738
		30.52	22.94	34.32	31.13
Insurance Underwriters	20	37,421	23,717	44,272	28,820
		17.99	11.41	21.29	13.86
Loan Counselors		26,958	20,751	30,061	23,570
		12.96	9.97	14.45	11.33
Loan Officers	150	36,003	27,524	40,243	35,790
		17.31	13.24	19.34	17.2
Management Analysts	100	50,064	38,835	55,679	43,645
		24.07	18.67	26.77	20.98
Personal Financial Advisors		51,977	22,144	66,894	38,658
		24.99	10.65	32.16	18.59
Purchasing Agents, Except Wholesale, Retail, and Farm Products	80	39,783	27,779	45,784	38,891
		19.13	13.36	22.01	18.7
Tax Examiners, Collectors, and Revenue Agents	30	32,718	15,517	41,318	24,545
		15.73	7.46	19.86	11.8
Tax Preparers	60	17,066	12,581	19,308	16,398
		8.2	6.05	9.29	7.89
Training and Development Specialists	90	34,283	23,513	39,667	31,982
		16.48	11.3	19.07	15.37
Wholesale and Retail Buyers, Except Farm Products	130	40,004	22,041	48,986	35,736
		19.23	10.6	23.55	17.18

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC002.htm.

Computer and Mathematical Occupations

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
		46,089	26,196	56,036	42,281
COMPUTER AND MATHEMATICAL OCCUPATIONS		22.16	12.6	26.94	20.33
	140	41,277	28,548	47,642	40,390
Computer Programmers		19.85	13.73	22.91	19.42
	70	39,875	26,775	46,424	39,684
Computer Software Engineers, Applications		19.18	12.87	22.32	19.08
	40	57,774	40,559	66,382	54,282
Computer Software Engineers, Systems Software		27.77	19.5	31.91	26.1
	130	31,389	20,365	36,901	26,746
Computer Support Specialists		15.1	9.79	17.74	12.86
	110	57,311	37,986	66,975	53,212
Computer Systems Analysts		27.55	18.26	32.2	25.58
	50	33,757	24,468	38,401	30,956
Database Administrators		16.23	11.76	18.46	14.88
	70	47,084	29,672	55,789	42,135
Network Systems and Data Communications Analysts		22.63	14.27	26.83	20.26
	120	32,567	19,649	39,025	30,310
Network and Computer Systems Administrators		15.66	9.44	18.76	14.58

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC002.htm.

Architecture and Engineering Occupation

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
		44,521	24,530	54,517	41,943
ARCHITECTURE AND ENGINEERING OCCUPATIONS		21.4	11.79	26.21	20.17
	40	43,586	29,272	50,742	48,495
All Other Drafters, Engineering, and Mapping Technicians		20.95	14.08	24.4	23.32
		51,191	29,300	62,138	48,716
Architects, Except Landscape and Naval		24.61	14.09	29.88	23.42
	60	31,734	24,994	35,103	28,251
Architectural and Civil Drafters		15.26	12.02	16.88	13.59
	20	69,874	56,476	76,572	69,844
Chemical Engineers		33.6	27.15	36.81	33.58
	160	25,992	19,049	29,464	22,161
Civil Engineering Technicians		12.49	9.16	14.17	10.66
	230	51,810	33,553	60,938	51,950
Civil Engineers		24.91	16.14	29.29	24.98
	20	61,841	45,503	70,010	63,590
Electrical Engineers		29.73	21.88	33.66	30.57
	90	41,713	27,673	48,732	43,335
Electrical and Electronic Engineering Technicians		20.05	13.3	23.43	20.84
		38,224	23,395	45,639	34,525
Electro-Mechanical Technicians		18.38	11.25	21.94	16.59
	20	65,149	48,175	73,635	67,234
Electronics Engineers, Except Computer		31.32	23.16	35.4	32.32
	70	68,777	42,266	82,032	68,628
Engineers, All Other		33.07	20.32	39.44	33
	20	41,455	25,490	49,437	36,236
Environmental Engineering Technicians		19.93	12.26	23.77	17.42
	30	51,248	30,383	61,680	54,952
Environmental Engineers		24.64	14.61	29.65	26.42
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	10	53,161	38,351	60,567	44,911
		25.56	18.44	29.12	21.59
	10	27,589	17,578	32,595	21,110
Industrial Engineering Technicians		13.26	8.46	15.67	10.15
	20	58,960	38,194	69,343	63,143
Industrial Engineers		28.35	18.36	33.34	30.35
	10	31,479	25,738	34,350	29,020
Mechanical Drafters		15.14	12.37	16.51	13.95
	60	51,612	35,411	59,712	51,395
Mechanical Engineers		24.82	17.02	28.71	24.71
Mining and Geological Engineers, Including Mining Safety Engineers	80	58,453	41,495	66,931	61,966
		28.1	19.95	32.18	29.79
		32,138	22,488	36,963	27,372
Surveying and Mapping Technicians		15.45	10.81	17.77	13.16
		30,476	25,334	33,047	28,336
Surveyors		14.66	12.18	15.89	13.63

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC002.htm.

Life, Physical and Social Science Occupations

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
LIFE, PHYSICAL, AND SOCIAL SCIENCE OCCUPATIONS		34,723	16,587	43,791	32,385
		16.69	7.98	21.06	15.57
Chemical Technicians	60	45,188	31,772	51,895	46,245
		21.73	15.28	24.95	22.24
Chemists	50	53,394	36,280	61,950	49,625
		25.67	17.44	29.78	23.86
Clinical, Counseling, and School Psychologists	120	34,197	23,527	39,532	29,918
		16.44	11.31	19	14.38
Environmental Science and Protection Technicians, Including Health	80	30,443	18,711	36,309	30,515
		14.64	9	17.45	14.67
Environmental Scientists and Specialists, Including Health	20	38,433	29,488	42,905	33,835
		18.48	14.18	20.62	16.27
Geological and Petroleum Technicians		36,363	25,475	41,807	34,153
		17.48	12.25	20.1	16.42
Geoscientists, Except Hydrologists and Geographers	130	40,694	27,068	47,507	36,728
		19.56	13.01	22.84	17.66
Life, Physical, and Social Science Technicians, All Other	20	33,185	26,048	36,753	31,850
		15.95	12.53	17.67	15.31

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC002.htm.

Community and Social Services Occupations

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
COMMUNITY AND SOCIAL SERVICES OCCUPATIONS		22,838	14,182	27,166	21,702
		10.98	6.81	13.06	10.43
All Other Counselors, Social and Religious Workers	50	27,135	12,699	34,354	14,794
		13.05	6.11	16.51	7.11
Child, Family, and School Social Workers	210	24,262	19,159	26,814	24,400
		11.67	9.21	12.89	11.73
Clergy	10	33,635	19,441	40,732	31,830
		16.17	9.34	19.58	15.3
Educational, Vocational, and School Counselors	140	33,606	23,609	38,604	36,265
		16.16	11.35	18.56	17.43
Health Educators	20	29,390	19,883	34,143	28,469
		14.13	9.56	16.41	13.69
Medical and Public Health Social Workers	110	24,084	17,776	27,237	24,771
		11.58	8.55	13.1	11.91
Mental Health Counselors		22,315	14,675	26,135	23,092
		10.73	7.06	12.57	11.1
Mental Health and Substance Abuse Social Workers	230	20,753	16,103	23,079	20,769
		9.98	7.74	11.1	9.99
Rehabilitation Counselors	60	30,079	23,411	33,413	27,976
		14.46	11.25	16.06	13.45
Social and Human Service Assistants	420	16,833	12,429	19,035	15,050
		8.09	5.98	9.15	7.23
Substance Abuse and Behavioral Disorder Counselors		24,182	20,212	26,166	23,311
		11.63	9.72	12.58	11.21

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC002.htm.

Legal Occupations

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
		46,222	22,148	58,260	39,147
LEGAL OCCUPATIONS		22.22	10.65	28.01	18.82
Administrative Law Judges, Adjudicators, and Hearing Officers	20	87,979	55,569	104,184	72,655
		42.3	26.71	50.09	34.93
	130	72,033	47,789	84,155	61,119
Lawyers		34.63	22.98	40.46	29.39
		24,580	18,350	27,695	23,616
Paralegals and Legal Assistants		11.82	8.82	13.31	11.35

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC002.htm.

Education, Training, and Library Occupations

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
EDUCATION, TRAINING, AND LIBRARY OCCUPATIONS		34,464	21,912	40,740	34,420
		16.57	10.53	19.59	16.55
Adult Literacy, Remedial Education, and GED Teachers and Instructors	120	35,041	31,301	36,911	34,681
		16.85	15.04	17.75	16.68
Elementary School Teachers, Except Special Education	1,140	35,813	30,098	38,671	36,262
Instructional Coordinators	30	44,354	29,057	52,001	49,670
		21.33	13.97	25	23.88
Kindergarten Teachers, Except Special Education	180	35,425	29,447	38,414	36,073
Librarians	70	34,489	25,290	39,088	35,540
		16.58	12.16	18.79	17.08
Library Technicians		18,796	12,947	21,720	18,132
		9.04	6.22	10.44	8.72
Middle School Teachers, Except Special and Vocational Education	470	35,611	29,921	38,457	35,733
Nursing Instructors and Teachers, Postsecondary	60	43,221	31,033	49,316	39,105
Preschool Teachers, Except Special Education	170	22,260	14,015	26,382	21,364
		10.7	6.74	12.69	10.27
Secondary School Teachers, Except Special and Vocational Education	740	36,196	30,610	38,988	36,318
Self-Enrichment Education Teachers		17,748	12,356	20,443	14,070
		8.54	5.94	9.83	6.76
Special Education Teachers, Preschool, Kindergarten, and Elementary School	220	34,163	28,488	37,000	33,887
Special Education Teachers, Secondary School	220	34,567	28,940	37,380	34,232
Teacher Assistants	670	18,523	14,348	20,611	18,581
Vocational Education Teachers, Secondary School	180	37,130	31,138	40,126	38,051

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC002.htm.

Arts, Design, Entertainment, Sports and Media Occupations

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
ARTS, DESIGN, ENTERTAINMENT, SPORTS, AND MEDIA OCCUPATIONS		32,475	16,131	40,646	26,567
		15.61	7.75	19.54	12.77
Broadcast Technicians	30	24,820	16,170	29,145	19,912
		11.93	7.77	14.01	9.58
Camera Operators, Television, Video, and Motion Picture	40	22,220	14,551	26,054	17,994
		10.68	7	12.53	8.65
Editors	50	32,928	18,041	40,371	30,222
		15.83	8.67	19.41	14.53
Floral Designers	90	18,171	14,661	19,925	17,019
		8.73	7.05	9.58	8.18
Graphic Designers	40	24,176	19,169	26,679	22,790
		11.63	9.22	12.83	10.95
Interior Designers	30	33,456	20,766	39,801	32,054
		16.08	9.99	19.13	15.41
Media and Communication Equipment Workers, All Other	30	15,491	12,563	16,956	14,011
		7.45	6.04	8.15	6.73
Media and Communication Workers, All Other		53,275	51,717	54,055	53,836
		25.61	24.87	25.99	25.89
Multi-Media Artists and Animators	10	30,273	20,898	34,960	30,697
		14.56	10.05	16.81	14.76
News Analysts, Reporters and Correspondents	100	40,356	20,913	50,079	32,502
		19.4	10.06	24.07	15.63
Photographers	60	26,363	17,888	30,600	24,942
		12.68	8.6	14.71	11.99
Producers and Directors	70	32,919	19,563	39,595	26,605
Public Relations Specialists	20	39,433	26,501	45,900	36,763
		18.96	12.74	22.06	17.68

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC002.htm.

Healthcare Practitioners and Technical Occupations

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
HEALTHCARE PRACTITIONERS AND TECHNICAL OCCUPATIONS		46,314	22,031	58,456	36,326
		22.26	10.59	28.11	17.46
Cardiovascular Technologists and Technicians	20	34,152	22,065	40,196	33,535
		16.42	10.61	19.33	16.13
Dietitians and Nutritionists	40	44,212	33,206	49,716	43,315
		21.26	15.96	23.9	20.83
Emergency Medical Technicians and Paramedics	230	17,868	12,474	20,565	16,641
		8.59	6	9.88	8
Family and General Practitioners	180	106,087	68,704	124,779	109,500
		51	33.03	59.99	52.64
Health Diagnosing and Treating Practitioners, All Other	30				
Internists, General	190	118,502	83,214	136,145	122,977
		56.98	40	65.45	59.13
Licensed Practical and Licensed Vocational Nurses	700	23,965	19,836	26,030	23,260
		11.53	9.54	12.52	11.18
Medical Records and Health Information Technicians	160	18,182	12,613	20,966	16,341
		8.74	6.07	10.08	7.85
Medical and Clinical Laboratory Technicians	110	24,643	20,342	26,794	24,004
		11.85	9.78	12.88	11.54
Nuclear Medicine Technologists	20	46,696	41,012	49,538	45,493
		22.45	19.72	23.82	21.87
Obstetricians and Gynecologists	90				
Occupational Health and Safety Specialists and Technicians	70	51,487	33,026	60,718	56,371
		24.75	15.88	29.19	27.1
Occupational Therapists	40	51,091	39,779	56,747	52,458
		24.56	19.12	27.28	25.22
Pharmacists	260	73,320	62,246	78,856	72,354
		35.25	29.93	37.91	34.78
Pharmacy Technicians	250	19,452	14,551	21,903	18,807
		9.35	7	10.53	9.05
Physical Therapists	70	61,355	44,573	69,748	56,780
		29.5	21.43	33.54	27.29
Physician Assistants	30	59,796	46,059	66,664	56,079
		28.74	22.14	32.05	26.96
Podiatrists	10				
Psychiatrists	30	111,963	81,717	127,088	118,072
		53.82	39.29	61.1	56.76
Radiologic Technologists and Technicians	170	31,355	26,856	33,605	31,560
		15.08	12.91	16.16	15.18
Recreational Therapists	20	28,663	21,197	32,397	30,098
		13.78	10.19	15.57	14.47
Registered Nurses	2,060	39,877	31,539	44,046	39,001
		19.18	15.17	21.17	18.75
Respiratory Therapists	90	33,888	25,591	38,036	33,167
		16.29	12.3	18.29	15.94
Speech-Language Pathologists	40	52,703	39,890	59,109	49,670
		25.34	19.18	28.42	23.88
Veterinarians	40	71,704	46,056	84,528	57,054
		34.48	22.14	40.64	27.43
Veterinary Technologists and Technicians	30	15,773	12,454	17,431	15,193
		7.58	5.99	8.38	7.3

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC002.htm.

Healthcare Support Occupations

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
HEALTHCARE SUPPORT OCCUPATIONS		16,105	12,598	17,858	15,049
		7.74	6.06	8.58	7.23
Healthcare Support Workers, All Other	50	19,643	12,637	23,146	14,373
		9.45	6.08	11.13	6.91
Home Health Aides	570	13,972	12,457	14,731	13,562
		6.72	5.99	7.08	6.53
Massage Therapists	30	25,816	14,767	31,340	27,068
		12.41	7.1	15.07	13.01
Medical Assistants	200	20,279	14,707	23,066	18,566
		9.75	7.07	11.09	8.93
Medical Transcriptionists	110	20,480	16,399	22,520	20,531
		9.84	7.88	10.83	9.88
Nursing Aides, Orderlies, and Attendants	1,100	15,251	12,804	16,473	15,309
		7.33	6.16	7.92	7.36
Occupational Therapist Assistants	20	30,824	26,252	33,111	28,626
		14.82	12.62	15.92	13.76
Pharmacy Aides		13,121	12,613	13,376	13,228
		6.31	6.07	6.43	6.36
Physical Therapist Aides		18,684	14,033	21,010	17,027
		8.98	6.75	10.1	8.18
Physical Therapist Assistants	30	30,211	18,849	35,891	31,439
		14.53	9.06	17.25	15.12
Psychiatric Aides	240	14,236	12,637	15,036	13,959
		6.84	6.08	7.23	6.71
Veterinary Assistants and Laboratory Animal Caretakers	60	13,111	12,477	13,428	13,204
		6.3	6	6.45	6.35

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC002.htm.

Protective Service Occupations

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
		19,768	12,536	23,384	16,015
PROTECTIVE SERVICE OCCUPATIONS		9.5	6.03	11.24	7.7
		26,491	18,872	30,300	26,954
Fire Fighters		12.73	9.07	14.57	12.96
	20	36,585	25,654	42,050	35,333
First-Line Supervisors/Managers of Police and Detectives		17.59	12.34	20.22	16.99
First-Line Supervisors/Managers, Protective Service Workers, All Other	20	28,884	14,675	35,988	26,510
		13.88	7.05	17.31	12.74
	230	28,018	20,084	31,985	29,382
Police and Sheriff's Patrol Officers		13.47	9.66	15.38	14.13
	10	23,860	16,420	27,579	19,840
Private Detectives and Investigators		11.47	7.9	13.26	9.54
	90	16,284	12,637	18,107	13,625
Protective Service Workers, All Other		7.83	6.08	8.7	6.56
	880	15,919	12,467	17,644	14,033
Security Guards		7.65	6	8.48	6.75

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC002.htm.

Food Preparation and Serving-Related Occupations

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
FOOD PREPARATION AND SERVING-RELATED OCCUPATIONS		14,011	12,561	14,737	13,531
		6.73	6.04	7.08	6.51
Bartenders	260	13,593	12,568	14,105	13,551
		6.54	6.05	6.78	6.51
Chefs and Head Cooks	140	19,982	12,661	23,642	19,679
		9.61	6.09	11.37	9.46
Combined Food Preparation and Serving Workers, Including Fast Food	1,910	13,218	12,492	13,581	13,153
		6.35	6.01	6.53	6.32
Cooks, Fast Food		12,619	12,508	12,675	12,954
		6.07	6.02	6.1	6.23
Cooks, Institution and Cafeteria	590	15,565	12,497	17,099	15,556
		7.48	6.01	8.22	7.48
Cooks, Restaurant	560	15,199	12,435	16,581	14,499
		7.31	5.98	7.97	6.97
Cooks, Short Order		12,751	12,537	12,858	13,049
		6.13	6.03	6.18	6.27
Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	170	13,071	12,552	13,330	13,223
		6.28	6.04	6.41	6.36
Dining Room and Cafeteria Attendants and Bartender Helpers	310	13,102	12,467	13,420	13,098
		6.3	6	6.45	6.3
Dishwashers	450	12,872	12,545	13,036	13,113
		6.19	6.04	6.27	6.3
First-Line Supervisors/Managers of Food Preparation and Serving Workers	560	17,851	12,785	20,383	16,219
		8.58	6.15	9.8	7.8
Food Preparation Workers	560	14,018	12,489	14,784	13,535
		6.74	6.01	7.11	6.5
Food Preparation and Serving Related Workers, All Other	80	16,363	12,581	18,255	13,506
		7.87	6.05	8.77	6.49
Food Servers, Nonrestaurant		15,135	12,620	16,392	14,296
		7.28	6.07	7.88	6.87
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	220	12,866	12,517	13,041	13,025
		6.19	6.02	6.27	6.26
Waiters and Waitresses	1,710	13,047	12,551	13,295	13,241
		6.27	6.04	6.39	6.36

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC002.htm.

Building and Grounds Cleaning and Maintenance Occupations

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
BUILDING AND GROUNDS CLEANING AND MAINTENANCE OCCUPATIONS		16,221	12,538	18,062	14,622
		7.8	6.03	8.68	7.03
All Other Building and Grounds Cleaning and Maintenance Workers	110	18,049	12,752	20,697	16,942
		8.68	6.13	9.95	8.15
First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	60	21,668	13,693	25,655	19,258
		10.41	6.59	12.34	9.26
First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers		31,840	21,816	36,852	32,047
		15.31	10.49	17.72	15.41
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	1,430	16,408	12,458	18,384	15,570
		7.89	5.99	8.84	7.48
Landscaping and Groundskeeping Workers	610	15,411	12,622	16,806	14,059
		7.41	6.07	8.08	6.76
Maids and Housekeeping Cleaners	510	13,534	12,447	14,077	13,286
		6.5	5.99	6.77	6.39

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC002.htm.

Personal Care and Service Occupation

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
PERSONAL CARE AND SERVICE OCCUPATIONS		14,521	12,469	15,546	13,547
		6.98	6	7.48	6.51
Amusement and Recreation Attendants	220	13,094	12,437	13,423	13,002
		6.29	5.98	6.45	6.25
Child Care Workers	200	15,992	15,207	16,385	16,014
		7.69	7.31	7.88	7.7
First-Line Supervisors/Managers of Personal Service Workers	30	18,945	12,559	22,138	16,439
		9.11	6.04	10.65	7.9
Funeral Attendants	60	15,965	12,331	17,782	13,670
		7.68	5.92	8.55	6.58
Hairdressers, Hairstylists, and Cosmetologists	220	17,699	12,508	20,295	15,278
		8.51	6.02	9.76	7.35
Nonfarm Animal Caretakers	90	14,894	12,468	16,107	13,989
		7.16	5.99	7.75	6.72
Personal and Home Care Aides	870	12,672	12,377	12,819	12,799
		6.09	5.95	6.16	6.15
Recreation Workers	100	15,133	12,473	16,463	14,129
		7.27	6	7.91	6.79
Ushers, Lobby Attendants, and Ticket Takers	20	12,585	12,568	12,594	12,993
		6.05	6.05	6.06	6.25

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC002.htm.

Sales and Related Occupations

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
		20,464	12,543	24,425	14,866
SALES AND RELATED OCCUPATIONS		9.84	6.03	11.74	7.15
	120	27,691	14,726	34,173	21,549
Advertising Sales Agents		13.32	7.08	16.43	10.36
	3,260	13,262	12,512	13,638	13,164
Cashiers		6.38	6.01	6.56	6.33
	280	15,347	12,541	16,750	13,693
Counter and Rental Clerks		7.38	6.03	8.05	6.58
First-Line Supervisors/Managers of Non-Retail Sales Workers	180	44,984	27,703	53,625	41,517
		21.63	13.32	25.78	19.96
	1,370	24,293	15,364	28,756	21,084
First-Line Supervisors/Managers of Retail Sales Workers		11.68	7.39	13.83	10.14
	240	34,114	15,041	43,652	20,186
Insurance Sales Agents		16.4	7.23	20.99	9.71
	370	17,241	12,383	19,671	14,895
Parts Salespersons		8.29	5.95	9.45	7.16
		25,028	12,645	31,219	16,451
Real Estate Sales Agents		12.03	6.08	15.01	7.91
	3,250	16,296	12,484	18,202	13,909
Retail Salespersons		7.83	6	8.75	6.68
	20	59,154	39,291	69,086	56,560
Sales Engineers		28.44	18.89	33.21	27.19
		40,309	22,052	49,438	41,652
Sales Representatives, Services, All Other		19.38	10.61	23.77	20.02
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	1,250	34,383	20,300	41,426	29,194
		16.54	9.76	19.92	14.04
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	130	57,221	38,421	66,620	54,128
		27.51	18.47	32.03	26.02
	200	33,189	14,064	42,751	25,055
Sales and Related Workers, All Other		15.95	6.77	20.55	12.04
Securities, Commodities, and Financial Services Sales Agents		38,763	24,769	45,760	28,669
		18.63	11.91	22	13.78
	960	17,348	12,877	19,582	16,559
Telemarketers		8.34	6.19	9.41	7.96
	20	25,917	18,144	29,803	23,857
Travel Agents		12.46	8.72	14.32	11.47

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC002.htm.

Office and Administrative Support Occupations

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
OFFICE AND ADMINISTRATIVE SUPPORT OCCUPATIONS		21,798	14,056	25,669	20,230
		10.48	6.75	12.34	9.73
All Other Financial, Information, and Record Clerks	60	23,244	15,407	27,163	18,556
		11.17	7.41	13.06	8.92
All Other Secretaries, Administrative Assistants, and Other Office Support	60	23,328	15,125	27,429	20,490
		11.22	7.28	13.19	9.85
Bill and Account Collectors	860	23,909	18,840	26,444	24,053
		11.49	9.06	12.71	11.56
Billing and Posting Clerks and Machine Operators	380	20,630	15,631	23,129	20,115
		9.92	7.51	11.12	9.67
Bookkeeping, Accounting, and Auditing Clerks	1,270	22,806	15,076	26,670	21,485
		10.96	7.25	12.82	10.33
Computer Operators	120	20,681	15,416	23,313	19,488
		9.95	7.41	11.21	9.37
Correspondence Clerks	30	24,326	18,853	27,063	25,224
		11.7	9.07	13.01	12.13
Couriers and Messengers		17,346	12,457	19,791	15,330
		8.34	5.99	9.52	7.37
Court, Municipal, and License Clerks	20	21,641	19,255	22,834	21,223
		10.41	9.26	10.98	10.2
Credit Authorizers, Checkers, and Clerks	100	21,414	17,037	23,603	20,742
		10.29	8.19	11.35	9.97
Customer Service Representatives	1,150	24,160	16,969	27,755	24,814
		11.61	8.16	13.34	11.93
Data Entry Keyers	160	18,589	13,447	21,160	17,264
		8.93	6.47	10.17	8.3
Dispatchers, Except Police, Fire, and Ambulance	130	29,178	20,032	33,750	22,351
		14.03	9.63	16.23	10.74
Executive Secretaries and Administrative Assistants	940	26,409	18,704	30,261	24,853
		12.7	8.99	14.55	11.95
File Clerks	170	17,064	12,513	19,340	14,852
		8.21	6.02	9.3	7.14
First-Line Supervisors/Managers of Office and Administrative Support Workers	700	31,963	19,461	38,215	28,053
		15.37	9.35	18.37	13.49
Hotel, Motel, and Resort Desk Clerks	100	13,966	12,615	14,642	13,553
		6.71	6.07	7.04	6.52
Human Resources Assistants, Except Payroll and Timekeeping	90	23,716	13,614	28,766	21,468
		11.4	6.55	13.84	10.33
Insurance Claims and Policy Processing Clerks	70	24,251	16,291	28,230	20,956
		11.66	7.83	13.57	10.08
Legal Secretaries	80	27,242	19,819	30,952	26,175
		13.1	9.53	14.88	12.59
Library Assistants, Clerical	10	14,398	12,423	15,386	13,744
		6.92	5.98	7.4	6.61
Loan Interviewers and Clerks	70	19,761	14,964	22,160	18,858
		9.5	7.19	10.65	9.07
Mail Clerks and Mail Machine Operators, Except Postal Service	40	19,389	13,683	22,242	18,182
		9.32	6.58	10.69	8.74
Medical Secretaries	150	18,458	14,602	20,386	17,781
		8.87	7.02	9.8	8.54
Meter Readers, Utilities		24,596	20,141	26,824	26,348
		11.83	9.68	12.89	12.67
New Accounts Clerks	130	23,308	18,137	25,893	24,116
		11.21	8.72	12.45	11.59
Office Clerks, General	1,890	17,436	12,706	19,802	16,393
		8.38	6.11	9.52	7.88

Office and Administrative Support Occupations

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
Office Machine Operators, Except Computer	40	14,405	12,550	15,332	13,318
		6.93	6.04	7.37	6.41
Order Clerks	230	22,244	13,753	26,490	20,597
		10.69	6.61	12.74	9.91
Payroll and Timekeeping Clerks	160	22,943	15,265	26,782	23,271
		11.03	7.34	12.87	11.18
Police, Fire, and Ambulance Dispatchers	80	16,335	12,583	18,211	15,954
		7.85	6.05	8.76	7.67
Postal Service Clerks	80	38,266	33,783	40,507	39,218
		18.4	16.24	19.47	18.86
Postal Service Mail Carriers	310	35,774	26,932	40,195	37,451
		17.2	12.94	19.32	18.01
Postal Service Mail Sorters, Processors, and Processing Machine Operators	160	28,344	18,310	33,361	27,130
		13.63	8.8	16.04	13.05
Procurement Clerks	70	29,194	21,678	32,953	29,142
		14.04	10.42	15.84	14.01
Production, Planning, and Expediting Clerks	100	31,884	19,693	37,978	28,846
		15.33	9.47	18.26	13.87
Receptionists and Information Clerks	510	16,503	12,567	18,470	15,867
		7.93	6.04	8.88	7.62
Secretaries, Except Legal, Medical, and Executive	1,590	20,361	14,298	23,393	19,643
		9.79	6.88	11.25	9.45
Shipping, Receiving, and Traffic Clerks	700	22,520	13,725	26,917	22,616
		10.83	6.6	12.94	10.88
Stock Clerks and Order Fillers	1,490	17,928	12,614	20,584	15,231
		8.62	6.07	9.9	7.33
Switchboard Operators, Including Answering Service		17,510	13,542	19,494	17,126
		8.42	6.51	9.37	8.24
Tellers	830	16,680	12,515	18,762	16,406
		8.02	6.02	9.02	7.89
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	20	20,701	15,881	23,110	18,210
		9.96	7.63	11.11	8.76
Word Processors and Typists	180	15,987	12,460	17,750	14,848
		7.69	5.99	8.53	7.14

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC002.htm.

Construction and Extraction Occupations

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
		32,280	19,502	38,669	31,085
CONSTRUCTION AND EXTRACTION OCCUPATIONS		15.52	9.38	18.59	14.95
	30	26,257	20,331	29,219	25,255
Brickmasons and Blockmasons		12.62	9.77	14.05	12.14
	1,040	22,785	15,931	26,212	20,672
Carpenters		10.96	7.66	12.6	9.94
	70	29,267	18,748	34,525	31,710
Carpet Installers		14.07	9.01	16.6	15.24
	20	38,783	25,524	45,413	34,830
Cement Masons and Concrete Finishers		18.64	12.27	21.83	16.74
	890	24,851	15,165	29,695	21,963
Construction Laborers		11.95	7.3	14.27	10.56
	510	34,691	32,205	35,935	33,936
Continuous Mining Machine Operators		16.68	15.48	17.27	16.31
		19,031	16,131	20,481	17,563
Drywall and Ceiling Tile Installers		9.15	7.75	9.85	8.45
	220	41,112	29,998	46,670	36,178
Earth Drillers, Except Oil and Gas		19.76	14.42	22.44	17.4
	550	40,510	32,766	44,383	41,470
Electricians		19.48	15.75	21.33	19.94
Explosives Workers, Ordnance Handling Experts, and Blasters		33,587	26,115	37,323	33,201
		16.15	12.56	17.95	15.96
	130	40,912	38,146	42,296	41,375
Extraction Workers, All Other		19.67	18.33	20.33	19.9
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	910	46,651	32,109	53,921	45,235
		22.43	15.44	25.93	21.75
		24,190	19,069	26,751	24,825
Glaziers		11.63	9.17	12.87	11.94
	60	18,215	13,778	20,433	18,874
Helpers--Carpenters		8.76	6.62	9.83	9.08
	30	24,132	16,501	27,948	21,233
Helpers--Electricians		11.6	7.93	13.43	10.21
	140	31,840	18,077	38,723	36,124
Helpers--Extraction Workers		15.31	8.69	18.62	17.37
Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	20	38,928	16,088	50,347	48,084
		18.72	7.74	24.2	23.12
	410	32,800	31,416	33,492	32,648
Mine Cutting and Channeling Machine Operators		15.77	15.1	16.1	15.69
Operating Engineers and Other Construction Equipment Operators		27,597	24,212	29,289	26,047
		13.27	11.64	14.08	12.53
	160	31,005	18,576	37,221	36,120
Painters, Construction and Maintenance		14.91	8.93	17.9	17.37
	40	27,150	21,058	30,197	27,299
Paving, Surfacing, and Tamping Equipment Operators		13.05	10.12	14.52	13.12
		28,830	18,568	33,962	27,903
Pipelayers		13.86	8.93	16.32	13.42
	190	39,288	28,176	44,844	35,715
Plumbers, Pipefitters, and Steamfitters		18.89	13.55	21.56	17.17
		43,389	39,305	45,431	42,762
Rail-Track Laying and Maintenance Equipment Operators		20.86	18.9	21.84	20.56
	210	40,701	38,409	41,847	41,087
Roof Bolters, Mining		19.57	18.47	20.12	19.75
	130	19,558	12,880	22,897	17,049
Roofers		9.41	6.19	11.01	8.19
	80	30,865	17,753	37,422	29,206
Roustabouts, Oil and Gas		14.84	8.54	17.99	14.04

Construction and Extraction Occupations

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
	40	22,802	17,492	25,456	22,233
Service Unit Operators, Oil, Gas, and Mining		10.96	8.41	12.23	10.69
	240	42,696	25,062	51,512	48,943
Sheet Metal Workers		20.53	12.05	24.76	23.53
	190	30,200	22,771	33,915	28,185
Structural Iron and Steel Workers		14.52	10.95	16.3	13.55
	190	30,200	22,771	33,915	28,185
Structural Iron and Steel Workers		14.52	10.95	16.3	13.55

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC002.htm.

Installation, Maintenance, and Repair Occupations

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
INSTALLATION, MAINTENANCE, AND REPAIR OCCUPATIONS		29,949	17,073	36,387	26,972
		14.4	8.2	17.49	12.96
All Other Electrical and Electronic Equipment Mechanics, Installers, and Repairers	50	32,490	30,999	33,234	33,127
		15.62	14.91	15.98	15.93
All Other Vehicle and Mobile Equipment Mechanics, Installers, and Repairers	40	25,431	12,726	31,784	21,781
		12.22	6.12	15.28	10.47
Automotive Body and Related Repairers	60	21,890	16,407	24,630	18,207
		10.52	7.89	11.85	8.75
Automotive Glass Installers and Repairers		20,100	16,131	22,085	17,204
		9.66	7.75	10.62	8.27
Automotive Service Technicians and Mechanics	580	19,246	12,600	22,568	17,489
		9.25	6.06	10.85	8.41
Bus and Truck Mechanics and Diesel Engine Specialists	270	25,661	19,329	28,827	24,687
		12.34	9.3	13.86	11.87
Coin, Vending, and Amusement Machine Servicers and Repairers	20	20,132	16,498	21,948	19,395
		9.68	7.93	10.55	9.33
Computer, Automated Teller, and Office Machine Repairers	110	28,330	18,355	33,317	26,210
		13.62	8.83	16.02	12.6
Control and Valve Installers and Repairers, Except Mechanical Door	60	33,093	21,589	38,844	33,632
		15.91	10.38	18.67	16.17
Electric Motor, Power Tool, and Related Repairers		28,113	21,410	31,464	28,024
		13.52	10.29	15.13	13.47
Electrical Power-Line Installers and Repairers	200	48,998	43,900	51,548	50,975
		23.56	21.11	24.78	24.51
Electrical and Electronics Repairers, Commercial and Industrial Equipment	50	38,612	30,401	42,717	40,646
		18.56	14.62	20.54	19.54
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	350	42,755	26,818	50,723	40,230
		20.56	12.9	24.39	19.35
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	330	32,501	22,153	37,675	32,165
		15.62	10.65	18.11	15.47
Helpers--Installation, Maintenance, and Repair Workers	100	21,267	16,071	23,865	20,046
		10.23	7.73	11.48	9.64
Home Appliance Repairers	20	18,705	15,479	20,318	17,035
		8.99	7.44	9.76	8.19
Industrial Machinery Mechanics	130	35,767	23,575	41,862	38,735
		17.19	11.34	20.13	18.62
Installation, Maintenance, and Repair Workers, All Other	50	64,757	40,780	76,746	66,266
		31.13	19.61	36.89	31.85
Locksmiths and Safe Repairers	10	25,402	23,497	26,354	25,524
		12.21	11.29	12.67	12.27
Maintenance Workers, Machinery	210	28,466	21,350	32,023	26,536
		13.68	10.26	15.4	12.75
Maintenance and Repair Workers, General	1,350	23,353	15,202	27,429	22,082
		11.22	7.31	13.18	10.61
Manufactured Building and Mobile Home Installers	50	20,081	15,918	22,162	18,938
		9.65	7.65	10.65	9.1
Mobile Heavy Equipment Mechanics, Except Engines	570	38,313	26,584	44,176	38,547
		18.42	12.78	21.24	18.53
Motorboat Mechanics	10	21,909	20,371	22,677	21,173
		10.53	9.79	10.91	10.18
Outdoor Power Equipment and Other Small Engine Mechanics	40	19,755	14,695	22,285	18,327
		9.5	7.06	10.71	8.82
Telecommunications Equipment Installers and Repairers, Except Line Installers	160	51,285	41,667	56,093	52,366
		24.66	20.03	26.97	25.18
Telecommunications Line Installers and Repairers	140	26,207	20,420	29,099	26,329
		12.6	9.82	13.99	12.66
Tire Repairers and Changers		17,229	13,107	19,290	16,679
		8.28	6.31	9.27	8.02

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC002.htm.

Production Occupations

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
		25,412	15,315	30,460	22,868
PRODUCTION OCCUPATIONS		12.22	7.37	14.64	10.99
	170	21,987	16,525	24,718	21,255
Assemblers and Fabricators, All Other		10.57	7.94	11.88	10.22
	220	21,821	12,580	26,441	16,892
Butchers and Meat Cutters		10.49	6.05	12.71	8.12
	80	20,884	15,823	23,415	20,015
Cabinetmakers and Bench Carpenters		10.04	7.61	11.25	9.62
	190	33,972	20,585	40,666	34,217
Chemical Plant and System Operators		16.34	9.9	19.55	16.45
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	20	20,478	18,690	21,373	20,480
		9.84	8.99	10.27	9.84
Computer-Controlled Machine Tool Operators, Metal and Plastic	60	26,899	18,906	30,895	25,864
		12.93	9.09	14.85	12.43
Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders		34,368	25,540	38,781	34,397
		16.52	12.28	18.65	16.54
Cutting and Slicing Machine Setters, Operators, and Tenders	110	25,737	18,272	29,469	26,080
		12.37	8.78	14.17	12.54
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	240	20,774	16,244	23,038	19,639
		9.99	7.81	11.07	9.45
	20	21,147	15,057	24,192	20,786
Dental Laboratory Technicians		10.16	7.23	11.63	9.99
Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	20	26,313	21,294	28,823	26,907
		12.66	10.23	13.86	12.93
		24,621	17,510	28,177	25,165
Electrical and Electronic Equipment Assemblers		11.84	8.42	13.55	12.1
Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	60	19,436	13,417	22,446	20,092
		9.34	6.45	10.8	9.66
First-Line Supervisors/Managers of Production and Operating Workers	370	41,290	22,713	50,578	35,832
		19.86	10.92	24.31	17.22
Forging Machine Setters, Operators, and Tenders, Metal and Plastic	170	22,410	16,162	25,534	20,892
		10.77	7.77	12.28	10.05
	20	15,748	12,644	17,300	14,621
Furniture Finishers		7.57	6.08	8.32	7.03
Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	40	25,615	17,179	29,834	22,148
		12.32	8.26	14.34	10.65
	470	17,873	15,984	18,817	16,925
Helpers--Production Workers		8.6	7.68	9.05	8.14
	90	28,241	17,116	33,805	24,892
Job Printers		13.58	8.22	16.25	11.97
Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	50	25,051	23,112	26,020	25,510
		12.04	11.11	12.51	12.27
	210	16,367	12,617	18,241	15,681
Laundry and Dry-Cleaning Workers		7.87	6.06	8.77	7.53
	390	27,960	21,244	31,317	27,065
Machinists		13.44	10.21	15.06	13.01
	20	23,120	20,257	24,551	20,860
Metal-Refining Furnace Operators and Tenders		11.11	9.74	11.81	10.03
Mixing and Blending Machine Setters, Operators, and Tenders	120	22,942	17,435	25,696	22,131
		11.03	8.38	12.35	10.64
	10	20,666	18,987	21,505	20,708
Painters, Transportation Equipment		9.94	9.13	10.34	9.96
		32,851	20,218	39,168	35,572
Plant and System Operators, All Other		15.79	9.72	18.83	17.1
Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	20	26,289	15,542	31,663	30,047
		12.64	7.47	15.22	14.44

Production Occupations

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
	60	19,915	14,079	22,833	20,205
Prepress Technicians and Workers		9.58	6.77	10.98	9.71
	80	21,128	15,734	23,825	19,856
Printing Machine Operators		10.16	7.56	11.45	9.55
		40,895	28,904	46,890	42,403
Production Workers, All Other		19.66	13.9	22.54	20.39
	280	15,051	12,426	16,363	14,619
Sewing Machine Operators		7.24	5.97	7.87	7.03
	30	42,403	33,415	46,896	42,851
Stationary Engineers and Boiler Operators		20.39	16.07	22.55	20.6
	30	24,381	19,155	26,994	24,642
Structural Metal Fabricators and Fitters		11.72	9.21	12.98	11.85
	30	15,284	12,580	16,636	14,751
Tailors, Dressmakers, and Custom Sewers		7.35	6.05	8	7.09
	320	18,738	14,743	20,736	17,568
Team Assemblers		9.01	7.08	9.97	8.44
	50	32,343	22,795	37,117	28,069
Tool and Die Makers		15.55	10.96	17.85	13.5
Water and Liquid Waste Treatment Plant and System Operators	120	26,755	23,573	28,345	26,664
		12.87	11.34	13.63	12.82
	820	25,877	18,118	29,756	25,267
Welders, Cutters, Solderers, and Brazers		12.44	8.71	14.3	12.14
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	50	16,279	14,286	17,275	16,387
		7.83	6.87	8.3	7.88

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC002.htm.

Transportation and Material Moving Occupations

Occupational title	Estimated Employment	Wage			
		Mean	Entry	Experienced	Median
TRANSPORTATION AND MATERIAL MOVING OCCUPATIONS		23,664	12,912	29,040	20,313
		11.38	6.21	13.97	9.77
Air Traffic Controllers	20				
Ambulance Drivers and Attendants, Except Emergency Medical Technicians		12,991	12,393	13,289	12,852
		6.25	5.95	6.39	6.18
Bridge and Lock Tenders	10				
Bus Drivers, School	510	18,665	15,720	20,138	18,798
		8.98	7.56	9.68	9.04
Cleaners of Vehicles and Equipment	400	14,656	12,565	15,702	14,155
		7.05	6.05	7.55	6.8
Conveyor Operators and Tenders	280	37,012	23,582	43,728	36,693
		17.79	11.34	21.02	17.64
Driver/Sales Workers	310	26,237	15,523	31,593	23,588
		12.62	7.46	15.18	11.34
Excavating and Loading Machine and Dragline Operators		38,262	30,107	42,339	39,435
		18.4	14.48	20.36	18.96
First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	110	23,662	16,299	27,343	20,117
		11.37	7.84	13.15	9.67
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	240	36,391	22,803	43,184	30,006
		17.5	10.96	20.76	14.43
Industrial Truck and Tractor Operators	760	28,081	21,135	31,554	27,355
		13.5	10.16	15.17	13.15
Laborers and Freight, Stock, and Material Movers, Hand	2,230	15,181	12,593	16,475	13,701
		7.3	6.06	7.92	6.59
Machine Feeders and Offbearers		18,364	15,682	19,707	18,054
		8.83	7.54	9.48	8.68
Motor Vehicle Operators, All Other		32,310	23,511	36,709	29,086
		15.53	11.3	17.65	13.99
Packers and Packagers, Hand	380	15,269	12,588	16,610	13,701
		7.34	6.06	7.98	6.59
Refuse and Recyclable Material Collectors		18,054	12,788	20,687	18,242
		8.68	6.15	9.95	8.77
Service Station Attendants		13,330	12,412	13,789	12,824
		6.4	5.96	6.63	6.17
Shuttle Car Operators	200	39,883	37,543	41,052	40,694
		19.17	18.05	19.73	19.56
Tank Car, Truck, and Ship Loaders	120	34,482	25,580	38,933	29,165
		16.58	12.3	18.72	14.02
Taxi Drivers and Chauffeurs	40	18,740	12,404	21,909	13,601
		9.01	5.96	10.53	6.53
Truck Drivers, Heavy and Tractor-Trailer	1,970	29,912	19,224	35,257	28,699
		14.38	9.24	16.95	13.79
Truck Drivers, Light or Delivery Services	910	17,520	12,473	20,044	15,408
		8.43	5.99	9.63	7.4
Wellhead Pumpers	70	35,294	23,996	40,943	38,038
		16.96	11.53	19.68	18.28

Source: http://www.state.wv.us/bep/lmi/ow2001/TOC002.htm.

APPENDIX F

WORKFORCE INVESTMENT AREA 2

OCCUPATIONAL PROJECTIONS, 1998-2008

Workforce Investment Area 2

Occupational Projections, 1998-2008

Occupation		Employment		Average Annual Openings			Growth Rate
		1998	*2008*	Growth	Replacement	Total	
0	TOTAL, ALL OCCUPATIONS	116,950	132,910	1,607	2,806	4,413	1.37%
10000	Exec, Admin, Managerial Occs	7,920	8,870	95	142	237	1.20%
11000	Managerial & Administrative Occs	7,920	8,870	95	142	237	1.20%
13000	Administrative Specialty Mgrs	1,400	1,620	22	24	46	1.55%
13002	Financial Managers	430	480	6	7	13	1.31%
13005	Human Resources Managers	140	160	2	3	5	1.13%
13008	Purchasing Managers	160	170	1	3	4	0.77%
13011	Adver/Mrkt/Promo/PR/Sales Mgrs	170	210	4	2	6	2.14%
13014	Administrative Services Managers	300	320	2	5	7	0.74%
13017	Engr/Nat Sci/Comp/Info Sys Mgrs	210	280	7	4	11	3.57%
15000	Line & Middle Managers	2,000	2,190	18	38	56	0.92%
15002	Postmasters/Mail Superintendents	90	100	1	2	3	1.15%
15005	Education Administrators	330	330	0	8	8	0.12%
15008	Medical/Health Service Managers	150	180	3	3	6	2.26%
15011	Prprty/Real Est/Comm Assoc Mgrs	50	60	1	1	2	1.48%
15014	Industrial Production Managers	140	130	-1	2	2	-0.37%
15017	Construction Managers	230	280	5	4	9	2.02%
15021	Mining & Related Managers	160	130	-3	3	3	-1.79%
15023	Communication/Transp/Util Mgrs	190	180	-1	3	3	-0.52%
15026	Food Service & Lodging Managers	670	800	13	12	25	1.86%
19000	Managers & Administrators, NEC	4,520	5,070	55	80	135	1.21%
19002	Govt Chief Execs & Legislators	70	60	-1	2	2	-1.47%
19005	General Managers & Top Execs	2,960	3,490	53	52	105	1.79%
19999	Managers & Administrators, NEC	1,490	1,520	3	26	29	0.18%
21000	Management Support Occupations	2,210	2,560	35	44	79	1.57%
21102	Insurance Underwriters	10	10	0	0	0	1.00%
21108	Loan Counselors & Officers	220	280	6	5	11	2.56%
21111	Tax Preparers	80	100	2	2	4	2.59%
21114	Accountants & Auditors	560	620	6	9	15	1.05%
21117	Budget Analysts	40	40	0	1	1	1.14%
21199	Financial Specialists, NEC	140	170	3	3	6	2.39%
21302	Wholesale/Retail Buyers, Ex Farm	50	50	1	1	2	1.09%
21305	Purchasing Agents & Buyers, Farm	10	10	0	0	0	0.00%
21308	Purchasing Agts, Ex Whl/Ret/Farm	100	110	1	3	4	0.93%
21502	Claims Takers, Unemploy Benefits	20	20	0	0	0	-0.59%
21505	Special Agents, Insurance	20	30	1	1	2	3.33%
21508	Employment Interviewers	10	10	0	0	0	0.77%
21511	Human Res/Training/Lab Rel Specs	200	230	4	5	9	1.79%
21902	Cost Estimators	140	160	2	2	4	1.78%
21905	Management Analysts	30	40	1	0	1	3.55%
21908	Construction, Bldg Inspectors	20	30	0	1	1	1.90%
21911	Inspectors & Compliance Officers	180	210	3	3	6	1.67%
21914	Tax Examiners/Colltrs/Rev Agts	30	40	1	1	2	1.56%
21917	Assessors	50	60	1	1	2	0.98%

Workforce Investment Area 2

Occupational Projections, 1998-2008

Occupation		Employment		Average Annual Openings			Growth Rate
		1998	*2008*	Growth	Replacement	Total	
21999	Management Support Workers, NEC	290	330	3	6	9	1.16%
22000	Engineers & Related Occupations	1,790	1,940	15	38	53	0.82%
22105	Materials Engineers	30	30	0	1	1	0.71%
22108	Mining Engineers, Inc Safety	40	30	-1	1	1	-2.05%
22114	Chemical Engineers	30	30	0	1	1	0.00%
22121	Civil Engineers	290	350	6	6	12	2.11%
22126	Electrical & Electronics Engis	140	140	0	3	3	0.07%
22127	Computer Engineers	30	40	1	0	1	1.82%
22128	Industrial Engineers, Ex Safety	20	20	1	0	1	6.00%
22132	Safety Engineers, Ex Mining	10	10	0	0	0	0.00%
22135	Mechanical Engineers	130	140	1	3	4	0.54%
22199	Engineers, NEC	110	120	1	3	4	1.12%
22302	Architects, Ex Landscape/Naval	10	10	0	0	0	0.77%
22308	Landscape Architects	20	20	0	0	0	1.58%
22311	Surveyrs/Cartographrs/Photogrmts	60	60	0	1	1	-0.17%
22502	Civil Engineering Techns/Technls	120	150	2	3	5	1.85%
22505	Elect & Electronic Techns/Tehnls	250	270	2	5	7	0.68%
22511	Mechnl Engineering Techns/Tehnls	60	60	0	1	1	0.34%
22514	Drafters	180	180	0	4	4	-0.11%
22517	Estimators & Drafters, Utilities	10	10	0	0	0	-2.50%
22521	Surveying/Mapping Techicians	130	140	2	3	5	1.20%
22599	Engineering Techns/Technls, NEC	120	120	0	3	3	0.17%
24000	Natural Scientists, Related Occs	490	550	6	10	16	1.20%
24105	Chemists	70	90	2	1	3	3.23%
24111	Geologsts/Geophysts/Oceanogrphrs	40	50	1	1	2	2.70%
24199	Physical Scientists, NEC	30	30	1	1	2	2.00%
24302	Conservation Scientists/Forestrs	20	20	0	0	0	2.11%
24308	Biological Scientists	20	30	1	0	1	5.88%
24399	Life Scientists, NEC	70	80	1	2	3	1.22%
24502	Biological/Agric Techns/Technols	10	10	0	0	0	0.83%
24505	Chemical Techns/Thnls, Ex Health	90	80	0	2	2	-0.35%
24599	Physicl/Life Science Techns, NEC	150	150	0	3	3	0.07%
25000	Computer & Math Occupations	410	530	12	5	17	3.00%
25102	Systems Analysts	80	110	4	0	4	5.07%
25103	Database Administrators	30	30	0	0	0	1.20%
25104	Computer Support Specialists	120	180	6	1	7	5.21%
25105	Computer Programmers	130	130	0	4	4	0.08%
25108	Computer Programmer Aides	10	10	0	0	0	0.77%
25199	Computer Scientists, NEC	20	30	1	0	1	4.17%
25315	Financial Analysts, Statistical	20	20	1	0	1	3.33%
27000	Social Scients/Rec/Religous Occs	1,500	1,950	45	31	76	2.97%
27102	Economists	20	20	0	0	0	1.11%
27105	Urban & Regional Planners	10	20	0	0	0	1.43%
27108	Psychologists	80	90	1	2	3	0.72%

Workforce Investment Area 2

Occupational Projections, 1998-2008

Occupation		Employment		Average Annual Openings			Growth Rate
		1998	*2008*	Growth	Replacement	Total	
27199	Social Scientists, NEC	30	30	0	1	1	0.00%
27302	Social Workers, Med/Psychiatric	240	310	7	3	10	2.85%
27305	Social Workers, Ex Med/Psychtric	300	370	7	4	11	2.29%
27307	Residential Counselors	200	260	6	5	11	2.91%
27308	Social/Human Service Assistants	350	500	16	9	25	4.48%
27311	Recreation Workers	250	330	8	7	15	3.31%
27502	Clergy	20	20	0	0	0	0.67%
28000	Law & Related Occupations	730	940	21	6	27	2.92%
28102	Judges & Magistrates	30	30	0	0	0	1.11%
28105	Adjudicators & Hearing Officers	30	40	1	0	1	2.33%
28108	Lawyers	460	550	9	5	14	2.05%
28302	Law Clerks	20	20	0	0	0	0.43%
28305	Paralegals & Legal Assistants	150	250	11	1	12	7.05%
28399	Legal Assistants, NEC	30	30	0	0	0	0.77%
31000	Teachers/Librarians/Counselors	6,530	7,280	74	135	209	1.14%
31114	Nursing Instructors	40	40	0	1	1	1.05%
31117	Graduate Assistants, Teaching	50	60	1	1	2	1.13%
31202	Life Sciences Teachers, Postsec	70	80	1	2	3	2.06%
31204	Chemistry Teachrs, Postsecondary	20	20	0	1	1	0.95%
31213	Communications Teachers, Postsec	20	20	0	0	0	2.35%
31214	English Lng/Lit Teachrs, Postsec	40	50	1	1	2	1.16%
31218	Art/Drama/Music Teachrs, Postsec	40	50	1	1	2	1.25%
31224	Math/Science Teachers, Postsec	20	20	0	0	0	1.18%
31226	Computer Science Teachers, Post	20	20	1	0	1	3.53%
31231	Anthrop/Sociol Teachers, Postsec	20	20	0	0	0	1.25%
31233	Economics Teachrs, Postsecondary	20	30	0	1	1	0.87%
31234	Geography Teachrs, Postsecondary	10	10	0	0	0	1.82%
31235	History Teachers, Postsecondary	20	20	0	0	0	1.33%
31236	Political Science Teachers, Post	20	20	0	0	0	1.33%
31237	Psycholgy Teachrs, Postsecondary	20	20	0	1	1	0.91%
31242	Business Teachers, Postsecondary	40	40	0	1	1	1.05%
31252	Education Teachrs, Postsecondary	40	40	0	1	1	1.14%
31258	Prks/Rec/Leisure/Fit Std Teachrs	20	20	1	0	1	3.53%
31299	Postsecondary Teachers, NEC	50	50	1	1	2	1.09%
31303	Teachers, Preschool	130	150	2	3	5	1.34%
31304	Teachers, Kindergarten	260	260	0	5	5	0.12%
31305	Teachers, Elementary School	1,380	1,400	2	32	34	0.14%
31308	Teachers, Secondary School	1,710	1,910	20	55	75	1.14%
31311	Teachers, Special Education	790	960	17	7	24	2.18%
31314	Teachers/ Instructors, VocED/Tr	440	440	0	5	5	0.05%
31317	Instructors, Adult (Non-VocEd)	120	140	2	1	3	1.93%
31321	Instructors/Coaches, Sports/Phy	230	240	2	2	4	0.71%
31399	Teachers & Instructors, NEC	140	230	9	1	10	6.64%
31502	Librarians	90	90	0	2	2	0.00%

Workforce Investment Area 2

Occupational Projections, 1998-2008

Occupation		Employment		Average Annual Openings			Growth Rate
		1998	*2008*	Growth	Replacement	Total	
31505	Library Technicians	30	30	0	1	1	1.03%
31514	Counselors, Vocation/Education	160	180	2	4	6	1.15%
31517	Instructional Coordinators	30	40	1	0	1	1.94%
31521	Teacher Aides, Paraprofessional	440	540	10	5	15	2.19%
32000	Health Practitioners/Techns/Rel	7,330	8,260	93	137	230	1.26%
32102	Physicians and Surgeons	730	840	10	11	21	1.41%
32105	Dentists	100	100	-1	2	2	-0.67%
32108	Optometrists	20	20	0	0	0	-0.56%
32113	Chiropractors	60	60	1	1	2	1.25%
32114	Veterinarians	30	40	1	1	2	2.58%
32302	Respiratory Therapists	120	160	4	2	6	3.06%
32305	Occupational Therapists	30	40	1	0	1	2.41%
32308	Physical Therapists	110	130	2	2	4	2.20%
32314	Speech Pathologts/Audiologists	60	70	1	1	2	2.33%
32317	Recreational Therapists	50	50	0	1	1	0.39%
32399	Therapists, NEC	60	70	2	1	3	2.91%
32502	Registered Nurses	2,460	2,740	28	41	69	1.15%
32505	Licensed Practical/Voc Nurses	900	990	9	19	28	0.95%
32508	Emergency Medical Techns/Paramds	350	360	1	9	10	0.40%
32511	Physician Assistants	150	210	6	3	9	3.70%
32514	Opticians, Dispensing	60	60	0	1	1	0.55%
32517	Pharmacists	390	410	2	11	13	0.41%
32518	Pharmacy Technicians	150	170	2	4	6	1.27%
32521	Dietitians & Nutritionists	50	50	0	1	1	0.87%
32523	Dietetic Technicians	10	20	0	0	0	3.64%
32902	Med/Clinical Lab Technologists	150	160	1	2	3	0.82%
32905	Med/Clinical Lab Technicians	190	210	2	2	4	0.78%
32908	Dental Hygienists	90	110	3	2	5	2.87%
32911	Med Records/Health Info Techns	100	140	3	3	6	3.20%
32913	Radiation Therapists	20	20	0	0	0	1.05%
32914	Nuclear Medical Technologists	30	30	0	0	0	0.00%
32919	Radiologic Techns/Technologists	290	330	4	4	8	1.22%
32925	Cardiology Technologists/Techns	20	30	1	1	2	3.04%
32926	EKG Technicians	20	20	-1	1	1	-3.04%
32928	Surgical Technologists	90	110	3	2	5	2.94%
32931	Psychiatric Technicians	130	130	-1	2	2	-0.46%
32999	Health Professionls/Parapro, NEC	300	390	9	7	16	2.95%
34000	Writers/Edtrs/Artrs/Entrs/Athlts	700	850	12	13	25	2.14%
34002	Writers & Editors	90	140	4	2	6	4.57%
34008	Public Relations Specialists	20	30	0	1	1	1.30%
34011	Reporters & Correspondents	40	50	0	1	1	0.70%
34017	Announcers, Radio & TV	60	40	-1	1	1	-2.36%
34023	Photographers	110	140	3	2	5	3.15%
34026	Camera Oprs, TV/Motion Pic/Video	40	40	0	1	1	1.14%

Workforce Investment Area 2

Occupational Projections, 1998-2008

Occupation		Employment		Average Annual Openings			Growth Rate
		1998	*2008*	Growth	Replacement	Total	
34028	Broadcast & Sound Technicians	20	20	0	1	1	-1.50%
34035	Artists & Commercial Artists	30	40	1	1	2	4.67%
34038	Designers, Ex Interior	170	230	5	2	7	3.16%
34041	Interior Designers	20	20	0	0	0	1.76%
34051	Musicians, Instrumental	10	10	0	0	0	0.00%
34056	Actors/Directors/Producers	50	50	0	1	1	0.00%
39000	Professionl/Paraprof/Techns, NEC	820	920	11	20	31	1.26%
39002	Air Traffic Controllers	40	50	1	1	2	2.56%
39005	Traffic Technicians	10	10	0	0	0	0.00%
39008	Radio Operators	30	30	0	1	1	-0.30%
39011	Funeral Directors & Morticians	40	50	2	1	3	4.29%
39014	Embalmers	20	20	1	1	2	2.63%
39999	Professionl/Paraprof/Techns, NEC	680	750	7	16	23	1.08%
40000	Marketing & Sales Occupations	16,720	22,160	545	491	1,036	3.25%
41000	Marketing/Sales Supervisors	2,070	2,540	47	27	74	2.26%
41002	Marketing/Sales Supervisors	2,070	2,540	47	27	74	2.26%
43000	Marketing & Sales, Service	860	1,060	19	19	38	2.31%
43002	Insurance Sales Agents	270	340	7	6	13	2.47%
43005	Brokers, Real Estate	30	40	1	1	2	1.67%
43008	Sales Agents, Real Estate	200	230	2	4	6	1.13%
43011	Real Estate Appraisers	30	30	0	1	1	0.80%
43014	Secrts/Comdts/Fin Ser Sales Agts	90	110	3	1	4	3.26%
43017	Sales Agents, Business Services	100	140	3	2	5	3.20%
43021	Travel Agents	30	20	-1	1	1	-2.00%
43023	Sales Agents, Advertising	90	120	3	2	5	3.68%
43099	Sales Rps/Salespersons, Serv NEC	30	40	1	1	2	4.67%
49000	Sales Workers, NEC	13,790	18,560	479	445	924	3.46%
49002	Sales Engineers	30	30	0	1	1	0.77%
49005	Sales Rprs, Scientfic Prods/Scie	230	250	3	6	9	1.14%
49008	Sales Rprs, Mfg and Wholesale	920	1,070	15	22	37	1.62%
49011	Retail Salespersons	4,120	5,270	115	140	255	2.79%
49014	Parts Salespersons	280	310	3	8	11	1.04%
49017	Counter & Rental Clerks	360	460	11	15	26	3.01%
49021	Stock Clerks, Sales Floor	1,380	1,520	14	21	35	1.03%
49023	Cashiers	3,460	4,410	95	151	246	2.74%
49026	Telmktrs/Door Sales/Related Wkrs	2,630	4,800	218	68	286	8.28%
49034	Demostrators/Product Promoters	30	40	1	1	2	2.96%
49999	Sales & Related Workers, NEC	360	400	4	11	15	0.97%
50000	Admin Support & Clerical Occs	15,480	16,780	131	327	458	0.84%
51000	Admin Support Supervisors	900	1,070	17	20	37	1.85%
51002	Office/Admin Support Supvrs/Mgrs	900	1,070	17	20	37	1.85%
53000	Industry Specific Support Occs	2,040	2,430	38	56	94	1.90%
53102	Bank Tellers	580	630	5	25	30	0.89%
53105	New Accounts Clerks, Banking	130	170	4	4	8	3.01%

Workforce Investment Area 2

Occupational Projections, 1998-2008

Occupation		Employment		Average Annual Openings			Growth Rate
		1998	*2008*	Growth	Replacement	Total	
53117	Credit Checkers	10	10	0	0	0	2.73%
53121	Loan & Credit Clerks	160	190	3	2	5	1.92%
53123	Adjustment Clerks	60	80	1	0	1	2.03%
53302	Ins Adjustrs/Examiners/Investgrs	100	120	3	2	5	2.63%
53311	Insurance Claims Clerks	70	90	2	1	3	2.11%
53314	Insurance Policy Process Clerks	40	50	1	1	2	3.50%
53502	Welfare Eligibility Workers	40	40	-1	1	1	-1.19%
53508	Bill & Account Collectors	260	350	9	7	16	3.56%
53702	Court Clerks	50	50	1	1	2	1.06%
53705	Municipal Clerks	30	30	0	0	0	1.11%
53708	License Clerks	20	30	0	0	0	1.25%
53808	Hotel/Motel/Resort Desk Clerks	170	230	5	7	12	3.05%
53902	Library Assists/Bkmobile Drivers	40	50	1	2	3	1.43%
53905	Teacher Aides/Educational Assts	230	270	4	3	7	1.67%
55000	General Office/Secretarial Wkrs	8,780	9,350	58	187	245	0.65%
55102	Legal Secretaries	320	390	8	5	13	2.44%
55105	Medical Secretaries	240	250	0	4	4	0.12%
55108	Secretaries, Ex Legal or Medical	2,190	2,190	1	36	37	0.02%
55302	Court Reporters/Med Trans/Stenos	70	80	1	1	2	1.22%
55305	Reception & Information Clerks	790	910	12	15	27	1.50%
55307	Word Processors & Typists	240	200	-4	5	5	-1.70%
55314	Human Res Assists, Ex Payrl/Time	50	50	0	1	1	-0.20%
55321	File Clerks	160	170	1	6	7	0.55%
55323	Order Clerks	170	180	1	4	5	0.53%
55326	Procurement Clerks	40	40	0	1	1	0.00%
55328	Statistical Clerks	10	10	0	0	0	-0.91%
55332	Interview Clks, Ex Personnel/Soc	50	60	1	2	3	1.35%
55335	Customer Service Reprs, Util	170	170	0	4	4	0.06%
55338	Bookkpng/Accntng/Auditng Clerks	1,340	1,300	-4	25	25	-0.29%
55341	Payroll & Timekeeping Clerks	150	140	-1	3	3	-0.47%
55344	Billing/Cost/Rate Clerks	300	340	4	6	10	1.25%
55347	Office Clerks, General	2,480	2,860	38	69	107	1.53%
56000	Elec Data Proc/Office Mach Wkrs	630	640	2	8	10	0.27%
56002	Billing/Posting Clerks/Mach Oprs	120	130	0	2	2	0.33%
56005	Duplicating Machine Operators	20	30	1	1	2	3.75%
56008	Mail Mach Oprs, Prepara/Handling	10	10	0	0	0	2.73%
56011	Computer Oprs, Ex Peripheral Eq	190	160	-3	3	3	-1.67%
56017	Data Entry Keyers, Ex Composing	260	290	4	2	6	1.49%
56099	Office Machine Operators, NEC	20	10	0	0	0	-2.00%
57102	Switchboard Operators	110	90	-2	2	2	-1.76%
57302	Mail Clks, Ex Mail Mach/Post Srv	40	50	1	1	2	1.25%
57305	Postal Mail Carriers	210	230	2	6	8	0.97%
57308	Postal Service Clerks	30	30	0	1	1	0.97%
57311	Couriers & Messengers	60	70	0	1	1	0.48%

Workforce Investment Area 2

Occupational Projections, 1998-2008

Occupation		Employment		Average Annual Openings			Growth Rate
		1998	*2008*	Growth	Replacement	Total	
58000	Mtrl Rec/Sched/Disp/Distr Occs	2,130	2,230	10	36	46	0.45%
58002	Dispatchers: Police/Fire/Amblnce	120	120	0	2	2	0.34%
58005	Dispatchers, Ex Police/Fire/Ambl	200	190	-1	3	3	-0.61%
58008	Production/Planning/Expdtng Clks	150	140	-1	2	2	-0.72%
58011	Transportation Agents	40	30	-1	0	0	-2.37%
58014	Meter Readers, Utilities	190	190	0	5	5	0.00%
58017	Weighers/Measurers/Checkers	20	20	0	0	0	-0.59%
58021	Marking Clerks	10	10	0	0	0	-2.50%
58023	Stock Clks: Stockrm/Warehouse/Yd	610	650	4	9	13	0.64%
58026	Order Fillers, Wholesale/Retail	210	250	3	5	8	1.60%
58028	Shipping/Receiving/Traffic Clks	550	610	6	9	15	1.01%
58099	Mtrl Rec/Sched/Distr Wkrs, NEC	30	30	0	1	1	-0.31%
59000	Admin Support/Clerical Occs, NEC	550	600	5	9	14	0.92%
59999	Admin Support/Clerical Occs, NEC	550	600	5	9	14	0.92%
60000	Service Occupations	17,640	20,770	316	553	869	1.77%
61000	First Line Supervisors, Srv Wkrs	600	760	17	15	32	2.82%
61002	Fire Fighting/Prevent Suprvrs	30	30	0	1	1	1.03%
61005	Police/Detective Supervrs	20	30	0	1	1	0.87%
61008	Institution Cleaning Supervrs	30	40	1	1	2	1.94%
61099	Service Supervrs/Mgrs Super, NEC	510	670	16	12	28	3.06%
62000	Private Household Workers	180	240	7	6	13	3.43%
62041	Child Care Wkrs, Prvt Household	60	70	1	3	4	1.19%
62061	Cleanrs/Servants, Prvt Household	120	170	6	3	9	4.66%
63000	Protective Service Occupations	1,320	1,730	39	30	69	3.05%
63008	Fire Fighters	80	80	0	2	2	0.12%
63011	Police Detectives	10	10	0	0	0	1.82%
63014	Police Patrol Officers	170	220	5	4	9	3.15%
63017	Correctional Officers	80	110	3	2	5	4.05%
63021	Parking Enforcement Workers	10	20	0	0	0	0.71%
63032	Sheriffs & Deputy Sheriffs	150	200	5	1	6	3.25%
63044	Crossing Guards	20	20	0	0	0	2.35%
63047	Guards	760	1,020	26	19	45	3.39%
63099	Protective Service Workers, NEC	20	30	0	2	2	1.25%
65000	Food/Beverage Prep/Service Occs	8,180	9,340	118	357	475	1.43%
65002	Hosts/Hostesses: Rest/Lnge/Cf Sh	150	180	4	4	8	2.41%
65005	Bartenders	690	710	2	30	32	0.29%
65008	Waiters & Waitresses	1,730	2,080	36	95	131	2.08%
65014	Dining Rm/Cafe Attds/Bar Helpers	470	460	0	14	14	-0.09%
65017	Counter Attendants/Lunchrm/Cftra	110	120	2	9	11	1.62%
65021	Bakers, Bread & Pastry	120	150	3	3	6	2.88%
65023	Butchers & Meatcutters, Retail	180	180	0	4	4	0.06%
65026	Cooks, Restaurant	580	720	14	15	29	2.32%
65028	Cooks, Institution/Cafeteria	630	560	-7	16	16	-1.06%
65032	Cooks, Fast Food	540	660	12	14	26	2.26%

Workforce Investment Area 2

Occupational Projections, 1998-2008

Occupation		Employment		Average Annual Openings			Growth Rate
		1998	*2008*	Growth	Replacement	Total	
65035	Cooks, Short Order	410	500	9	11	20	2.13%
65038	Food Preparation Workers	1,140	1,350	21	63	84	1.86%
65041	Fd Prep/Service Wkrs, Fast Food	1,360	1,590	23	75	98	1.66%
65099	Food Service Workers, NEC	90	80	-1	4	4	-1.06%
66000	Health Service Occupations	2,400	2,920	53	39	92	2.17%
66002	Dental Assistants	100	130	3	1	4	3.06%
66005	Medical Assistants	270	390	12	7	19	4.46%
66008	Nursing Aides/Orderlies/Attends	1,110	1,260	16	15	31	1.41%
66011	Home Health Aides	570	750	18	8	26	3.14%
66014	Psychiatric Aides	80	80	0	1	1	-0.49%
66017	Physical Therapy Assists/Aides	70	90	2	2	4	2.96%
66021	Occ Therapy Assistants/Aides	30	30	1	1	2	2.69%
66023	Amblnce Drivers/Attends, Ex EMTs	60	60	0	1	1	0.68%
66026	Pharmacy Aides	80	80	0	2	2	0.53%
66099	Health Service Workers, NEC	50	50	1	1	2	1.11%
67000	Cleaning/Bldg Serv Occs, Ex Prvt	2,820	3,130	31	58	89	1.08%
67002	Maids & Housekeeping Cleaners	860	990	14	16	30	1.61%
67005	Janitors & Cleaners	1,740	1,910	17	38	55	0.98%
67008	Pest Controllers Workers	20	30	1	0	1	3.64%
67099	Cleaning/Bldg Serv Workers, NEC	210	200	-1	4	4	-0.48%
68000	Selected Personal Service Occs	1,820	2,290	47	39	86	2.57%
68002	Barbers	20	20	0	0	0	0.00%
68005	Hairdressrs/Hairstylsts/Cosmtgts	540	730	19	14	33	3.54%
68008	Manicurists	20	20	1	0	1	5.33%
68014	Amusement/Recreation Attendants	210	260	6	4	10	2.75%
68021	Ushers/Lobby Atts/Ticket Takers	60	80	2	1	3	3.79%
68023	Baggage Porters/Bellhops	20	20	0	0	0	1.05%
68028	Other Transportation Attendants	60	40	-1	1	1	-2.28%
68035	Personal/Home Care Aides	580	720	15	15	30	2.52%
68038	Child Care Workers	300	340	4	3	7	1.46%
68041	Funeral Attendants	30	40	1	1	2	3.44%
69000	Service Occupations, NEC	320	360	4	9	13	1.12%
69999	Service Workers, NEC	320	360	4	9	13	1.12%
70000	Agri/Forestry/Fishing/Rel Occs	1,150	1,390	24	30	54	2.06%
71000	Farm Operators & Managers	20	20	0	0	0	-0.48%
71005	Farm Managers	10	10	0	0	0	-1.82%
72000	Suprvs: Farming/Forestry/Agr Rel	10	10	0	0	0	0.00%
73000	Forestry/Conservation/Log Occs	120	160	5	3	8	3.50%
73002	Fallers & Buckers	40	50	1	1	2	2.20%
73008	Log Handling Equipment Operators	30	50	2	1	3	5.59%
73011	Logging Tractor Operators	20	30	1	0	1	4.71%
73099	Timber Cutting/Rel Log Wkrs, NEC	30	30	1	1	2	2.00%
79000	Agri/Forestry/Fishing Occs, NEC	1,010	1,210	19	27	46	1.95%
79008	Log Graders & Scalers	10	10	0	0	0	1.82%

Workforce Investment Area 2

Occupational Projections, 1998-2008

Occupation		Employment		Average Annual Openings			Growth Rate
		1998	*2008*	Growth	Replacement	Total	
79017	Animal Caretakers, Ex Farm	30	40	1	0	1	1.76%
79033	Pruners	10	20	0	0	0	3.08%
79041	Laborers, Ldscpng/Groundskpng	790	960	17	24	41	2.15%
79801	Farm Workers	40	30	-1	1	1	-2.37%
79806	Veterinary Assistants	50	60	1	1	2	2.80%
79998	Agric/Forestry/Fishing Wkrs, NEC	10	10	0	0	0	-2.00%
79999	Agric/Forestry/Fishing Wkrs, NEC	40	50	1	1	2	2.56%
81000	Blue-Collar Worker Supervisors	2,290	2,290	1	62	63	0.00%
81002	First Line Supervs: Mechs/Rprs	430	460	3	13	16	0.67%
81005	First Line Supervs: Const/Extrac	860	860	0	23	23	-0.02%
81008	First Line Supervs: Prod/Opertng	370	390	2	10	12	0.43%
81011	First Line Supervs: Transport	210	180	-2	5	5	-1.07%
81017	First Line Supervs: Helprs/Labrs	100	100	-1	3	3	-0.69%
81099	Blue-Collar Worker Supervs, NEC	310	300	-1	8	8	-0.42%
83000	Inspectors/Testers/Graders, Prec	380	370	-1	7	7	-0.34%
83002	Inspectors/Testers/Graders, Prec	60	60	0	1	1	0.00%
83005	Insptrs/Tstrs/Grdrs/Smplrs/Wghrs	190	180	-1	4	4	-0.52%
83008	Transportation Inspectors	30	20	0	0	0	-1.20%
83099	Inspectors/Testers/Related, NEC	100	100	0	2	2	0.00%
85000	Mechanics, Installers, Repairers	6,110	6,640	53	149	202	0.87%
85110	Industrial Machinery Mechanics	350	320	-2	8	8	-0.64%
85117	Mine Machinery Mechanics	170	130	-3	4	4	-1.93%
85118	Mach Maint Mechns: Water/Power	120	120	-1	3	3	-0.50%
85119	Machinery Maint Mechanics, NEC	100	80	-2	2	2	-1.75%
85123	Millwrights	60	70	1	2	3	1.33%
85128	Machinery Maintenance Workers	210	190	-2	5	5	-0.91%
85132	Maintenance Repairers, Gen Util	1,380	1,440	6	31	37	0.45%
85302	Automotive Mechns/Service Techns	1,000	1,230	23	25	48	2.28%
85305	Automotive Body & Rel Repairers	260	310	5	8	13	2.05%
85308	Motorcycle Mechanics	40	40	1	1	2	1.32%
85311	Bus/Truck/Diesel Engine Mechns	320	320	-1	7	7	-0.16%
85314	Mobile Heavy Equipment Mechns	400	420	2	10	12	0.58%
85317	Rail Car Repairers	40	40	0	1	1	-0.45%
85328	Small Engine Mechanics	20	30	0	1	1	0.83%
85502	Central Office/PBX Instllrs/Rprs	30	30	0	1	1	1.07%
85505	Frame Wirers, Central Office	50	50	0	2	2	-0.63%
85511	Signal/Track Switch Maintainers	20	20	0	1	1	-0.45%
85702	Telephone/Cable TV Instlrs/Rprs	180	220	3	6	9	1.68%
85708	Elec Home Entertain Equip Rprs	40	30	0	1	1	-1.08%
85711	Elec Home Appl/Power Tool Rprs	20	30	1	1	2	2.38%
85714	Electric Motor/Transform Rprs	80	80	0	2	2	-0.49%
85717	Electronics Rprs, Comm/Ind Eq	100	150	5	3	8	5.10%
85721	Power/Substation/Relay Electrcns	10	10	0	0	0	-1.00%
85723	Electric Powerline Instllrs/Rprs	280	370	9	6	15	3.37%

Workforce Investment Area 2

Occupational Projections, 1998-2008

Occupation		Employment		Average Annual Openings			Growth Rate
		1998	*2008*	Growth	Replacement	Total	
85726	Station Instllrs/Rprs, Telephone	50	30	-2	2	2	-4.69%
85728	Electrical Instllrs/Rprs Transp	20	20	0	1	1	0.00%
85902	Heat/AC/Refrig Mechns/Instllrs	270	330	6	5	11	2.41%
85905	Precision Instrument Repairers	30	20	0	1	1	-0.77%
85921	Musical Instrument Rprs/Tuners	10	10	0	0	0	0.00%
85926	Office Mach/Cash Register Servrs	70	80	1	2	3	1.27%
85928	Mechanical Control Instllrs/Rprs	20	20	0	0	0	-1.11%
85938	Mobile Home Repairers	70	90	2	2	4	2.61%
85947	Coin/Vending/Amuse Mach Servrs	20	20	0	0	0	1.76%
85953	Tire Repairers & Changers	20	20	0	1	1	1.76%
85999	Mechanics/Installers/Rprs, NEC	210	220	1	4	5	0.67%
87000	Constr Trades/Extractive Occs	6,470	6,550	8	158	166	0.11%
87102	Carpenters	1,000	1,130	13	27	40	1.32%
87108	Drywall Installers	20	20	0	0	0	1.76%
87121	Brattice Builders	40	20	-2	1	1	-4.29%
87202	Electricians	1,070	1,060	-1	22	22	-0.07%
87302	Brickmasons/Blockmasons	180	220	4	4	8	1.93%
87311	Cncrt Fnshrs/Cmnt Msns/Trzo Wkrs	40	40	1	0	1	1.35%
87402	Painters & Paperhangers	390	470	8	10	18	1.91%
87502	Plumbers/Pipefittrs/Steamfitrs	370	410	4	5	9	1.05%
87508	Pipelayers	40	40	0	1	1	0.48%
87511	Septic Tank Srvrs/Swr Pipe Clnrs	20	30	1	0	1	4.44%
87602	Carpet Installers	110	120	1	2	3	0.54%
87708	Paving/Surfacing/Tamping Opers	60	70	1	2	3	1.41%
87711	Highway Maintenance Workers	30	40	0	1	1	0.94%
87714	Rail-Track Laying/Maint Eq Opers	150	120	-3	4	4	-1.93%
87802	Insulation Workers	20	20	0	0	0	1.33%
87803	Hazardous Materials Removel Wkrs	50	60	1	1	2	1.91%
87805	Sheet Metal Duct Installers	20	20	1	0	1	3.13%
87808	Roofers	480	580	9	17	26	1.88%
87811	Glaziers	60	70	1	2	3	0.95%
87814	Structural Metal Workers	30	30	1	1	2	2.31%
87899	Construction Trades Workers, NEC	130	140	1	3	4	1.04%
87902	Earth Drillers, Ex Oil & Gas	100	90	-1	3	3	-0.92%
87905	Explsve Wks/Ord Hdlg Exprts/Blrs	90	80	-1	2	2	-1.26%
87921	Roustabouts, Oil/Gas	30	30	-1	1	1	-1.94%
87923	Roof Bolters, Mining	450	300	-16	11	11	-3.43%
87941	Continuous Mining Mach Opers	310	310	0	8	8	-0.10%
87943	Mine Cutting/Channeling Mach Ops	50	40	-1	1	1	-1.80%
87949	Mining Mach Operators, NEC	790	650	-14	20	20	-1.77%
87989	Extraction Wkrs, Ex Helpers, NEC	180	160	-3	5	5	-1.41%
87999	Constr/Extractive Wkrs, NEC	140	180	4	4	8	2.61%
89000	Precision Production Occupations	1,260	1,400	15	25	40	1.09%
89102	Tool & Die Makers	20	30	1	0	1	3.50%

Workforce Investment Area 2

Occupational Projections, 1998-2008

Occupation		Employment		Average Annual Openings			Growth Rate
		1998	*2008*	Growth	Replacement	Total	
89108	Machinists	480	560	8	10	18	1.69%
89111	Tool Grinders/Filers/Sharpeners	70	70	0	2	2	0.45%
89132	Sheet Metal Workers	230	280	6	5	11	2.43%
89308	Wood Machinists	20	20	1	0	1	3.33%
89311	Cabinetmakers/Bench Carpentrs	50	60	1	1	2	1.35%
89505	Custom Tailors & Sewers	30	30	0	0	0	1.54%
89517	Pressers, Delicate Fabric	30	40	1	1	2	3.23%
89706	Paste-Up Workers	20	10	-1	0	0	-3.75%
89802	Slaughterers & Meat Packers	30	30	1	1	2	2.00%
89905	Molders/Shapers, Ex Jewelry/Fdry	40	20	-1	1	1	-3.51%
89917	Ophthalmic Laboratory Techns	50	40	0	1	1	-0.83%
89921	Dental Lab Techns, Precision	20	20	0	0	0	-0.87%
89999	Precision Workers, NEC	100	80	-2	3	3	-2.08%
90000	Operators/Fabricators/Laborers	19,010	19,940	96	423	519	0.49%
91000	Mach Strs/Set-Up Oprs/Oprs/Tndr	3,550	3,820	28	74	102	0.77%
91102	Sawing Mach Tool Sttrs/Oprs, M/P	50	50	0	1	1	0.44%
91105	Lathe/Turng Mach Sttrs/Oprs, M/P	70	70	0	1	1	0.00%
91108	Drillng/Bore Mach Sttrs/Ops, M/P	30	30	0	1	1	0.30%
91114	Grinding Mach Sttrs/Oprs, M/P	10	10	0	0	0	0.00%
91117	Machine Tool Cutting Opers, M/P	20	20	1	0	1	3.75%
91302	Punching Mach Sttrs/Oprs, M/P	60	90	3	1	4	4.26%
91305	Press Mach Settrs/Opers, M/P	50	90	5	1	6	9.57%
91308	Shear Mach Settrs/Opers, M/P	50	50	0	1	1	0.43%
91311	Extrude/Drawng Sttrs/Oprs, M/P	20	20	0	1	1	0.00%
91314	Rolling Machine Sttrs/Oprs, M/P	150	150	0	3	3	-0.13%
91317	Forging Machine Sttrs/Oprs, M/P	20	30	1	0	1	8.24%
91321	Machine Forming Oprs/Tndrs, M/P	110	100	-2	3	3	-1.43%
91502	Numerical Control Mach Oprs, M/P	80	90	1	2	3	1.50%
91505	Combo Mach Tool Sttrs/St-Up, M/P	20	20	0	0	0	0.53%
91702	Welding Mach Sttrs/Set-Up Opers	30	30	0	1	1	0.30%
91705	Welding Machine Opers/Tenders	100	120	3	2	5	2.78%
91714	Metal Fabricators, Structral Met	40	50	1	1	2	2.38%
91905	Plastic Mold/Cast Mach Ops/Tndrs	20	20	0	0	0	0.00%
91908	Metal Mold/Core/Cast Mach Sttrs	40	40	0	1	1	0.51%
91911	Met Mold/Core/Cast Mach Ops/Tdrs	80	90	1	2	3	0.61%
91921	Electro Plat/Coat Mach Oprs, M/P	10	20	0	0	0	3.08%
91928	Heating Equip Settrs/Opers, M/P	10	10	0	0	0	-1.67%
91932	Heat Treat/Anneal/Temp Mach Oprs	80	80	-1	2	2	-1.07%
91935	Furnace Operators & Tenders	50	40	-1	1	1	-1.33%
91938	Heaters, Metal/Plastic	80	70	-1	2	2	-1.45%
92197	Metal/Plast Mach Sttrs/Ops, NEC	40	50	1	1	2	1.16%
92302	Sawing Mach Sttrs/Set-Up Opers	30	40	1	1	2	1.52%
92305	Head Sawyer	20	20	0	0	0	2.35%
92308	Sawing Machine Opers/Tenders	50	60	2	1	3	3.33%

Workforce Investment Area 2

Occupational Projections, 1998-2008

Occupation		Employment		Average Annual Openings			Growth Rate
		1998	*2008*	Growth	Replacement	Total	
92314	Woodwrkng Mach Ops/Tndrs, Ex Swg	20	30	0	1	1	1.67%
92510	Print Press Machine Setters	30	20	0	1	1	-0.77%
92512	Offset Lithographic Press Opers	20	30	0	1	1	0.83%
92515	Letterpress Operators	40	50	0	1	1	0.68%
92522	Specialty Mtrl Printg Mach Sttrs	50	50	0	1	1	0.00%
92524	Screen Printing Mach Sttrs/Opers	40	40	0	1	1	0.00%
92541	Typesetting/Composing Mach Oprs	10	10	-1	0	0	-5.38%
92543	Printing Press Mach Opers/Tndrs	30	30	1	1	2	3.20%
92705	Textile Machine Operators/Tndrs	30	20	-1	0	0	-2.40%
92717	Sewing Machine Opers, Garment	470	310	-16	6	6	-3.41%
92721	Sewing Mach Opers, Non-Garment	20	20	0	0	0	-0.83%
92726	Laundry/Drycleaning Mach Opers	190	210	3	5	8	1.34%
92728	Pressing Mach Oprs/Tndrs, Txtles	110	130	2	2	4	1.68%
92908	Photographic Process Mach Opers	40	40	0	2	2	-0.26%
92923	Furn/Kiln/Oven/Drier/Kettle Oprs	20	10	0	0	0	-1.33%
92926	Boiler Opers/Tndrs, Low Pressure	10	10	0	0	0	-0.77%
92935	Chemical Equip Controllers/Opers	110	130	1	3	4	1.23%
92944	Cutng/Slicng Machine Opers/Tndrs	20	20	0	1	1	0.00%
92947	Painters, Transportation Equip	90	180	9	2	11	10.33%
92951	Coat/Paint/Spray Mach Sttrs/Oprs	30	30	0	1	1	-0.30%
92953	Coat/Paint/Spray Mach Oprs/Tndrs	120	120	0	3	3	0.26%
92958	Cleang/Wash/Picklg Eq Oprs/Tndrs	50	40	-1	1	1	-1.80%
92962	Separating/Still Mach Sttrs/Oprs	20	20	0	0	0	-2.11%
92965	Crush/Grd/Mix Mach Opers/Tndrs	90	110	2	2	4	2.05%
92971	Extrud/Form/Pres Mach Oprs/Tndrs	10	10	0	0	0	-0.71%
92974	Packaging/Fillng Mach Oprs/Tndrs	270	330	6	7	13	2.19%
92997	Machine Settrs/Setup Opers, NEC	10	10	0	0	0	0.00%
92998	Machine Operators/Tenders, NEC	120	180	6	2	8	5.38%
93000	Handwork Occs, Inc Assmblrs/Fabr	1,470	1,740	27	33	60	1.84%
93105	Mach Builder Assemblers, Prec	10	10	0	0	0	0.91%
93114	Elec/Electronic Equip Assem, Prc	30	30	-1	1	1	-1.76%
93905	Electrical/Electronic Assemblers	60	50	-1	1	1	-1.77%
93908	Coil Winders/Tapers/Finishers	30	30	0	0	0	0.00%
93914	Welders & Cutters	630	810	17	16	33	2.75%
93921	Pressers, Hand	30	10	-1	1	1	-5.00%
93944	Molders & Casters, Hand	20	10	-1	0	0	-4.12%
93953	Grinders & Polishers, Hand	90	140	5	2	7	5.65%
93956	Assemblers/Fab, Ex Mach/Elec/Pre	340	430	10	6	16	2.83%
93999	Hand Workers, NEC	220	200	-1	6	6	-0.60%
95000	Plant & System Occupations	800	810	1	22	23	0.10%
95002	Water & Waste Treat Plant Opers	280	310	3	7	10	1.06%
95005	Gas Plant Operators	40	30	0	1	1	-0.83%
95008	Chemical Plant & System Opers	150	160	1	5	6	0.93%
95017	Gaugers	20	10	0	0	0	-0.67%

Workforce Investment Area 2

Occupational Projections, 1998-2008

Occupation		Employment		Average Annual Openings			Growth Rate
		1998	*2008*	Growth	Replacement	Total	
95021	Power Generating Plant Operators	100	100	0	3	3	-0.10%
95023	Auxiliary Equipment Opers, Power	10	10	0	0	0	0.83%
95032	Stationary Engineers	50	40	-1	1	1	-2.45%
95099	Plant & System Operators, NEC	160	140	-2	5	5	-1.27%
97000	Motor Vehicle Operators	9,160	9,150	-1	156	156	-0.01%
97102	Truck Drivers, Heavy	2,960	2,880	-8	43	43	-0.27%
97105	Truck Drivers, Light	1,390	1,570	18	20	38	1.29%
97108	Bus Drviers, Transit/Intercity	70	80	1	1	2	1.16%
97111	Bus Drivers, School	600	610	2	11	13	0.29%
97114	Taxi Drivers & Chauffeurs	160	150	-2	3	3	-0.93%
97117	Driver/Sales Workers	400	460	6	8	14	1.50%
97199	Motor Vehicle Operators, NEC	70	70	0	1	1	0.60%
97302	Railroad Conductors/Yardmasters	130	130	0	4	4	0.23%
97305	Locomotive Engineers	180	200	2	6	8	1.33%
97308	Rail Yard Engns/Dinkey Oprs/Htls	20	10	0	1	1	-2.67%
97311	Locomotive Firers	20	10	-1	1	1	-4.29%
97317	Railroad Brake/Signal/Switch Ops	70	40	-3	2	2	-4.48%
97702	Aircraft Pilots/Flight Engineers	10	20	1	0	1	6.36%
97802	Bridge/Lock/Lighthouse Tenders	10	10	0	0	0	0.83%
97805	Service Station Attendants	180	160	-1	8	8	-0.74%
97808	Parking Lot Attendants	30	30	1	0	1	2.14%
97899	Transportation Workers, NEC	80	80	0	1	1	-0.26%
97908	Oil Pumpers, Ex Wellhead	50	40	-2	1	1	-3.08%
97911	Wellhead Pumpers	50	40	-2	1	1	-3.40%
97921	Gas Compressor Operators	10	10	0	0	0	0.83%
97923	Excavation/Loading Mach Opers	330	360	3	6	9	1.00%
97926	Dragline Operators	30	20	-1	1	1	-2.22%
97928	Dredge Operators/Dipper Tndrs	20	10	0	0	0	-2.35%
97932	Loading Mach Oprs, Mining	50	40	-1	1	1	-2.04%
97935	Shuttle Car Operators	300	230	-7	7	7	-2.17%
97938	Grader/Bulldozer/Scraper Opers	680	640	-4	5	5	-0.60%
97941	Hoist & Winch Operators	10	10	0	0	0	-1.82%
97944	Crane & Tower Operators	80	80	0	2	2	-0.25%
97947	Industrial Truck & Tractor Opers	300	340	3	4	7	1.05%
97951	Conveyor Operators/Tenders	150	120	-3	3	3	-1.85%
97953	Pump Operators	10	10	0	0	0	-2.31%
97956	Operating Engineers	120	130	1	2	3	0.41%
97989	Material Moving Eq Opers, NEC	170	200	3	4	7	1.78%
97999	Transp/Materl Moving Eq Ops, NEC	380	310	-7	9	9	-1.83%
98000	Helpers/Labors/Mtrl Movers, Hand	4,030	4,420	41	138	179	0.97%
98102	Mechanic & Repairer Helpers	240	240	0	11	11	-0.16%
98311	Brick/Stone Mason Helpers	80	90	1	4	5	1.27%
98312	Carpenters/Related Helpers	330	390	7	15	22	2.00%
98313	Electricians/Related Helpers	20	30	0	1	1	0.87%

Workforce Investment Area 2

Occupational Projections, 1998-2008

Occupation		Employment		Average Annual Openings			Growth Rate
		1998	*2008*	Growth	Replacement	Total	
98314	Painters/Paperhangers Helpers	10	10	0	1	1	1.82%
98315	Plumbers/Related Helpers	50	50	1	2	3	1.11%
98316	Roofers Helpers	70	80	1	3	4	1.16%
98319	Construction Trades Helpers, NEC	40	40	0	2	2	1.05%
98323	Extractive Workers Helpers	10	10	0	1	1	0.00%
98502	Machine Feeders & Offbearers	170	190	2	5	7	1.20%
98702	Stevedores, Ex Equip Operators	20	20	0	1	1	-2.00%
98705	Refuse/Recyclable Mtrl Collectrs	90	90	0	3	3	0.00%
98799	Freight/Stock/Movers, Hand, NEC	390	410	2	14	16	0.41%
98902	Hand Packers & Packagers	380	460	9	9	18	2.25%
98905	Cleaners of Vechicles/Equipment	200	260	6	6	12	3.16%
98999	Helpers/Laborers/Movers, NEC	1,940	2,060	12	60	72	0.62%

APPENDIX G

WORKFORCE INVESTMENT AREA 2

OCCUPATIONAL PROJECTIONS BY TOTAL GROWTH, 1998-2008

Workforce Investment Area 2

Occupational Projections, 1998-2008

	Occupation	Rank by Total Growth
49026	Telmktrs/Door Sales/Related Wkrs	2,175
49011	Retail Salespersons	1,148
49023	Cashiers	949
19005	General Managers & Top Execs	529
41002	Marketing/Sales Supervisors	468
55347	Office Clerks, General	380
65008	Waiters & Waitresses	359
32502	Registered Nurses	282
63047	Guards	257
85302	Automotive Mechns/Service Techns	228
65041	Fd Prep/Service Wkrs, Fast Food	226
65038	Food Preparation Workers	212
31308	Teachers, Secondary School	195
68005	Hairdressrs/Hairstylsts/Cosmtgts	191
97105	Truck Drivers, Light	180
66011	Home Health Aides	178
93914	Welders & Cutters	174
31311	Teachers, Special Education	171
67005	Janitors & Cleaners	170
79041	Laborers, Ldscpng/Groundskpng	170
51002	Office/Admin Support Supvrs/Mgrs	167
61099	Service Supervrs/Mgrs Super, NEC	157
66008	Nursing Aides/Orderlies/Attends	156
27308	Social/Human Service Assistants	156
49008	Sales Rprs, Mfg and Wholesale	149
68035	Personal/Home Care Aides	145
49021	Stock Clerks, Sales Floor	142
67002	Maids & Housekeeping Cleaners	138
65026	Cooks, Restaurant	135
87102	Carpenters	132
15026	Food Service & Lodging Managers	125
65032	Cooks, Fast Food	121
98999	Helpers/Laborers/Movers, NEC	120
55305	Reception & Information Clerks	119
66005	Medical Assistants	119
49017	Counter & Rental Clerks	107
28305	Paralegals & Legal Assistants	105
32102	Physicians and Surgeons	103
31521	Teacher Aides, Paraprofessional	97
93956	Assemblers/Fab, Ex Mach/Elec/Pre	95
28108	Lawyers	94
85723	Electric Powerline Instllrs/Rprs	93

Workforce Investment Area 2

Occupational Projections, 1998-2008

	Occupation	Rank by Total Growth
53508	Bill & Account Collectors	93
92947	Painters, Transportation Equip	93
87808	Roofers	91
31399	Teachers & Instructors, NEC	91
32999	Health Professionls/Parapro, NEC	88
65035	Cooks, Short Order	87
32505	Licensed Practical/Voc Nurses	86
98902	Hand Packers & Packagers	85
27311	Recreation Workers	83
89108	Machinists	81
55102	Legal Secretaries	77
87402	Painters & Paperhangers	75
13017	Engr/Nat Sci/Comp/Info Sys Mgrs	74
39999	Professionl/Paraprof/Techns, NEC	73
27305	Social Workers, Ex Med/Psychtric	69
27302	Social Workers, Med/Psychiatric	68
43002	Insurance Sales Agents	67
98312	Carpenters/Related Helpers	65
92998	Machine Operators/Tenders, NEC	64
85902	Heat/AC/Refrig Mechns/Instllrs	64
25104	Computer Support Specialists	62
85132	Maintenance Repairers, Gen Util	62
98905	Cleaners of Vechicles/Equipment	62
22121	Civil Engineers	61
92974	Packaging/Fillng Mach Oprs/Tndrs	60
97117	Driver/Sales Workers	60
21114	Accountants & Auditors	59
27307	Residential Counselors	58
68014	Amusement/Recreation Attendants	57
32511	Physician Assistants	57
21108	Loan Counselors & Officers	56
13002	Financial Managers	56
58028	Shipping/Receiving/Traffic Clks	56
89132	Sheet Metal Workers	55
62061	Cleanrs/Servants, Prvt Household	55
34038	Designers, Ex Interior	54
85305	Automotive Body & Rel Repairers	53
63014	Police Patrol Officers	53
53808	Hotel/Motel/Resort Desk Clerks	53
93953	Grinders & Polishers, Hand	52
53102	Bank Tellers	51
59999	Admin Support/Clerical Occs, NEC	51

Workforce Investment Area 2

Occupational Projections, 1998-2008

	Occupation	Rank by Total Growth
85717	Electronics Rprs, Comm/Ind Eq	49
63032	Sheriffs & Deputy Sheriffs	49
15017	Construction Managers	47
91305	Press Mach Settrs/Opers, M/P	45
34002	Writers & Editors	43
68038	Child Care Workers	43
53105	New Accounts Clerks, Banking	40
53905	Teacher Aides/Educational Assts	39
87502	Plumbers/Pipefittrs/Steamfitrs	39
58023	Stock Clks: Stockrm/Warehouse/Yd	39
32302	Respiratory Therapists	38
55344	Billing/Cost/Rate Clerks	38
25102	Systems Analysts	38
56017	Data Entry Keyers, Ex Composing	38
13011	Adver/Mrkt/Promo/PR/Sales Mgrs	37
87999	Constr/Extractive Wkrs, NEC	37
69999	Service Workers, NEC	36
32919	Radiologic Techns/Technologists	36
87302	Brickmasons/Blockmasons	35
49999	Sales & Related Workers, NEC	35
65002	Hosts/Hostesses: Rest/Lnge/Cf Sh	35
21511	Human Res/Training/Lab Rel Specs	35
58026	Order Fillers, Wholesale/Retail	34
65021	Bakers, Bread & Pastry	34
34023	Photographers	34
21999	Management Support Workers, NEC	34
97923	Excavation/Loading Mach Opers	33
32911	Med Records/Health Info Techns	33
43017	Sales Agents, Business Services	33
15008	Medical/Health Service Managers	33
21199	Financial Specialists, NEC	33
97947	Industrial Truck & Tractor Opers	32
63017	Correctional Officers	32
43023	Sales Agents, Advertising	32
85702	Telephone/Cable TV Instlrs/Rprs	31
21911	Inspectors & Compliance Officers	30
97989	Material Moving Eq Opers, NEC	30
66002	Dental Assistants	30
53121	Loan & Credit Clerks	30
95002	Water & Waste Treat Plant Opers	30
81002	First Line Supervs: Mechs/Rprs	29
49014	Parts Salespersons	29

Workforce Investment Area 2

Occupational Projections, 1998-2008

	Occupation	Rank by Total Growth
43014	Secrts/Comdts/Fin Ser Sales Agts	28
19999	Managers & Administrators, NEC	27
91705	Welding Machine Opers/Tenders	27
91302	Punching Mach Sttrs/Oprs, M/P	26
49005	Sales Rprs, Scientfic Prods/Scie	26
92726	Laundry/Drycleaning Mach Opers	25
53302	Ins Adjustrs/Examiners/Investgrs	25
32928	Surgical Technologists	25
32908	Dental Hygienists	25
32308	Physical Therapists	24
21902	Cost Estimators	24
97305	Locomotive Engineers	24
22502	Civil Engineering Techns/Technls	23
85314	Mobile Heavy Equipment Mechns	23
43008	Sales Agents, Real Estate	23
31317	Instructors, Adult (Non-VocEd)	23
68021	Ushers/Lobby Atts/Ticket Takers	22
13014	Administrative Services Managers	22
66017	Physical Therapy Assists/Aides	21
21111	Tax Preparers	21
24105	Chemists	21
57305	Postal Mail Carriers	20
65005	Bartenders	20
98502	Machine Feeders & Offbearers	20
31305	Teachers, Elementary School	19
73008	Log Handling Equipment Operators	19
32518	Pharmacy Technicians	19
31303	Teachers, Preschool	18
92728	Pressing Mach Oprs/Tndrs, Txtles	18
92965	Crush/Grd/Mix Mach Opers/Tndrs	18
85938	Mobile Home Repairers	18
31514	Counselors, Vocation/Education	18
22505	Elect & Electronic Techns/Tehnls	17
97111	Bus Drivers, School	17
65017	Counter Attendants/Lunchrm/Cftra	17
31321	Instructors/Coaches, Sports/Phy	16
81008	First Line Supervs: Prod/Opertng	16
32399	Therapists, NEC	16
32517	Pharmacists	16
13005	Human Resources Managers	16
98799	Freight/Stock/Movers, Hand, NEC	16
32905	Med/Clinical Lab Technicians	15

Workforce Investment Area 2

Occupational Projections, 1998-2008

	Occupation	Rank by Total Growth
39011	Funeral Directors & Morticians	15
92308	Sawing Machine Opers/Tenders	15
22521	Surveying/Mapping Techicians	15
53311	Insurance Claims Clerks	15
34035	Artists & Commercial Artists	14
31202	Life Sciences Teachers, Postsec	14
91317	Forging Machine Sttrs/Oprs, M/P	14
92935	Chemical Equip Controllers/Opers	14
43099	Sales Rps/Salespersons, Serv NEC	14
53314	Insurance Policy Process Clerks	14
32508	Emergency Medical Techns/Paramds	14
79806	Veterinary Assistants	14
85999	Mechanics/Installers/Rprs, NEC	14
32314	Speech Pathologts/Audiologists	14
95008	Chemical Plant & System Opers	14
53123	Adjustment Clerks	13
87899	Construction Trades Workers, NEC	13
22199	Engineers, NEC	12
13008	Purchasing Managers	12
32902	Med/Clinical Lab Technologists	12
91502	Numerical Control Mach Oprs, M/P	12
39002	Air Traffic Controllers	11
21905	Management Analysts	11
68041	Funeral Attendants	11
98311	Brick/Stone Mason Helpers	10
25199	Computer Scientists, NEC	10
89517	Pressers, Delicate Fabric	10
91714	Metal Fabricators, Structral Met	10
79999	Agric/Forestry/Fishing Wkrs, NEC	10
24308	Biological Scientists	10
24111	Geologsts/Geophysts/Oceanogrphrs	10
15002	Postmasters/Mail Superintendents	10
73002	Fallers & Buckers	9
55302	Court Reporters/Med Trans/Stenos	9
22128	Industrial Engineers, Ex Safety	9
55321	File Clerks	9
24399	Life Scientists, NEC	9
55323	Order Clerks	9
87803	Hazardous Materials Removel Wkrs	9
85926	Office Mach/Cash Register Servrs	9
21308	Purchasing Agts, Ex Whl/Ret/Farm	9
87708	Paving/Surfacing/Tamping Opers	9

Workforce Investment Area 2

Occupational Projections, 1998-2008

	Occupation	Rank by Total Growth
56005	Duplicating Machine Operators	9
97108	Bus Drviers, Transit/Intercity	8
68008	Manicurists	8
15011	Prprty/Real Est/Comm Assoc Mgrs	8
92543	Printing Press Mach Opers/Tndrs	8
87511	Septic Tank Srvrs/Swr Pipe Clnrs	8
73011	Logging Tractor Operators	8
67008	Pest Controllers Workers	8
49034	Demostrators/Product Promoters	8
32114	Veterinarians	8
21505	Special Agents, Insurance	8
85123	Millwrights	8
98316	Roofers Helpers	8
55332	Interview Clks, Ex Personnel/Soc	7
62041	Child Care Wkrs, Prvt Household	7
28105	Adjudicators & Hearing Officers	7
97702	Aircraft Pilots/Flight Engineers	7
66021	Occ Therapy Assistants/Aides	7
32925	Cardiology Technologists/Techns	7
32305	Occupational Therapists	7
32113	Chiropractors	7
89311	Cabinetmakers/Bench Carpentrs	7
89102	Tool & Die Makers	7
22135	Mechanical Engineers	7
97808	Parking Lot Attendants	6
61008	Institution Cleaning Supervrs	6
79017	Animal Caretakers, Ex Farm	6
27108	Psychologists	6
31117	Graduate Assistants, Teaching	6
53902	Library Assists/Bkmobile Drivers	6
22127	Computer Engineers	6
87814	Structural Metal Workers	6
91117	Machine Tool Cutting Opers, M/P	6
87811	Glaziers	6
31517	Instructional Coordinators	6
31226	Computer Science Teachers, Post	6
87602	Carpet Installers	6
31258	Prks/Rec/Leisure/Fit Std Teachrs	6
21302	Wholesale/Retail Buyers, Ex Farm	5
89802	Slaughterers & Meat Packers	5
97956	Operating Engineers	5
85711	Elec Home Appl/Power Tool Rprs	5

Workforce Investment Area 2

Occupational Projections, 1998-2008

	Occupation	Rank by Total Growth
91911	Met Mold/Core/Cast Mach Ops/Tdrs	5
92197	Metal/Plast Mach Sttrs/Ops, NEC	5
31214	English Lng/Lit Teachrs, Postsec	5
43005	Brokers, Real Estate	5
25315	Financial Analysts, Statistical	5
87311	Cncrt Fnshrs/Cmnt Msns/Trzo Wkrs	5
24199	Physical Scientists, NEC	5
92302	Sawing Mach Sttrs/Set-Up Opers	5
39014	Embalmers	5
53702	Court Clerks	5
21917	Assessors	5
98315	Plumbers/Related Helpers	5
66099	Health Service Workers, NEC	5
87805	Sheet Metal Duct Installers	5
55108	Secretaries, Ex Legal or Medical	5
31299	Postsecondary Teachers, NEC	5
89308	Wood Machinists	5
31218	Art/Drama/Music Teachrs, Postsec	5
21914	Tax Examiners/Colltrs/Rev Agts	5
85308	Motorcycle Mechanics	5
73099	Timber Cutting/Rel Log Wkrs, NEC	5
57302	Mail Clks, Ex Mail Mach/Post Srv	5
56002	Billing/Posting Clerks/Mach Oprs	4
97199	Motor Vehicle Operators, NEC	4
15005	Education Administrators	4
58002	Dispatchers: Police/Fire/Amblnce	4
66023	Amblnce Drivers/Attends, Ex EMTs	4
31242	Business Teachers, Postsecondary	4
31252	Education Teachrs, Postsecondary	4
31114	Nursing Instructors	4
32523	Dietetic Technicians	4
98319	Construction Trades Helpers, NEC	4
21908	Construction, Bldg Inspectors	4
32521	Dietitians & Nutritionists	4
92314	Woodwrkng Mach Ops/Tndrs, Ex Swg	4
31213	Communications Teachers, Postsec	4
66026	Pharmacy Aides	4
79033	Pruners	4
91921	Electro Plat/Coat Mach Oprs, M/P	4
34026	Camera Oprs, TV/Motion Pic/Video	4
24302	Conservation Scientists/Forestrs	4
89505	Custom Tailors & Sewers	4

Workforce Investment Area 2

Occupational Projections, 1998-2008

	Occupation	Rank by Total Growth
92305	Head Sawyer	4
63044	Crossing Guards	4
21117	Budget Analysts	4
55105	Medical Secretaries	3
25103	Database Administrators	3
28102	Judges & Magistrates	3
63099	Protective Service Workers, NEC	3
53708	License Clerks	3
53705	Municipal Clerks	3
22308	Landscape Architects	3
32514	Opticians, Dispensing	3
31505	Library Technicians	3
53117	Credit Checkers	3
34008	Public Relations Specialists	3
34011	Reporters & Correspondents	3
97302	Railroad Conductors/Yardmasters	3
34041	Interior Designers	3
31304	Teachers, Kindergarten	3
92953	Coat/Paint/Spray Mach Oprs/Tndrs	3
57311	Couriers & Messengers	3
85947	Coin/Vending/Amuse Mach Servrs	3
85953	Tire Repairers & Changers	3
87108	Drywall Installers	3
57308	Postal Service Clerks	3
92515	Letterpress Operators	3
89111	Tool Grinders/Filers/Sharpeners	3
61002	Fire Fighting/Prevent Suprvrs	3
87711	Highway Maintenance Workers	3
85502	Central Office/PBX Instllrs/Rprs	3
56008	Mail Mach Oprs, Prepara/Handling	3
43011	Real Estate Appraisers	2
63011	Police Detectives	2
32317	Recreational Therapists	2
68023	Baggage Porters/Bellhops	2
32913	Radiation Therapists	2
49002	Sales Engineers	2
31237	Psycholgy Teachrs, Postsecondary	2
22105	Materials Engineers	2
98314	Painters/Paperhangers Helpers	2
31236	Political Science Teachers, Post	2
87802	Insulation Workers	2
31235	History Teachers, Postsecondary	2

Workforce Investment Area 2

Occupational Projections, 1998-2008

	Occupation	Rank by Total Growth
31234	Geography Teachrs, Postsecondary	2
87508	Pipelayers	2
22511	Mechnl Engineering Techns/Tehnls	2
31224	Math/Science Teachers, Postsec	2
28399	Legal Assistants, NEC	2
22599	Engineering Techns/Technls, NEC	2
31233	Economics Teachrs, Postsecondary	2
31231	Anthrop/Sociol Teachers, Postsec	2
98313	Electricians/Related Helpers	2
31204	Chemistry Teachrs, Postsecondary	2
61005	Police/Detective Supervrs	2
27102	Economists	2
91308	Shear Mach Settrs/Opers, M/P	2
27105	Urban & Regional Planners	2
85328	Small Engine Mechanics	2
91102	Sawing Mach Tool Sttrs/Oprs, M/P	2
91908	Metal Mold/Core/Cast Mach Sttrs	2
92512	Offset Lithographic Press Opers	2
31314	Teachers/ Instructors, VocED/Tr	2
79008	Log Graders & Scalers	2
91505	Combo Mach Tool Sttrs/St-Up, M/P	1
97921	Gas Compressor Operators	1
91702	Welding Mach Sttrs/Set-Up Opers	1
28302	Law Clerks	1
55335	Customer Service Reprs, Util	1
65023	Butchers & Meatcutters, Retail	1
27502	Clergy	1
95023	Auxiliary Equipment Opers, Power	1
21102	Insurance Underwriters	1
25105	Computer Programmers	1
22126	Electrical & Electronics Engis	1
24502	Biological/Agric Techns/Technols	1
22302	Architects, Ex Landscape/Naval	1
21508	Employment Interviewers	1
63008	Fire Fighters	1
63021	Parking Enforcement Workers	1
97802	Bridge/Lock/Lighthouse Tenders	1
25108	Computer Programmer Aides	1
93105	Mach Builder Assemblers, Prec	1
24599	Physicl/Life Science Techns, NEC	1
91108	Drillng/Bore Mach Sttrs/Ops, M/P	1
27199	Social Scientists, NEC	0

Workforce Investment Area 2

Occupational Projections, 1998-2008

	Occupation	Rank by Total Growth
83002	Inspectors/Testers/Graders, Prec	0
55326	Procurement Clerks	0
92524	Screen Printing Mach Sttrs/Opers	0
85728	Electrical Instllrs/Rprs Transp	0
68002	Barbers	0
31502	Librarians	0
85921	Musical Instrument Rprs/Tuners	0
92997	Machine Settrs/Setup Opers, NEC	0
91105	Lathe/Turng Mach Sttrs/Oprs, M/P	0
91114	Grinding Mach Sttrs/Oprs, M/P	0
58014	Meter Readers, Utilities	0
91311	Extrude/Drawng Sttrs/Oprs, M/P	0
34051	Musicians, Instrumental	0
98705	Refuse/Recyclable Mtrl Collectrs	0
22114	Chemical Engineers	0
93908	Coil Winders/Tapers/Finishers	0
98323	Extractive Workers Helpers	0
22132	Safety Engineers, Ex Mining	0
21305	Purchasing Agents & Buyers, Farm	0
39005	Traffic Technicians	0
91905	Plastic Mold/Cast Mach Ops/Tndrs	0
34056	Actors/Directors/Producers	0
92522	Specialty Mtrl Printg Mach Sttrs	0
83099	Inspectors/Testers/Related, NEC	0
92944	Cutng/Slicng Machine Opers/Tndrs	0
32914	Nuclear Medical Technologists	0
85511	Signal/Track Switch Maintainers	-1
55314	Human Res Assists, Ex Payrl/Time	-1
95021	Power Generating Plant Operators	-1
55328	Statistical Clerks	-1
95017	Gaugers	-1
85721	Power/Substation/Relay Electrcns	-1
32108	Optometrists	-1
58017	Weighers/Measurers/Checkers	-1
58099	Mtrl Rec/Sched/Distr Wkrs, NEC	-1
92926	Boiler Opers/Tndrs, Low Pressure	-1
39008	Radio Operators	-1
92971	Extrud/Form/Pres Mach Oprs/Tndrs	-1
92951	Coat/Paint/Spray Mach Sttrs/Oprs	-1
22311	Surveyrs/Cartographrs/Photogrmts	-1
92908	Photographic Process Mach Opers	-1
21502	Claims Takers, Unemploy Benefits	-1

Workforce Investment Area 2

Occupational Projections, 1998-2008

	Occupation	Rank by Total Growth
92721	Sewing Mach Opers, Non-Garment	-2
91314	Rolling Machine Sttrs/Oprs, M/P	-2
89921	Dental Lab Techns, Precision	-2
91928	Heating Equip Settrs/Opers, M/P	-2
22514	Drafters	-2
97899	Transportation Workers, NEC	-2
85317	Rail Car Repairers	-2
92923	Furn/Kiln/Oven/Drier/Kettle Oprs	-2
85928	Mechanical Control Instllrs/Rprs	-2
97944	Crane & Tower Operators	-2
85905	Precision Instrument Repairers	-2
71005	Farm Managers	-2
79998	Agric/Forestry/Fishing Wkrs, NEC	-2
81005	First Line Supervs: Const/Extrac	-2
92510	Print Press Machine Setters	-2
97941	Hoist & Winch Operators	-2
22517	Estimators & Drafters, Utilities	-3
85505	Frame Wirers, Central Office	-3
87941	Continuous Mining Mach Opers	-3
97953	Pump Operators	-3
24505	Chemical Techns/Thnls, Ex Health	-3
58021	Marking Clerks	-3
95005	Gas Plant Operators	-3
56099	Office Machine Operators, NEC	-3
34028	Broadcast & Sound Technicians	-3
83008	Transportation Inspectors	-3
97928	Dredge Operators/Dipper Tndrs	-4
65014	Dining Rm/Cafe Attds/Bar Helpers	-4
92962	Separating/Still Mach Sttrs/Oprs	-4
66014	Psychiatric Aides	-4
98102	Mechanic & Repairer Helpers	-4
85714	Electric Motor/Transform Rprs	-4
85708	Elec Home Entertain Equip Rprs	-4
89917	Ophthalmic Laboratory Techns	-4
98702	Stevedores, Ex Equip Operators	-4
97308	Rail Yard Engns/Dinkey Oprs/Htls	-4
43021	Travel Agents	-5
85311	Bus/Truck/Diesel Engine Mechns	-5
53502	Welfare Eligibility Workers	-5
15014	Industrial Production Managers	-5
93114	Elec/Electronic Equip Assem, Prc	-6
89706	Paste-Up Workers	-6

Workforce Investment Area 2

Occupational Projections, 1998-2008

	Occupation	Rank by Total Growth
87921	Roustabouts, Oil/Gas	-6
91935	Furnace Operators & Tenders	-6
32931	Psychiatric Technicians	-6
85118	Mach Maint Mechns: Water/Power	-6
97926	Dragline Operators	-6
92705	Textile Machine Operators/Tndrs	-6
92541	Typesetting/Composing Mach Oprs	-7
32105	Dentists	-7
81017	First Line Supervs: Helprs/Labrs	-7
32926	EKG Technicians	-7
55341	Payroll & Timekeeping Clerks	-7
93944	Molders & Casters, Hand	-7
22108	Mining Engineers, Inc Safety	-8
87202	Electricians	-8
87902	Earth Drillers, Ex Oil & Gas	-9
91932	Heat Treat/Anneal/Temp Mach Oprs	-9
58011	Transportation Agents	-9
92958	Cleang/Wash/Picklg Eq Oprs/Tndrs	-9
79801	Farm Workers	-9
87943	Mine Cutting/Channeling Mach Ops	-9
97311	Locomotive Firers	-9
83005	Insptrs/Tstrs/Grdrs/Smplrs/Wghrs	-10
97932	Loading Mach Oprs, Mining	-10
15023	Communication/Transp/Util Mgrs	-10
65099	Food Service Workers, NEC	-10
67099	Cleaning/Bldg Serv Workers, NEC	-10
19002	Govt Chief Execs & Legislators	-10
87905	Explsve Wks/Ord Hdlg Exprts/Blrs	-11
93905	Electrical/Electronic Assemblers	-11
58008	Production/Planning/Expdtng Clks	-11
91938	Heaters, Metal/Plastic	-11
95032	Stationary Engineers	-12
58005	Dispatchers, Ex Police/Fire/Ambl	-12
89905	Molders/Shapers, Ex Jewelry/Fdry	-13
81099	Blue-Collar Worker Supervs, NEC	-13
34017	Announcers, Radio & TV	-13
93999	Hand Workers, NEC	-13
68028	Other Transportation Attendants	-13
97805	Service Station Attendants	-13
93921	Pressers, Hand	-14
97114	Taxi Drivers & Chauffeurs	-15
91321	Machine Forming Oprs/Tndrs, M/P	-16

Workforce Investment Area 2

Occupational Projections, 1998-2008

	Occupation	Rank by Total Growth
97908	Oil Pumpers, Ex Wellhead	-16
85119	Machinery Maint Mechanics, NEC	-17
97911	Wellhead Pumpers	-18
87121	Brattice Builders	-18
85128	Machinery Maintenance Workers	-19
57102	Switchboard Operators	-19
95099	Plant & System Operators, NEC	-20
89999	Precision Workers, NEC	-20
85110	Industrial Machinery Mechanics	-22
81011	First Line Supervs: Transport	-22
85726	Station Instllrs/Rprs, Telephone	-23
87989	Extraction Wkrs, Ex Helpers, NEC	-26
97951	Conveyor Operators/Tenders	-28
15021	Mining & Related Managers	-28
87714	Rail-Track Laying/Maint Eq Opers	-29
97317	Railroad Brake/Signal/Switch Ops	-30
56011	Computer Oprs, Ex Peripheral Eq	-32
85117	Mine Machinery Mechanics	-32
55338	Bookkpng/Accntng/Auditng Clerks	-39
97938	Grader/Bulldozer/Scraper Opers	-41
55307	Word Processors & Typists	-41
97935	Shuttle Car Operators	-65
65028	Cooks, Institution/Cafeteria	-67
97999	Transp/Materl Moving Eq Ops, NEC	-70
97102	Truck Drivers, Heavy	-79
87949	Mining Mach Operators, NEC	-140
87923	Roof Bolters, Mining	-155
92717	Sewing Machine Opers, Garment	-160