

## APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

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### ECONOMIC ANALYSIS

The study of the economy Frederick County involves many factors. Included in this chapter examines the change in employment sectors, the role of small business and top employers. Change in Frederick County's economy, undoubtedly, is evident in this chapter; however, the strong signs of stability with appropriate diversity are particularly noteworthy.

### RECENT EMPLOYMENT COMPARISONS AND TRENDS

An analysis of the employment segments reveals minimal overall change in the Frederick County economy since 1990. While the absolute number of employment change is significant for some of the largest employers, 4 of the top employers in 1990 remain twenty years later. Health Care and Social Assistance employment is the only new arrival to the top employer list. The growth of Winchester Medical Center and Frederick County's population remain likely reasons for its rise. Overall, retail trade displayed the largest growth of the top employers (+1,281). Manufacturing's overall net increase is debatably stunning given its decrease in the Commonwealth and Virginia.

Largest Employment Sectors			
1990		2010	
Sector	Employment	Sector	Employment
Manufacturing	3,815	Manufacturing	3,958
Construction	1,564	Local Government	3,227
Local Government	1,523	Retail Trade	2,635
Retail Trade	1,354	Accommodation & Food	1,943
Accommodation & Food	956	Construction	1,869
Wholesale Trade	798	Health Care & Social Assistance	1,362

Looking into the next twenty years, population increase and continued international economic forces will likely influence Frederick County's economy and its largest employment sectors. Established clusters in food processing and plastic manufacturing coupled with the area's sheer logistical advantages and workforce draw will likely keep manufacturing employment stable. Retail and healthcare growth, fueled by population growth, will gain additional employment and likely rise in its role within the economy. Joining the national and state trends, Frederick County will diversify further via service based employment. Professional service, finance and insurance employment will likely lead this surge.

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Although the major employment players remain mostly the same, their impact on the community has clearly changed. Viewing the growth in net new establishments provides an alternative view on the role of largest employment segments. The growth in the number of manufacturing establishments is a prime example. This fact along with overall positive employment growth in this sector demonstrates a very positive evolving manufacturing sector. The future of Frederick County’s economy shines bright given manufacturing’s noted large multiplier impact and above average wage.

Overall, Frederick County added over 800 new establishments in the past twenty years. Service based businesses; health care (+182) and professional services (+115), produced the largest net gain in new establishments since 1990. These sectors, however, collectively employ slightly half the employees of manufacturing sector. Advancing twenty year’s health care and professional service entities will likely continued to add their totals furthering Frederick County’s diversification into a manufacturing/service based economy.

<b>Largest Employment Sectors</b>			
	1990		2010
Sector	Establishments	Sector	Establishments
Manufacturing	50	Manufacturing	92
Construction	192	Local Government	17
Local Government	16	Retail Trade	182
Retail Trade	153	Accommodation & Food	103
Accommodation & Food	44	Construction	265
Wholesale Trade	37	Health Care & Social Assistance	193

With discussion of largest employers and their change complete, some attention toward the smallest employment sectors reveals some findings worth mentioning. Like the biggest employers, the sectors within the bottom five remain mostly the same. Only the Federal Government with 41 employees in 1990, presently with 545, rose from the bottom five employment segments. (Note: data for 2009 utilities was not disclosed.)

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### SMALL BUSINESS

A discussion about any economy would be incomplete without reviewing the role of small businesses. Their importance to a community’s long term economic success cannot be overstated. In the United States overall, they employ nearly half of all private sector employees. They generated 60 to 80 percent of net new job annually over the last decade.

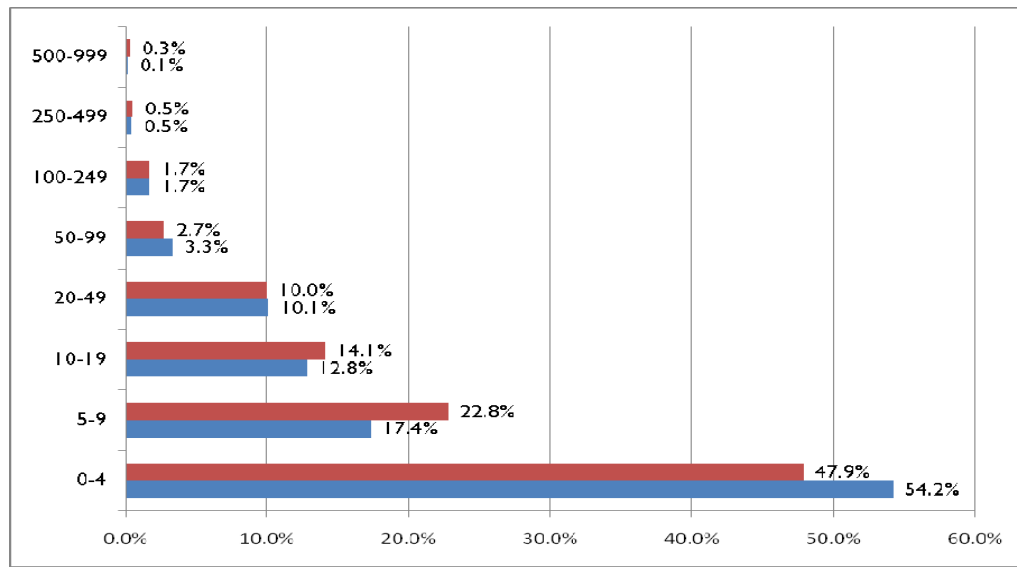
The definition of small business varies widely. For this chapter purposes, small business will be identified as those employer with less than 19 employees.

In 1990, 84.8% of all employers in Frederick County had less than 19 employees. Advance 20 years later, Frederick County still holds nearly an identical percentage of employers with less than 19 employees. Given the number of arrival/increase of large employers like Kraft, HP Hood, FEMA, and Valley Health Systems, the ability of small business to hold their role in Frederick County’s economy is impressive.

<b>Smallest Employment Sectors</b>			
	1990		2010
Sector	Employment	Sector	Employment
Federal Government	41	Educational Services	47
Real Estate & Rental and Leasing	70	Mining	103
Professional & Technical Services	93	Information	188
Information	101	Real Estate & Rental and Leasing	201
Arts, Entertainment, and Recreation	129	Arts, Entertainment & Recreation	255
Utilities	147	Management of Companies & Enterprises	278

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Small business will retain the vast majority of employment in Frederick County. As such, entrepreneurship/small business development should remain one of the pinnacles of Frederick County's economic development. It is a beacon indicating when a community has an ideal business climate – when all physical and soft infrastructure is in place to allow new companies to grow and the community to self-sustain economic growth. The community's undeveloped entrepreneurial culture has often been highlighted in studies as a hurdle to continued economic growth.

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### CURRENT TOP EMPLOYERS

The section will illustrate the evolution of Frederick County's economy through the top ten employer rankings.

Over twenty years ago, Frederick County's economy was chiefly led by major manufacturers and local government entities. Plastic manufacturers established deep roots due to the area's immense access to the East Coast, Virginia's favorable cost of business and Frederick County's productive workforce.

<b>Employer</b>	<b>Industry</b>	<b>Employees</b>
Polyone Engineered Films, Inc.	Plastics and Rubber Products Manufacturing	1000 and over
Frederick County School Board	Educational Services	500 to 999
VDO Yazaki Corp	Computer and Electronic Product Manufacturing	250 to 499
County of Frederick	Executive, Legislative, and Other General Government Support	250 to 499
Action Executive Services	Administrative and Support Services	250 to 499
Perry Engineering Company	Heavy and Civil Engineering Construction	250 to 499
Arthur H Fulton Inc	Truck Transportation	250 to 499
Technicon Instr	Chemical Manufacturing	250 to 499
Farmers & Merchants Natio	Credit Intermediation and Related Activities	100 to 249
Amoco Foam Products Co	Plastics and Rubber Products Manufacturing	100 to 249

Today, the make-up of the largest employers is quite more diverse than 1990. While manufacturers still hold several slots in the top ten, many service base employers, like Navy Federal, Home Depot and Westminster Canterbury, have provided a more diverse economy than 20 years ago. These new additions provide enhanced stability during instance of plant closures and national economic downturns.

<b>Employer</b>	<b>Industry</b>	<b>Employees</b>
Frederick County School Board	Educational Services	1000 and over
County of Frederick	Executive, Legislative, and Other General Government Support	500 to 999
U.S. Department of Homeland Defense	Administration of Economic Programs	250 to 499
H.P. Hood, Inc.	Food Manufacturing	250 to 499
Lord Fairfax Community College	Educational Services	250 to 499
Kraft Foods	Food Manufacturing	250 to 499
Navy Federal Credit Union	Credit Intermediation and Related Activities	250 to 499
Shockey Brothers, Inc.	Nonmetallic Mineral Product Manufacturing	250 to 499
The Home Depot	Building Material and Garden Equipment and Supplies Dealers	250 to 499
Westminster Canterbury	Nursing and Residential Care Facilities	250 to 499

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### FUTURE BUSINESS GROWTH

In 20 years, the top employer listing may contain many of the same names, but likely they will be joined by some of employers of tomorrow. Third party analyses have indicated a strong likelihood of success toward other business service operations, life science entities and defense/advance security oriented businesses. Full list is below. As such, names like Johnson & Johnson, Pfizer, Proctor & Gamble, IBM, Deloitte Touche, Canon, 3M Company, United Technologies Corporation and Lockheed Martin Corporation.

TARGETED BUSINESSES				
BUSINESS SERVICES	DEFENSE & ADVANCED SECURITY	LIFE SCIENCES	FOOD PROCESSING	ASSEMBLY
	Manufacturing	Manufacturing	Manufacturing	Manufacturing
	R&D	R&D		
Software	Software			
Back Office	Back Office			

NICHE INDUSTRY RECOMMENDATIONS				
IT Service Centers	Small & Medium-scale Manufacturing	Medical Device Manufacturing	Packaged Foods	Medical Focus
Regional Headquarters	Life Sciences Applications	Biotech & Pharmaceutical Research	Perishable Foods	Battery Manufacturing
Data Centers	Software Development		Organic Foods	
Call Centers (high value add)	Business Services		Beverages	
Back Office Services				
Software Design				

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**CURRENT WORKFORCE DRAW**

	Civilian Labor Force	Employed	Unemployed	Rate	Last Month Rate	Last Year Rate
Clarke	8,485	7,988	497	5.9%	5.7%	7.0%
Frederick	41,280	38,261	3,019	7.3%	7.3%	8.4%
Page	11,921	10,631	1,290	10.8%	10.9%	10.9%
Shenandoah	19,732	18,096	1,636	8.3%	8.2%	8.8%
Warren	20,773	19,364	1,409	6.8%	6.7%	7.8%
Winchester	14,213	13,196	1,017	7.2%	7.0%	8.8%
Total Virginia	116,404	107,536	8,868	7.6%	7.6%	8.6%
Berkeley	44,640	40,780	3,860	8.6%	8.9%	10.0%
Hampshire	9,060	8,240	820	9.1%	9.4%	8.6%
Hardy	6,380	5,800	580	9.1%	9.6%	9.9%
Jefferson	23,880	22,270	1,610	6.7%	6.5%	8.2%
Morgan	6,710	6,090	620	9.2%	9.2%	9.8%
Total West Virginia	90,670	83,180	7,490	8.3%	8.4%	9.4%
Allegany*	34,334	31,094	3,240	9.4%	8.4%	9.3%
Washington	67,136	60,281	6,855	10.2%	9.6%	10.5%
Total Maryland	101,470	91,375	10,095	9.9%	9.2%	10.1%
Franklin*	79,600	72,800	6,800	8.5%	8.8%	8.4%
Fulton*	7,800	6,900	900	11.5%	11.5%	13.9%
Total Pennsylvania	87,400	79,700	7,700	8.8%	9.0%	8.9%
Total workforce	395,944	361,791	34,153	8.6%	8.5%	9.2%
Total 30 mile workforce	274,210	250,997	23,213	8.5%	8.3%	9.3%
Virginia	4,208,295	3,908,467	299,828	7.1%	6.9%	7.3%
United States	154,767,000	139,882,000	14,885,000	9.6%	9.3%	9.7%
Winchester - Frederick County	55,493	51,457	4,036	7.3%	7.2%	8.5%

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### **EMPLOYMENT AND BUSINESS**

	1990 Census		2000 Census		Spring 2010 Estimate		2015 Projection		1990 to 2000	2010 to 2015
Age 16 + Population	52,489		64,400		80,562		87,158		22.7%	8.2%
In Labor Force	37,073	70.6%	44,556	69.2%	56,939	70.7%	61,491	70.6%	20.2%	8.0%
Employed	35,338	95.3%	43,071	96.7%	52,117	91.5%	58,830	95.7%	21.9%	12.9%
Unemployed	1,652	4.5%	1,373	3.1%	4,697	8.3%	2,512	4.1%	-	-
In Armed Forces	77	0.2%	112	0.3%	125	0.2%	149	0.2%	45.5%	19.2%
Not In Labor Force	15,416	29.4%	19,844	30.8%	23,623	29.3%	25,667	29.5%	28.7%	8.7%
Number of Employees (Daytime Pop)					57,387					
Number of Establishments					4,334					

### **COMMUTING PATTERNS**

The Winchester-Frederick County community is the regional economic epicenter for the Northern Shenandoah Valley region. One reason for this statement is found in the area's commuting patterns. The 2000 Census showed just over 4,000 more workers commuted into this community than out-commuted, double the amount from 1990. In 2000, the in-commuting growth (up 5,012) significantly out-paced that of out-commuters (up 2,807) by nearly a 2 to 1 margin.

In addition, the Winchester-Frederick County community remains a "Place to Live and Work." Nearly 75% (31,573 out of 42,291) of working individuals in either Winchester or Frederick County reported living and working in the Winchester-Frederick County community. Over 4,600 (17.4%) net new workers have chosen to work and live in this community since 1990.

The benefits of our community having a large "live where you work" population is enormous.

- Promotes linkage between employers and community
- Reduces commuting costs, thus increasing a household's disposable income
- Reduces employee turnover, training, and recruitment costs
- Makes our community a more attractive place for businesses to locate and expand



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The out-commuting population also remains a viable labor force for some companies. In 2000, slightly more than 25% (10,718 individuals) of our community's working population commuted. Over 89% of our community's commuting population works either in an adjacent local area or the Northern Virginia area.

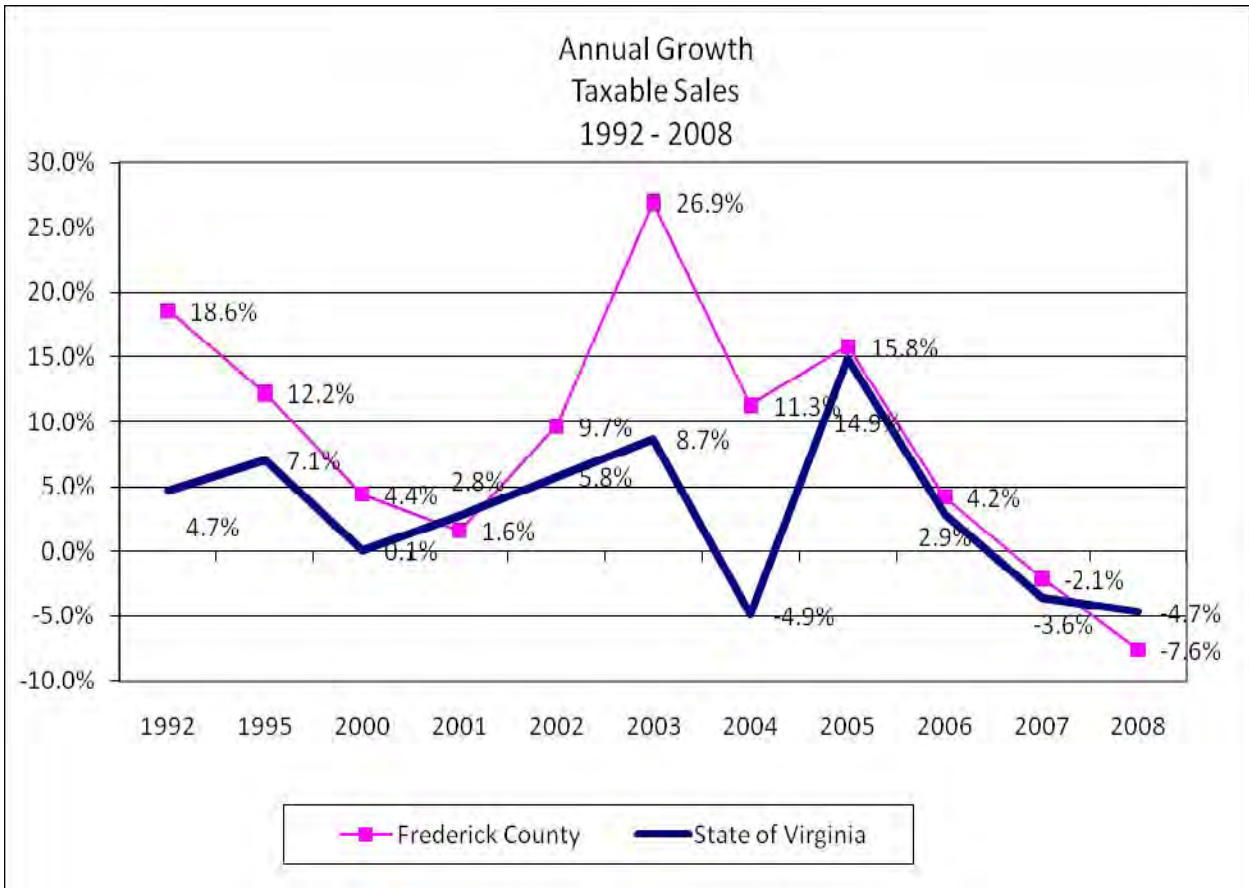
Workforce studies in 2003 and 2006 yielded similar commuting patterns. Specifically, the 2006 study showed that 68.7% of Winchester-Frederick County's working population live and work in Winchester-Frederick County, with only 12.4% working in Northern Virginia.

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### TAXABLE SALES

The retail sector is important, though, as retail activity reflects the general health of a local economy. Retail sales also produce sales tax dollars, which support municipal service provision. Until recently, taxable sales in Frederick County typically grew annually and exceeded State growth. Like the country, taxable sales growth year over year spiraled downward with a decrease of -7.6 percent from 2007-2008. However, in Frederick County the overall value of taxable sales grew from \$254 million in 1992 to \$813 million in unadjusted dollars, currently.

Please note, in the third quarter of calendar year 2005 the Virginia Department of Taxation began tracking quarterly taxable sales using the North American Industry Classification System (NAICS) business categories rather than Standard Industrial Classification (SIC) categories. Consequently, data from the two time periods are not fully compatible for purposes of comparison. Taxable sales reported on this page can be compared from 1995 through the second quarter of 2005 (the quarters using the SIC categories) or from the third quarter of 2005 through the current quarter (quarters using the NAICS categories), but comparing data from between the two periods will carry misleading results.



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The evolution of Frederick County’s economy once again became apparent when examining the top taxable sales categories over the past almost 20 years. In 1992, miscellaneous store retail topped all with sales over nearly \$35 million. Fast forward to 2009, the top ranking changes to general merchandise stores taxable sales, which exceeded \$211 million. The difference between the first and last of the top ten is stark. Over \$13 million separate, clothing (\$12 million), the number 10 top category in 1992, and miscellaneous store retail. In 2009, the difference between miscellaneous store retail (\$18 million) and general merchandise stores exceeded \$175 million.

### Top Ten Sales Categories

1992	2009
Miscellaneous Store Retail	General Merchandise Stores
Groceries – chain	Food & Beverage Stores
Food Services & Drinking Places	Food Services & Drinking Places
Cabinet shops, millwork	Merchant Wholesalers, Durable Goods
Building materials/lumber	Building Material & Garden Equipment & Supplies Dealers
Other machinery, equipment etc.	Gasoline Stations
Groceries – non chain	Motor Vehicle & Parts Dealers
Other building supplies	Specialty Trade Contractors
Clothing	Accommodation

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