

ECONOMY

INTRODUCTION

The purpose of this section is to study Shenandoah County's economy and identify important trends and changes that are occurring. The County economy has been examined in a major way several times before for the comprehensive planning process, during the development of an Overall Economic Development Program in the late 1970s, and as part of meeting the initial and then re-certification requirements of the Virginia Department of Economic Development's Community Certification program.

This chapter incorporates data from several sources. The best available recent data has been used for each specific topic, from a variety of State and Federal agencies including: the Virginia Employment Commission, the U.S. Bureau of the Census and the Bureau of Economic Analysis. Due to multiple statistical methods and source data, some variation may be evident throughout the chapter; however, this does not affect the larger economic picture.

The economic base of the County has slowly changed over the past several decades. Textiles were the dominant manufacturing industry for many decades, with plants in several of the towns as well as in the unincorporated area. Now there are no longer any active textile plants.

Manufacturing is still the classification that has the highest percentage of local jobs (although that percentage is falling), followed by Services and then Wholesale and Retail Trade. Agriculture is also an important part of the County's economy, and while the direct employment numbers are not high compared to other classifications, several of the manufacturing enterprises and service industries that are located here are dependent upon the agricultural base for their existence.

The primary economic indicators are employment and income. These indicators are analyzed in two ways in this chapter: by the types of employment and incomes of the County's residents, no matter where they are employed, and by the types of jobs that are located here in Shenandoah County and the incomes generated by those jobs.

In addition, there is a specific analysis of the County's agricultural economy and its relationship to the total local economy.

LABOR ANALYSIS

Labor Force

Labor force refers to the number of persons living in Shenandoah County who are 16 years of age or older and who are employed or seeking work, either within the County or elsewhere. Of the two basic labor force components-- armed forces and civilian--the military portion consisted of only a small number of persons. Accordingly, only the civilian labor force is considered in this study. Comparative figures for 1980 and 1990, and 2000 are shown in Table 4-A.

TABLE 4-A
LABOR FORCE DATA

	<u>1980</u>	<u>1990</u>	<u>2000</u>
Total, 16 years and over	21,418	25,373	28,092
Civilian Labor Force	13,120	16,233	18,204
Employment	12,575	15,622	17,710
Unemployment	545	611	494
Unemployment Rate	4.2%	3.0%	2.7%
Not in labor force	8,289	9,129	9,840

Sources: Census of Population 1980 and 1990, General Social and Economic Characteristics
Census of Population 2000, Summary File 3 (STF3) - Sample Data

In 1980, the County's civilian labor force was 13,120, which represented 61.3 percent of all persons age 16 and over. By 1990, the labor force had increased to 16,233, which represented 64.0 percent of all citizens 16 years and over. The 2000 Census shows an increase to 18,204 persons in the labor force, or 64.8 percent of the total population of 16 years and older. This is a growth rate in the labor force of 38.8 percent for the 20-year period. The rate of growth in the first decade (23.7%) was much greater than the rate of growth in the second decade (12.1%). The County was about equal with Virginia's labor force participation rate of 64.4 percent in 2000. There were a total of 9,840 persons aged 16 and over who were not in the labor force.

The female participation rate in Shenandoah County increased from 48 percent in 1980 to 54.5 percent in 1990 and to 57.4 percent in 2000. That figure was lower than the state average of 59.9 percent in 2000.

Labor Characteristics

The resident labor force is classified in two different ways by the Bureau of Census. The first is by the industry in which they are employed, such as agriculture, manufacturing, services, etc. The second is by occupation. Managers or clerical workers, for example, are employed in a number of industries. Table 4-B shows the growth and change in employment by industry between 1980 and 2000.

TABLE 4-B
INDUSTRY OF EMPLOYED RESIDENTS

	1980 <u>Total</u>	1990 <u>Total</u>	2000 <u>Total</u>	% Change <u>1980-2000</u>
Total Employment*	12,575	15,622	17,710	+ 40.8
Agricultural, Forestry, fishing, hunting, and mining	863	866	684	- 20.7
Construction	1,209	1,922	1,782	+ 47.4
Manufacturing	4,440	4,266	3,870	- 12.8
Transportation, Communication, and other utilities	800	862	798	- 0.0
Wholesale-Retail Trade	1,980	2,841	2,825	+ 42.6
Information	---	---	541	---
Finance, Insurance, Real Estate	387	635	751	+ 94.1
Services	2,551	3,782	5,617	+ 120.2
Government/Public Admin.	345	448	842	+ 144.1

Sources: Census of Population 1980, General Social and Economic Characteristics
Census of Population 1990, General Social and Economic Characteristics
Census of Population 2000, Profile of Selected Economic Characteristics

* (Note: Includes employment both within and outside of Shenandoah County.)

Between 1980 and 2000, total employment rose 40.8 percent, and the distribution by industry of employed residents changed. In 1980, over one-third of those employed worked in the manufacturing sector of the economy and the service sector accounted for approximately 20 percent, followed by the wholesale and retail industry with about 16 percent.

By 2000, the top two shares were reversed, with services employing 31.7 percent of the residents while manufacturing employed 21.9 percent. Wholesale and retail trade continued to employ about 16 percent of the County's work force.

Every sector of the economy had a net increase in employment for the 20-year time period except for Agriculture, Forestry, Fisheries and Mining – which decreased from 6.9 percent to 3.9 percent of the work force – and Manufacturing which decreased from 35.3 percent to 21.9 percent. In the short span of 20 years, these are significant changes in the mix of the labor force.

Occupation of Employed Residents

The two leading occupation groups for County residents in 2000 were "Sales and office" and "Production, transportation and material moving" at 24.9 and 23.8 percent of the total respectively as shown in Table 4-C on the next page. In addition, "Management, professional and related" was the classification for 22.5 percent of the residents.

As far as changes are concerned, the "Construction extraction and maintenance" category had the greatest percentage growth between 1980 and 2000, increasing by 157.9 percent. "Sales and office" was the next fastest-growing category with a 122.3 percent increase. "Management, professional and related" workers grew by 96.6 percent while those working in "Services" increased their share by 70.8 percent. Examples of employment in this sector include hospitals and physicians' practices, nursing homes, motels, beauty salons, auto repair shops, and amusement facilities. Most tourism-related businesses are included in this category. In addition, educational services (both public and private) are also classified in this industry.

All occupations had net increases, with the exception of "Farming, forestry and fishing" which had a net decrease of 62.7 percent and "Production, transportation & material moving" which decreased by 23.3 percent. This reflects a continuing trend of growth in the white collar and service industries and away from the manufacturing type industries.

TABLE 4-C
OCCUPATION OF EMPLOYED RESIDENTS

<u>Occupation</u>	<u>1980 Total</u>	<u>1990 Total</u>	<u>2000 Total</u>	<u>% Change 1980-2000</u>
Total employed, 16 years and over	12,575	15,622	17,710	+ 40.8
Management, professional and related	2,028	2,914	3,987	+ 96.6
Services	1,465	1,858	2,502	+ 70.8
Sales and office	1,986	3,323	4,414	+122.3
Farming, forestry and fishing	695	774	259	- 62.7
Construction, extraction and maintenance	905	997	2,334	+157.9
Production, transportation, & material moving	5,496	5,756	4,214	- 23.3

Sources: Census of Population 1980, General Social and Economic Characteristics
Census of Population 1990, General Social and Economic Characteristics
Census of Population 2000, Profile of Selected Economic Characteristics

Unemployment

During the early 1980's Shenandoah County's unemployment rates were above the state's average. By 1990, the County's average annual unemployment rate had decreased to 3.6 percent while the State posted 3.8 percent that same year. In 1995 the County's average of 5.8 percent was again above the average of 4.5 percent for the state, but by 2000 the County's average of 1.2 percent was below Virginia's average of 2.2 percent. Table 4-D, on the next page, shows the unemployment rates for Shenandoah County, the Northern Shenandoah Valley region and Virginia.

TABLE 4-D

AVERAGE ANNUAL UNEMPLOYMENT RATES

	<u>1990</u>	<u>1995</u>	<u>2000</u>
Shenandoah Co.	3.6	5.8	1.2
NSV Region	4.5	5.2	1.7
Virginia	3.8	4.5	2.2

Source: Labor Force Estimates, Virginia Employment Commission

Regional Labor Pool

In 2000, there were 258,417 people living in the counties adjoining Shenandoah County, and the cities that two of those counties surround. This includes Frederick County and the City of Winchester, Warren County, Page County, Rockingham County and the City of Harrisonburg, and Hardy County, WV.

It is estimated that 113,437 persons comprised the civilian labor force within Shenandoah County and the surrounding communities as of July, 2003. Of those persons, 108,769 were employed and 4,668 or 4.1 percent of the labor force were seeking employment, according to monthly unemployment estimates from Virginia and West Virginia.

TABLE 4-E
2003 REGIONAL LABOR POOL

Population of Labor Drawing Area (2000):

Shenandoah County	=	35,075
Surrounding Areas	=	258,417
Total	=	293,492

Persons in Labor Force (July 2003): 113,437

Estimated Unemployed (July 2003): 4,668

Source: Labor Force Estimates, Virginia and West Virginia.

WORK SOURCE ANALYSIS

Jobs in Shenandoah County

As reported by the Bureau of Economic Analysis (BEA), in 2000 Shenandoah County had 19,766 jobs, up from 13,067 jobs in 1980 for an increase of 51.3 percent. (See Table 4-F, next page.) Non-farm jobs grew at a faster rate (59.4%).

About 28.4 percent of the wage and salary employment in Shenandoah County in 2000 was in the manufacturing sector with 5,253 jobs, down from 35 percent of total non-farm jobs in 1980. The service sector provided 4,207 jobs, and wholesale and retail trade had 3,819. Together these three industries accounted for 71.9 percent of all the jobs in Shenandoah County in 2000. The service sector had a 108.4 percent increase over 1980, wholesale and retail industries increased 72.2 since 1980, and manufacturing posted a 29.4 percent increase.

Several major employers in Shenandoah County employ over 250 persons; including:

<u>Name</u>	<u># of Employees*</u>
Shenandoah County Schools	1000 +
George's Chicken, LLC	500 - 999
Lear Corporation	500 - 999
Perry Judd's Inc.	500 - 999
Merillat Corporation	250 - 499
Shenandoah Memorial Hospital	250 - 499
Howell Metal Company	250 - 499
Wal-Mart Associates	250 - 499

*(As of the 1st Quarter, 2003)

With 22.8 percent of the County's jobs, the service industry is both the second largest employer and the fastest growing sector of the economy.

Figures 4-B and 4-C give graphic comparison of Shenandoah County's employment and income changes by industry for the years 1980, 1990 and 2000 on pages 4-9 and 4-10.

TABLE 4-F
SHENANDOAH COUNTY EMPLOYMENT AND INCOME BY INDUSTRY: 1980, 1990 & 2000

Industry Classification	No. of Employees				Personal Income by Major Industry Classification			
	<u>1980</u>	<u>1990</u>	<u>2000</u>	<u>% Change 1980-2000</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>	<u>% Change 1980-2000</u>
Total - Farm and Non-Farm	13,065	17,372	19,766	51.3%	\$124,429	\$310,002	\$447,430	260.0%
Farm - total	1,470	1,207	1,287	-8.5%	\$1,708	\$13,924	\$12,041	605.0%
Non-Farm - total	11,595	16,165	18,479	59.4%	\$122,721	\$296,078	\$435,389	254.8%
Private - subtotal	10,234	14,596	16,579	70.0%	\$107,464	\$260,915	\$377,273	251.1%
Agriculture, Forestry & Fisheries	88	136	(D)	---	\$504	\$3,340	(D)	---
Mining	(D)	34	(D)	---	\$583	\$1,058	(D)	---
Contract Construction	703	1,217	1,241	76.5%	\$7,490	\$23,307	\$29,985	300.0%
Manufacturing	4,059	5,522	5,253	29.4%	\$51,837	\$127,604	\$161,987	212.5%
Transportation & Public Utilities	420	625	741	76.4%	\$6,446	\$16,062	\$29,023	350.2%
Wholesale Trade	405	482	424	4.7%	\$4,939	\$9,558	\$11,798	138.9%
Retail Trade	1,813	2,431	3,395	87.3%	\$14,684	\$27,889	\$46,022	213.4%
Finance, Insurance & Real Estate	725	756	1,010	39.3%	\$4,178	\$7,375	\$13,448	221.9%
Services	2,019	3,393	4,207	108.4%	\$16,803	\$44,722	\$73,749	338.9%
Government - subtotal	1,361	1,569	1,900	39.6%	\$15,257	\$35,163	\$58,116	280.9%
Federal, Civilian	161	148	170	5.6%	\$2,981	\$4,969	\$8,090	171.4%
Military	115	168	131	13.9%	\$512	\$1,587	\$1,840	259.4%
State & Local	1,085	1,253	1,599	47.4%	\$11,764	\$28,607	\$48,186	309.6%

(D) = Not shown to avoid disclosure of confidential information, but the estimates for this item are included in the totals.

Source: Bureau of Economic Analysis, Regional Economic Information System, Tables CA05 and CA25.

(Inflation was 70.75% between 1980 and 1990, and a total of 128% between 1980 and 2000.)

Figure 4-A
Employment By Industry
Shenandoah County: 1980-2000

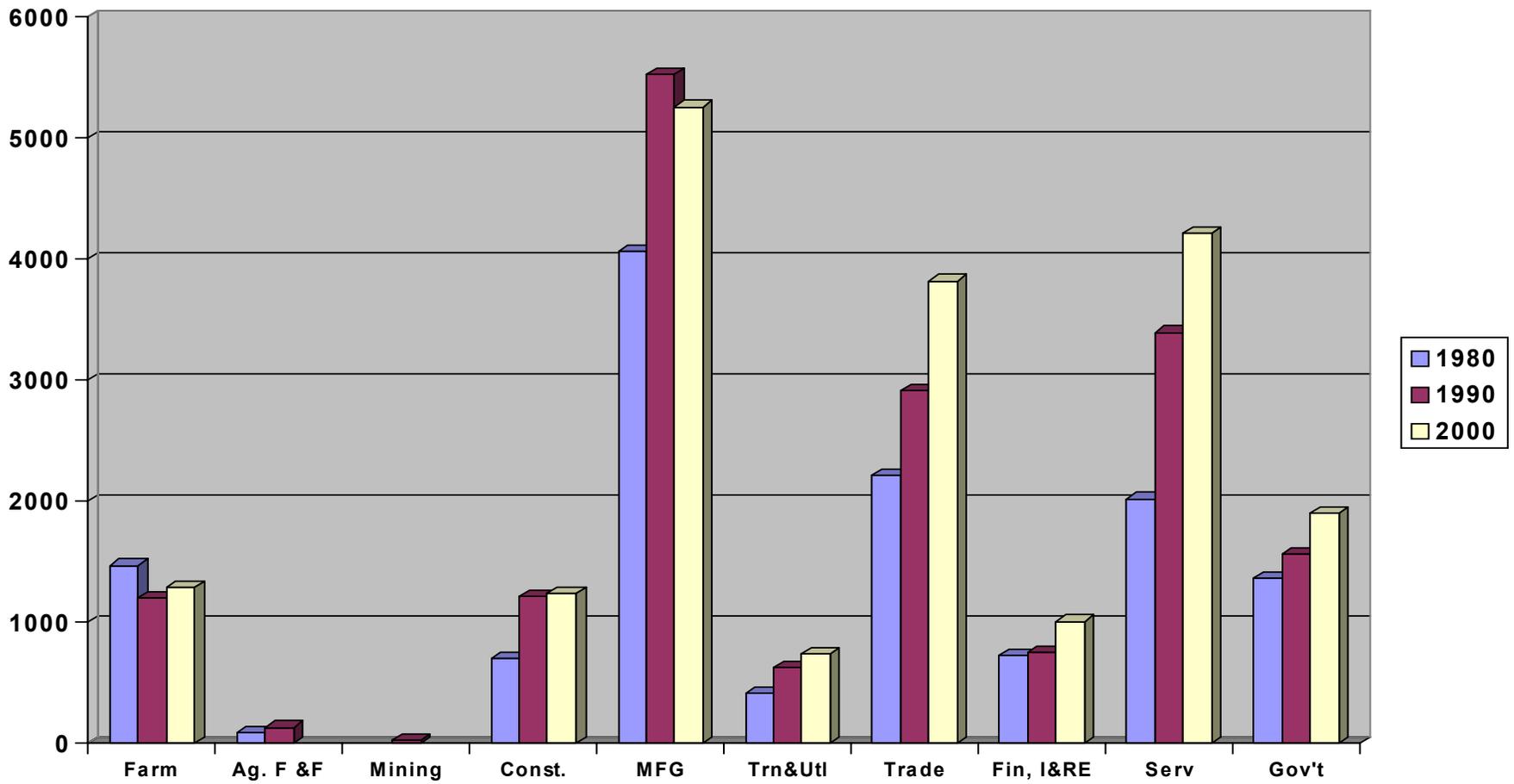
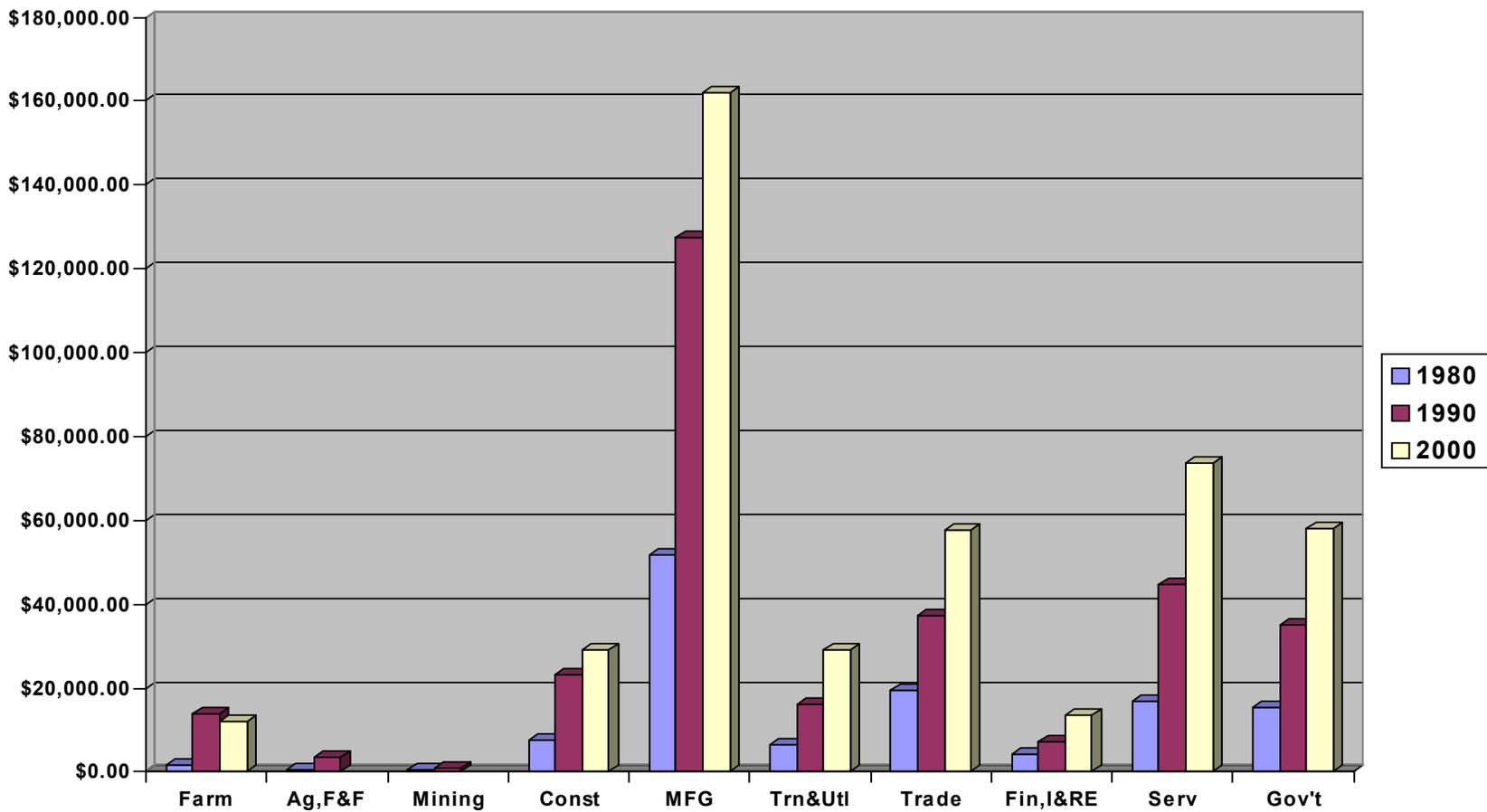


Figure 4-B
Income By Industry
Shenandoah County: 1980-2000



Wholesale and Retail Trade provide 20.7 percent of all jobs in the County. Government accounts for 10.3 percent or 1,900 jobs, most of which (1,599) are in state and local governments. Farm employment fell by 183 jobs (12.5 percent) from 1980 to 2000. Employment is shifting away from farm and manufacturing industries to the service and trade sectors of the economy.

All industries posted increases in personal earnings. Overall, incomes rose by 260 percent, while employment rose by 51.3 percent between 1980 and 2000.

The Non-Farm sector rose by 254.8 percent and the Private sector posted a 251.1 percent increase. Farm income showed a 605.0 percent increase although employment decreased by 8.5 percent.

The other industries with the largest increases in income are Transportation & Public Utilities (350.2%), Services (338.9%), Contract Construction (300.0%), and Government (280.9%). Finance, Insurance & Real Estate incomes rose by 221.9% percent, Manufacturing by 212.5% and combined Wholesale and Retail Trade by 194.7 percent.

Commuting Patterns

As of 2000, approximately 65.2 percent of the 18,252 workers who reported their place of work indicated that they both lived and worked within Shenandoah County, down from 75.2 percent in 1980. Roughly twice as many workers commuted out of Shenandoah County (6,085) compared to those who commuted into the County (3,066) for work. See Table 4-G on the next page for a summary of 2000 commuting data.

There were 3,066 commuters coming into Shenandoah County in 2000. Approximately one-third (33.6%) of those commuters were from Rockingham County (826) or Harrisonburg (637). The Counties of Page (230) and Warren (550) accounted for 25.4 percent of all in-commuters. The City of Winchester (172) and Frederick County (530) represented 22.9 percent of the commuters to Shenandoah County.

A total of 6,085 workers commuted to locations outside the County in 2000. This included 2,098 (34.5%) to the Winchester-Frederick County area and another 1,463 (24.0%) to the Harrisonburg-Rockingham County area. In addition, 1,043 (17.1%) commuted east to the Northern Virginia/D.C. area, and 680 (11.2%) commuted to Warren County.

TABLE 4-G
SHENANDOAH COUNTY COMMUTING PATTERNS - 2000

	In-commuters	Out-commuters	Net
	From	To	
NSV Region:			
Clarke County	28	97	-69
Frederick County	530	1,232	-702
Page County	230	119	+111
Warren County	550	680	-130
Winchester City	<u>172</u>	<u>866</u>	<u>-694</u>
Sub-total	1,510	2,994	-1,484
Outside NSV-within Va.:			
Alexandria	0	29	-29
Arlington County	0	71	-71
Fairfax City	0	31	-31
Fairfax County	7	452	-445
Harrisonburg	164	637	-473
Loudoun County	5	193	-188
Manassas	0	59	- 59
Prince William County	25	92	-67
Rockingham County	867	826	+41
Other in Virginia	<u>77</u>	<u>311</u>	<u>-234</u>
Sub-total	1,145	2,701	-1,556
Washington D.C.	15	116	-101
Maryland	0	127	-127
West Virginia	372	73	+299
Other States, Countries	<u>24</u>	<u>74</u>	<u>-50</u>
Sub-total	411	390	+21
Totals	3,066	6,085	-3,019

Source: U.S. Bureau of the Census, unpublished data, 2000. Northern Shenandoah Valley Regional Commission.

From the commuter data, it can be seen that out-commuting has more than doubled over the past 20 years (6,085 workers in 2000 compared to 2,926 in 1980), while the percentage of those who lived and worked in the County declined from 75.2 percent to 62.3 percent.

Many of Shenandoah County's workers are employed in the Winchester-Frederick County Area and the Harrisonburg-Rockingham Area. Warren County employed 11.2 percent of the County's residents and another 17.1 percent commuted to the Washington D.C./Northern Virginia area. Those areas offer higher paying jobs, for skilled workers. These commuters might choose to work locally if they could find more comparable jobs and wages. This commuting pattern is helped by the existence of interstate 81 running north and south and interstate 66 running directly into the Washington D.C. metropolitan area.

ECONOMIC BASE ANALYSIS

Basic and Supporting Employment

The County's employment is divided into basic and supporting employment. Basic employment industries sell most of their goods and services outside the County. Industries such as manufacturing, farming and the Federal government, along with the military, are considered basic industries. All of these industries are subject to national and regional demands. The supporting sector markets their goods and services locally. These industries include wholesale and retail trade, construction, finance, insurance, real estate, and most services along with local and routine state government functions. Most supporting industries rely upon the basic industries and local economy rather than regional and national markets.

About 42.2 percent of Shenandoah County's employment in 2000 was in basic industries, down from 44.6 percent in 1990. The manufacturing sector accounts for almost 63 percent of the County's basic employment. Table 4-H on the next page, shows that supporting industries provided employment for 57.8 percent of the County in 2000, up from 55.4 percent in 1990. Since 1990, 1,800 jobs have been added to the supporting industries which is an increase of about 19 percent. The basic industry on the other hand added 583 new jobs or a 7.5 percent increase in the ten year period.

The ratio of supporting employment to basic employment to increased from 1.24:1 in 1990 to 1.37:1 in 2000. This shows an overall increasing demand for more support services as basic employment grows incrementally. A percentage of Shenandoah County's retail, motel, and tourist attractions are also considered basic.

The local population alone would not support the level of earning of those facilities. According to 2000 Virginia Tourism statistics, Shenandoah County had \$114,087,885 in revenues from tourism related attractions. The Bryce Resort, Shenvallee Golf Resort, Shenandoah Caverns, the American Celebration on Parade, the Civil War Battlefields, and an increased interest in Agri-tourism (wineries, deer farms), as well as having 35 miles of interstate running through the County, have all contributed to these revenues.

TABLE 4-H
BASIC VS. SUPPORTING EMPLOYMENT

	<u>1990</u> <u>Number</u>	<u>%</u>	<u>2000</u> <u>Number</u>	<u>%</u>
Employment in County	17,372	100.0	19,766	100.0%
Basic	7,753	44.6	8,336	42.2
Manufacturing	5,522	31.8	5,253	26.6
Farming	1,343	7.7	1,423	7.2
Travel/Tourism Trade	740	4.3	1,490	7.5
Federal Government	148	0.9	170	0.9
Supporting	9,619	55.4	11,430	57.8

Source: Employment by Type and Broad Industrial Sources, Bureau of Economic Analysis

Other basic employment not shown in the table above comes from preparatory schools (Massanutten Military Academy, Shenandoah Valley Academy), as well as several nursing homes and assisted living facilities. There is no state-wide data in these categories, but we are aware that this employment adds to the overall basic employment data for the County.

Trends in the County's Economic Base

Total employment has steadily grown in the County, both in the basic and supporting industry sectors. Shenandoah County historically has had a sound and stable economy even when some of its neighbors have not enjoyed similar stability; this is because the economic base is diversified. Currently the County reports one of the lowest unemployment rates state-wide. It is also well-positioned to attract new industries that depend on information technology as their basis with the wide-band telecommunications capabilities that are currently in place, and further improvements that are planned for the future.

The percentage of manufacturing jobs has decreased slightly. The year 2000 reported 269 fewer manufacturing jobs than were available in 1990. "Farming" jobs reflect a 6.0 percent increase in the last decade, and Shenandoah County remains one of Virginia's top agricultural Counties. The majority of the agricultural sector produces poultry which is processed by food companies located in Shenandoah County.

Tourism/travel plays a major role in the economy, and tourism-related jobs have increased by 101.4 percent between 1990 and 2000. Tourism should continue to increase in the future.

AGRICULTURAL ECONOMY

Since Shenandoah County is a rural area as opposed to a urbanized area, an analysis of the agricultural economy is vital to understand how it relates to Shenandoah County's economy as a whole. This section will attempt to show the relationship between the agricultural sector and the rest of the County's economy.

Market Value of Agricultural Products

Shenandoah County is one of the top five agricultural counties in Virginia in terms of farm income. The backbone of Shenandoah County's agricultural economy is poultry and poultry products.(See Table 4-I on the following page.) This industry is integrated with local growers operating small farms. The revenues of poultry and poultry products (\$45,708,000) represent 66 percent of the total revenues from agricultural products in 2002, up from 63 percent in 1992. Poultry is clearly the dominant agricultural activity in the County today and for the foreseeable future.

With approximately 55,100 acres of pasture land, raising livestock is also particularly well-suited to the County. "Cattle and Calf" production is its second leading agricultural industry. The revenues from the sale of "Cattle and Calves" in 2002 was \$11,295,000, or 16.2 percent of the total market value of all products sold. Dairy products, sheep, lambs and other livestock have declined over the same period, from a total of 11.7 percent of all livestock sales in 1992 to 9.1 percent of all livestock sales in 2002.

Meanwhile, crops such as grains, nursery/greenhouse products, and fruits, nuts, and berries have improved market value, with a 24 percent increase over the decade. Altogether though, crops represent only 9.2 percent of the total of agricultural products sold. This figure may be distorted somewhat by the practice of growing hay and silage for consumption on the same farm (rather than for sale).

"Crops" with \$6,401,000 in revenues ranks third of Shenandoah County's agricultural products in 2002. While not responsible for a large percentage of the total agricultural sales, the growing of crops is also important in Shenandoah County. The largest section of "Crops" was "fruits, nuts and berries". In 1992 "Crops" were responsible for \$5.1 million with "fruit, nuts and berries" accounting for \$2.8 million.

The total market value of all agricultural products sold equaled \$69,658,000 in 2002. This was an decrease of \$3,386,000 (4.6 percent) from 1997, but a total increase of \$13,703,000 (24.5 percent) since 1992. While these figures indicate a substantial rise, most of it can be attributed to inflation rather than an increase in farm production. In Table 4-I, below, net dollar values are given for comparison.

TABLE 4-I
MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD

(in \$1,000)	<u>1992</u>	<u>1992</u>	<u>1997</u>
Total Market Value of All Products Sold	\$55,955	\$73,044	\$69,658
Livestock, Poultry, and Their Products	\$50,798	\$65,604	\$63,257
Poultry and Poultry Products	\$35,159	\$50,633	\$45,708
Dairy Products	\$5,234	\$5,473	\$5,570
Cattle, Calves	\$9,288	\$8,583	\$11,295
Sheep, Lambs, and Wool	\$535	\$365	\$174
Other Livestock and Poultry	\$198	\$201	—
Crops	\$5,157	\$7,440	\$6,401
Grains	\$1,416	\$2,489	\$1,271
Hay, Silage, and Field Seeds	\$591	\$916	\$1,057
Nursery/ Greenhouse Products	\$29	\$491	\$847
Fruits, Nuts, and Berries	\$2,802	\$3,467	\$3,063
Other Crops (Vegs., Sweet Corn, & Melons)	\$34	\$63	\$163

Source: Census of Agriculture, 1992, 1997, 2002.

Farm Income

Table 4-J shows the relationship of farm income to total personal income in Shenandoah County. The percentages over a twenty year span have fluctuated between 0.73% to 2.76%. The large increase in the percent of farm income seems to coincide with an increase in the number of farmers who are growing poultry under contract.

TABLE 4-J
FARM INCOME IN SHENANDOAH COUNTY

	<u>Farm Income</u>	<u>Total Personal Income</u>	<u>Farm/Total</u>
1980	\$4,135,000	\$236,503,000	1.75%
1990	\$13,924,000	\$503,869,000	2.76%
2000	\$15,367,000	\$812,878,000	1.89%

Sources: Personal Income by Major Sources, Bureau of Economic Analysis, April 1991.
Table CA30, Regional Economic Information System, Bureau of Economic Analysis,
May 2002.

Even though the County's farm income percentages have fluctuated, they have usually been several times as high as the State's percentage (see Table 4-K, next page). It can be seen that both the State and Shenandoah County's percentages have declined in the most recent decade, but Shenandoah County's proportion to the State figures is increasing.

TABLE 4-K
FARM INCOME VS. TOTAL PERSONAL INCOME
BY PLACE OF RESIDENCE

Farm Income/Total Personal Income

	<u>Shenandoah</u>	<u>Virginia</u>	<u>Shenandoah/Virginia</u>
1980	0.73%	0.16%	4.56
1990	2.76%	0.50%	5.52
2000	1.89%	0.26%	7.27

Source: Regional Economic Information System, Bureau of Economic Analysis, May 2002.

Farm Employment

In Shenandoah County farm employment is now almost five times greater than the State as a whole. Farm as well as total employment include both laborers and proprietors. In 2000 the farm employment was 11.8 percent of Shenandoah County's total employment. This is well above the State's 3.0 percent for the same year. (See Table 4-L, below.) Note that for 2000 11.8% of the total employment is in farming, but only 1.89% of total personal income (Table 4-J) is from farming.

TABLE 4-L
FARM EMPLOYMENT VS. TOTAL EMPLOYMENT BY PLACE OF WORK

	Farm Employment/Total Employment		
	<u>Shenandoah</u>	<u>Virginia</u>	<u>Shenandoah/Virginia</u>
1980	11.25%	3.03%	3.71
1990	12.30%	2.98%	4.13
2000	11.80%	2.49%	4.74

Source: Table CA25, Regional Economic Information System, Bureau of Economic Analysis, May 2002.

Farm employment in Shenandoah County has remained fairly steady between 1980 and 2000 (See Table 4-M). In 2000, there were 2,337 persons employed in the farming industry. Of these, 1,050 were farm proprietors and 1,287 were laborers. In the 1980's about 19 percent of all employment in the County was in farming compared to approximately 12 percent in 2000. So while farm employment has been level, its portion of total employment has steadily decreased.

TABLE 4-M
FARM EMPLOYMENT IN SHENANDOAH COUNTY

	<u>Farm Proprietors</u>	<u>Farm Laborers</u>	<u>All Farm Employment</u>	<u>Total Employment</u>	<u>Farm/Total</u>
1980	1,016	1,470	2,486	13,065	19.03%
1990	930	1,207	2,137	17,372	12.30%
2000	1,050	1,287	2,337	19,766	11.82%

Source: Table CA25, Regional Economic Information System, Bureau of Economic Analysis, May 2002.

INCOME ANALYSIS

Income and Wages

Table 4-N, below, shows the median family incomes as indicated by Census figures for Shenandoah County and the surrounding counties for 1980, 1990, and 2000. They are also shown graphically for comparison in Figure 4-D on the next page.

For this twenty year period, the County's median adjusted gross income is slightly lower than the average of NSVRC medians, and well below the State average. However, during this time period, the County has gained as a percentage of the State, rising from 78.1 percent in 1980 to 83.2 percent by 2000.

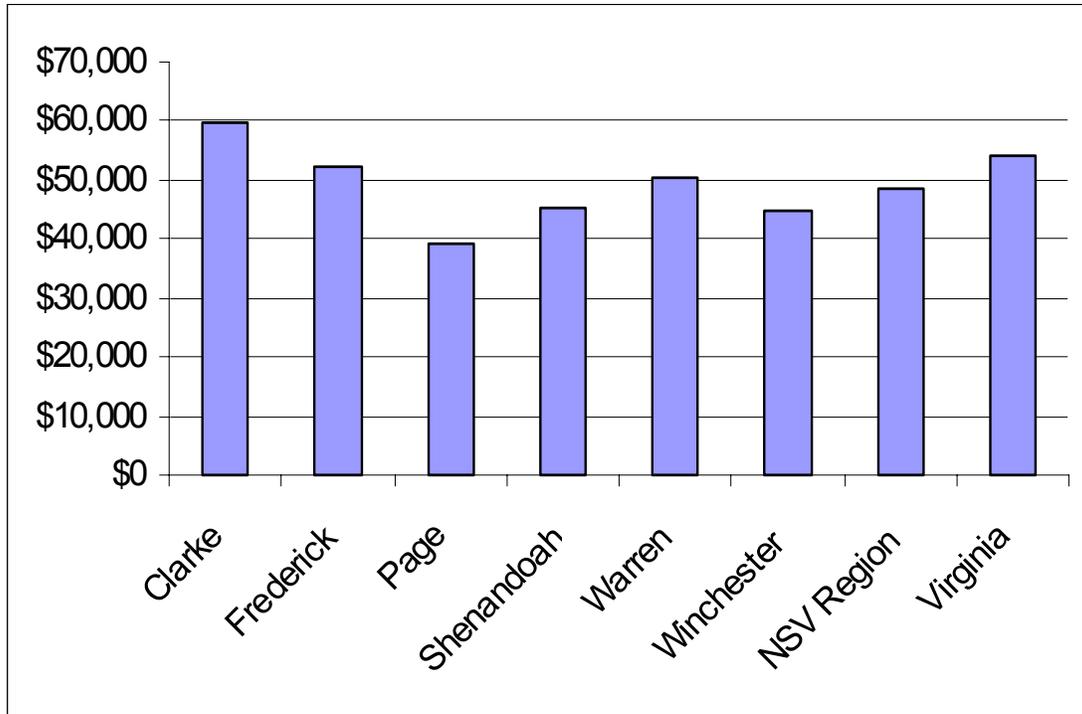
TABLE 4-N
MEDIAN FAMILY INCOME

	<u>1980</u>	<u>% of</u> <u>State</u>	<u>1990</u>	<u>% of</u> <u>State</u>	<u>2000</u>	<u>% of</u> <u>State</u>
Shenandoah County	\$16,375	75.3	\$31,273	81.8	\$45,080	83.2
Clarke County	\$19,632	90.3	\$38,096	99.7	\$59,750	110.3
Frederick County	\$18,815	86.6	\$35,958	94.1	\$52,281	96.5
Page County	\$15,344	70.5	\$28,251	73.9	\$39,005	72.0
Warren County	\$18,212	83.8	\$35,130	91.9	\$50,487	93.2
Winchester	\$19,559	90.0	\$31,974	83.7	\$44,675	82.5
Planning District	\$17,787	81.8	\$33,457	87.5	\$48,546	89.6
NOVA PDC	\$32,517	149.6	\$48,274	126.3	\$56,765	104.8
Virginia	\$21,735	100.0	\$38,213	100.0	\$54,169	100.0

Source: Summary Social, Economic and Housing Characteristics, 1980, and Summary Tape File STF-3, 1990 and 2000, U.S. Bureau of the Census.

FIGURE 4-C
 MEDIAN FAMILY INCOME - 1999

...



Per-Capita Personal Incomes for 1980, 1990 and 2000 are shown in Table 4-O on the next page for all the counties in the Northern Shenandoah Valley Region, the City of Winchester, and for the Commonwealth.

As reported by the Census Bureau, per capita personal income in Shenandoah County in 2000 was \$19,755 which is 82.4 percent of the State's 2000 per capita income of \$23,975.

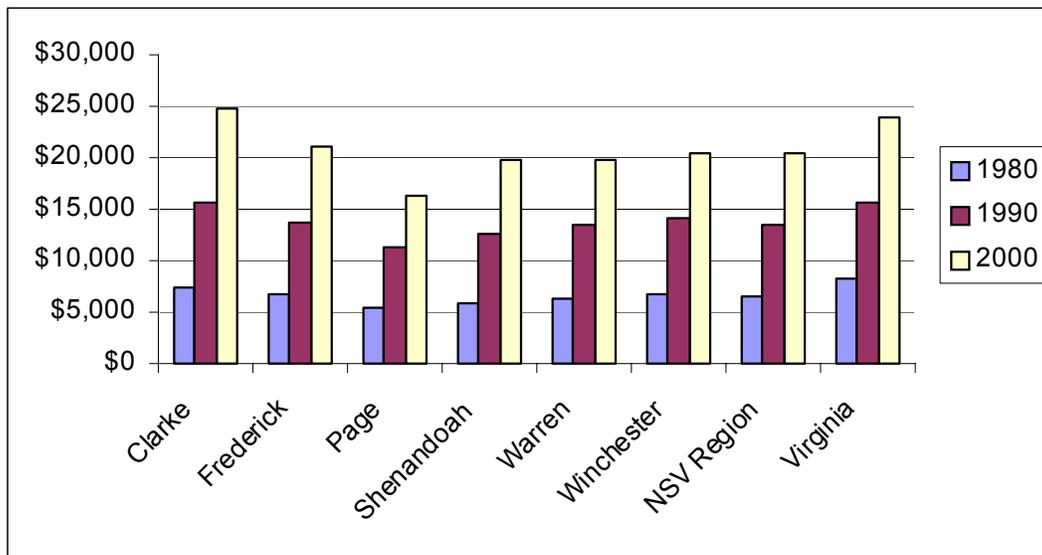
In 1980, the County had a per capita income of \$5,849 and the State had a per capita income of \$8,205. The County's per capita income increased 237.8 percent between 1980 and 2000, well above the State's increase of 192.2 percent.

The 1980, 1990 and 2000 Census per capita personal incomes are also provided on Figure 4-E, below, graphically showing the increases by county over the 20-year period..

TABLE 4-0
PER-CAPITA PERSONAL INCOME - 1999

	1980	1990	2000
Clarke	\$7,473	\$15,657	\$24,844
Frederick	\$6,821	\$13,671	\$21,080
Page	\$5,395	\$11,304	\$16,321
Shenandoah	\$5,849	\$12,686	\$19,755
Warren	\$6,326	\$13,580	\$19,841
Winchester	\$6,821	\$14,214	\$20,500
NSV Region	\$6,448	\$13,519	\$20,390
Virginia	\$8,205	\$15,713	\$23,975

FIGURE 4-D
PER-CAPITA PERSONAL INCOME - 1999



In 2000, some 2873 individuals (8.2% of the population) of Shenandoah County were classified as living below the poverty level. This compares with a state-wide average of 9.6%.

The average weekly wage paid to workers by industries in Shenandoah County during 2000 was \$444 (Table 4-P), according to the Virginia Employment Commission. That represents a 194.5 percent increase over the first quarter of 1980. The industrial group paying the highest wages included transportation, communication, and utility firms, which paid a weekly average of \$707. Manufacturing and Construction were the next highest categories, paying \$545 and \$435 per week respectively.

TABLE 4-P
AVERAGE WEEKLY WAGES PAID IN SHENANDOAH COUNTY
COVERED EMPLOYMENT FOR 1980, 1990, 2000

	<u>1980</u>	<u>1990</u>	<u>2000</u>
Agricultural, Forestry, Fisheries	\$145	\$227	\$427
Construction	\$152	\$310	\$435
Manufacturing	\$205	\$366	\$545
Transportation, Communication			
Utilities	\$240	\$430	\$707
Wholesale & Retail Trade	\$156	\$236	\$381
Finance, Insurance, Real Estate	\$177	\$313	\$414
Services	\$142	\$210	\$351
Average	\$183	\$313	\$444

Sources: Covered Employment and Wages, First Quarter, 1980, 1990, Virginia Employment Commission.
ES-202 Annual Average Weekly Wage, 2000, Virginia Employment Commission.

During 2000, the average weekly wage per worker in Shenandoah County was \$444. The Lord Fairfax Planning District had an average weekly wage of \$525 and the State average was \$706. Table 4-Q also compares wages paid in Shenandoah County to those paid in Arlington and Fairfax Counties, illustrating the reason why some workers commute to the Northern Virginia metropolitan area:

TABLE 4-Q
AVERAGE WEEKLY WAGES: 2000

Shenandoah County	\$444
Lord Fairfax PDC	\$525
Arlington County	\$1,065
Fairfax County	\$1,013
Virginia	\$706

Source: Employment and Wages, 2000, Virginia Employment Commission

Components of Income

The income of Shenandoah's residents has been increasing steadily in recent years. Between 1980 and 2000, total personal income in the County increased by 243.7 percent, and per capita income has increased by 169.4 percent (these figures are derived from Table 4-R on the next page). This increase is lower than the average of those for the Planning District and the State.

The increase in Shenandoah County has been due to all categories of income, but the most rapid rate of increase is seen in "Dividends, Interest & Rent" This category grew by 335.6 percent and between 1980 and 2000, while all other categories grew between 217 and 243 percent.

Two factors continue to significantly affect the local economy in terms of personal income. One is income from dividends, interest, and rent, and the other is transfer payments. Together they comprise almost 35 percent of all income for County residents.

Transfer payments include retirement and disability benefits; unemployment insurance benefits; and medical, educational, and public assistance benefits. Retirement benefits are the biggest source of transfer payments.

In 2000, 14.9 percent of the total personal income of Shenandoah's residents was from transfer payments, up from 12.9 percent in 1990. This percentage remains well above the State's and the Planning District's percentage share, and is consistent with the high median age of county residents. (See Chapter 5 - Population.)

TABLE 4-R
COMPONENTS OF PERSONAL INCOME

	1980		1990		2000	
	1,000	Distr.	1,000	Distr.	1,000	Distr.
<u>Shenandoah County</u>						
Net Labor and Propr.						
Income	160,915	68.0%	328,021	65.1%	528,873	65.1%
Dividends, Interest & Rent	37,410	15.8%	110,683	22.0%	162,943	20.0%
Transfer Payments	38,178	16.1%	65,165	12.9%	121,062	14.9%
Total Personal Income	236,503	100.0%	503,869	100.0%	812,878	100.0%
Per Capita Income (\$1)	8,568	—	17,568	---	23,079	—
<u>Planning District</u>						
Net Labor and Propr.						
Income	772,784	69.6%	1,817,950	68.7%	3,375,804	70.1%
Dividends, Interest & Rent	165,067	14.9%	541,018	20.4%	874,405	18.2%
Transfer Payments	172,546	15.5%	286,625	10.9%	563,276	11.7%
Total Personal Income	1,110,397	100.0%	2,645,593	100.0%	4,813,485	100.0%
Per Capita Income (\$1)	8,361	—	16,359	---	26,199	—
<u>Virginia</u>						
Net Labor and Propr.						
Income	38,288,138	72.6%	92,493,148	72.5%	160,824,350	72.7%
Divs, Interest & Rent	7,083,659	13.4%	24,146,954	18.9%	39,493,025	17.9%
Transfer Payments	7,381,938	14.0%	10,974,042	8.6%	20,760,391	9.4%
Total Personal Income	52,753,735	100.0%	127,614,144	100.0%	221,077,766	100.0%
Per Capita Income (\$1)	9,827	—	18,979	—	31,120	—

Source: Personal Income by Major Sources, 1980, 1990, 2000, Bureau of Economic Analysis.

SUMMARY

Approximately 42 percent of the jobs in the County are in the industries which provide the County's economic base. Those "basic" industries are industries which sell the majority of their goods and services outside the County, thus bringing to the County money from other areas. Much of the County's basic employment is in manufacturing.

The manufacturing sector of the economy has decreased both in the number of employees and percentage of total employment between 1990 and 2000. The most rapid increases are seen in the services and retail trade sectors. Significant increases in employment and in total distribution have occurred in recent years in tourism in Shenandoah County.

Changes in the occupational distribution of the County's residents indicate a continued shift from blue collar to white collar type jobs. This trend may be due somewhat to those who have recently moved into the County but still retained their jobs in other areas, and now commute out to maintain their higher-skill and higher-pay employment.

The economy of Shenandoah County is becoming less dependent on farming as a primary source of income and employment for residents. However, the agricultural economy is still much more important in Shenandoah County than in most of the rest of Virginia. Poultry and poultry products account for 69% of the market value of all agricultural products sold.

Historically, Shenandoah's unemployment rate had been higher than the State and the Planning District. Beginning with the late 1980s, the County's yearly average unemployment rate has been lower than both the State's and the Northern Shenandoah Valley Region.

The income of Shenandoah's residents has historically been lower than the average of the region and of the State, and it remains so as of the year 2000. It is also considerably lower than that of those living in the Northern Virginia/D.C. metropolitan area, providing an incentive for some workers to commute. In fact, twice as many workers commute to jobs outside the County as commute into the County from elsewhere.

If the County is to break out of the current cycle of low-paying jobs, it will need to attract a different kind of business and industry – ones that require a better educated workforce, a more highly skilled workforce, a more technically oriented workforce, a more knowledge-based workforce. Such companies hire mostly college graduates, and they pay substantially higher wages and salaries. Recruiting such companies requires a collective community effort to create a business-friendly climate and a targeted effort, perhaps on a regional basis, to recruit the right kind of companies to build or relocate here.

With a more highly educated workforce, new companies will look closely at the quality of the public schools in the county. Shenandoah County schools currently spend over \$1000 less per student than the state average, have a higher student/teaching position ratio in grades 8-12 than the state, show lower average SAT scores than the state average, and otherwise show indications that the quality of instruction offered to high school students who aspire to four-year college degrees needs improvement. See the Implementation chapter for specific recommendations related to attracting quality business and industry to the County.

The County's relationship to the regional, state, national and global economies has continued to become increasingly important. Economic analysts agree that a locality's economic viability in the 21st century depends upon a quality work force in terms of basic education, continuing education to upgrade skills and a positive work ethic.