

THE 2035 COMPREHENSIVE PLAN
APPENDIX II – BACKGROUND
ANALYSIS AND SUPPORTING
STUDIES



APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

- **HISTORICAL BACKGROUND**
- **GEOGRAPHICAL IMPACTS**
- **DEMOGRAPHIC ANALYSIS**
- **ECONOMIC ANALYSIS**
- **LAND USE ANALYSIS**

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING
STUDIES

- **HISTORICAL BACKGROUND**

HISTORICAL BACKGROUND

Early European Settlement:

For 12,000 years prior to English Settlement of the Shenandoah Valley, a sparse population of Native Americans lived in the area, but many more traveled through these valleys on the "Indian War Path" from New York and Pennsylvania to winter in Georgia and South Carolina. The first Europeans to come through the Shenandoah Valley were Jesuit missionaries in 1632, and the details of this wilderness area were first mapped by French explorer, Samuel de Champlain.

The first private English ownership of Frederick County was the Virginia Company, which was tasked with the settlement of the Virginia Colony by King James I. Ownership of the area returned to the Crown in 1624 when the **Virginia Company's charter was revoked. In 1649, King Charles II granted** seven royalist supporters the land "bounded by and within the heads" of the Potomac and Rappahannock Rivers. By 1681, Thomas, the Second Lord Culpepper, owned most of this original land grant. After he died in 1689, his daughter married Thomas, the Fifth Lord Fairfax, and later, their son Thomas, the Sixth Lord Fairfax, inherited the entire land grant.

Englishmen settled the Piedmont, then pushed west by foot and horse through passes in the Blue Ridge, and many more German and Scots-Irish settlers came down through the valleys from Philadelphia and Lancaster, Pennsylvania. Some of the earliest settlers of this area were Quakers who built the Hopewell Friends Meeting House, which still stands near Clearbrook and is listed on the National Register of Historic Places. These settlers were attracted by the fertile soils and the abundant forest and water resources.

Initial Settlement and Organization:

The Colonial government of Virginia wanted this wilderness settled as quickly as possible, as a buffer against the Native Americans; but Robert "King" Carter, Lord Fairfax's agent, was settling Fairfax's land slowly in large plantations. The government of Virginia had chartered counties in the Fairfax land grant as settlement spread up the Northern Neck and west. Virginia argued that Fairfax's land grant ended at the Blue Ridge, and began granting up to 1,000 acres each to settler families west of the Blue Ridge.

Abraham Hollingsworth settled near the site of Abrams Delight, now located within the Winchester City limits, in about 1729. Owen Thomas and Jeremiah Smith came to Back Creek in 1730 and settled on 806 acres granted in Thomas' name. Smith left and returned with a wife before 1741. His log cabin is now part of a house west of Back Creek and south of Route 50. In

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

1732, Jost Hite settled 16 families on his 5,000 acre "grant" and built Hite's Fort at Bartonsville, located on Route 11, approximately two miles south of Winchester.

The "Indian Path" became the Great Wagon Road to Philadelphia and Native Americans were dispossessed westward by treaty and force of arms. Frederick County was created from western Orange County by the House of Burgesses on December 21, 1738, and was named after Frederick Louis, the Prince of Wales and son of King George II, and originally spanned from the Blue Ridge Mountains to current day Ohio. In 1744, James Wood, County Surveyor for Orange County, platted a town at the County seat, which he named Winchester, after his birthplace. It consisted of 26 half-acre lots and three streets within 1300 acres, which he claimed as wilderness land owned by Virginia. Those streets are now Loudoun, Boscawen and Cameron. Winchester was officially chartered in 1752.

County government in Virginia was originally by self-perpetuating courts. Frederick County's Court was proclaimed and organized in 1743, and its officials took their oaths of office on November 11th of that year. The Frederick County Court first met at the surveying office of its clerk, James Wood, at the site on which he later built his estate, Glen Burnie.

The original Frederick County has since been divided into the following Counties*:

In Virginia:

Dunmore (now Shenandoah) - 1772
Page – 1831
Warren – 1836
Clarke – 1836

In West Virginia:

Hampshire – 1753
Berkeley – 1772
Hardy – 1776
Jefferson – 1801
Morgan – 1820
Mineral – 1866
Grant – 1866

*from "Frederick County, Virginia: History through Architecture" by Maral S. Kalbian

By the mid-1740s, the Frederick County Court had acknowledged that Lord Fairfax's land grant did include Frederick County, despite previous arguments that the Fairfax lands ended at the Blue Ridge Mountains. At the age of 16, George Washington was a member of a surveying party that came to Frederick County for Lord Fairfax in 1748. In 1749, Lord Fairfax moved to Frederick County and built his home, Greenway Court, at White Post, in present-day Clarke County. He accepted Wood's 1,300 acre claim and other additional lots at Winchester. Eventually, 11 other counties would be created from the 3,824 square miles included in the original Frederick County.

George Washington maintained a relationship with Winchester and Frederick County during and after his surveying expedition for Lord

Fairfax. Early during those years, Washington operated his surveying office in Winchester and oversaw the construction of **Fort Loudoun**. **Washington's first** elected office was as a representative of Frederick County in the House of Burgesses 1758. He served in this post for 15 years. During the French and Indian War, he was given a Commission by Governor Dinwiddie of Virginia and was later promoted to Commander in Chief of the colonial forces with headquarters in Winchester. The location of the headquarters for the western campaign helped to stimulate growth in Winchester throughout the French and Indian War which in turn led to improvements along trade/travel roads,

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

the creation of additional lots in Winchester, and the formation of Stephensburg, which is now Stephens City.

The American Revolution in Frederick County:

Although there were no battles or military engagements in Frederick County during the Revolutionary War, the area was very important in the effort. Prior to the drafting of the Declaration of Independence, a group of protesters met **in Winchester to protest King George’s taxes on the colonies.** They drafted the Frederick County Resolves and promised not to purchase English wares until their grievances were resolved. During the war, General Daniel Morgan, who lived in eastern Frederick County (now Clarke County), and his "Long Rifles" played a prominent role in many battles of the Revolutionary War, including the Battle at Cowpens in South Carolina. His regiment of expert riflemen was one of two from Virginia. Several local citizens furnished the troops with food and supplies, including Isaac Zane Jr. who supplied the army with ammunition made at his ironworks in Marlboro. Many prisoners captured during the War were held in Winchester and Frederick County. By 1779, the number of British prisoners held in Winchester had increased beyond the capacity of the existing prison and a larger one was built. A barracks was built four miles west of Winchester to hold these prisoners whose number had increased to 1,600 by the year 1781.

After the Revolution, the trade routes established during the French and Indian War continued to develop and provide avenues for trade between farmers in Frederick County and those in Eastern Virginia. Winchester grew as a travel and commercial hub in Western Virginia.

Early National Period:

During the late eighteenth and early nineteenth centuries, life in Frederick County centered on small family farms and transportation and trade routes. By the 1770s, the Indian Warpath through Frederick County had transformed into the Great Wagon Road and forms what is now US Route 11. In addition to Route 11, other major roads were established through Winchester including what are now Route 50 West, 522 South, and Route 7 East. These four major roads provided avenues of transportation and made trade possible across the state of Virginia as well as major cities North and South of Virginia. As a result, Winchester and the surrounding area grew in terms of residential occupants and commercial occupants.

Economic life was centered around Winchester and other local towns including Stephens City, Middletown, Kernstown, Gainesboro and Gore, which remain centers of economic and community growth today. The number of craftsmen and merchants in these towns was large and diverse. The strongest influence on the local economy was the Great Wagon Road which carried settlers and travelers from Philadelphia, south through the Valley and to the west. Activity associated with this road made Winchester one of the largest towns in western Virginia.

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

Farming in this region focused on several main crops which grew well in the soils of the area. During this period, wheat production became the center of the local economy, along with cattle farming, and by 1810, Frederick County was one of the largest producers of wheat in Virginia. Economic growth in the area was predominantly encouraged by agricultural activities and their industrial counterparts, such as milling and transporting of the locally grown products. By 1820, there were 54 grain mills in Frederick County along with numerous sawmills, tanneries, and other business activities.

Growth in the area continued into the mid-nineteenth century, when the County was faced with Civil War and the turbulence that this area felt as a consequence of its location at the crossroads of many major roads and railroads.

The American Civil War:

In the early to mid-nineteenth century, issues were brewing in Frederick County which mirrored those across the Nation. As agriculture developed in the County, a clear division formed areas east of the Opequon (current day Clarke County), where slave labor constituted a majority of the population and areas west of the Opequon, where small family owned farms were the agricultural trend. In 1836, Clarke County split from Frederick County, largely over this issue.

During the Civil War, Frederick County played a significant role, primarily due to its location at the intersection of many major roads. The northern Shenandoah Valley supplied food, livestock, horses, and soldiers to the southern cause. The Valley was also important because of its strategic location in relation to Washington D.C. The town of Winchester changed hands about 70 times during the course of the war, an average of once every three weeks, for four years.

Major local battles included the First Battle of Kernstown in March of 1862, during which General Stonewall Jackson suffered his only tactical defeat during the Valley Campaign. However, Jackson did succeed in keeping Union troops in the Valley from leaving to reinforce McClellan on the peninsula. This was the first major encounter of the War in this area. In May of 1862, Jackson's army defeated the Union troops at the First Battle of Winchester.

In the Second Battle of Winchester in 1863, Confederate troops successfully attacked and defeated Union troops occupying forts on the western side of Winchester. The most critical effort of the campaign was the battle at **Stephenson's Depot and a portion of the battlefield still remains intact today.** Union troops were again defeated at the second battle of Kernstown in 1864.

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

Belle Grove and Cedar Creek Battlefield National Historic Park:

In 2002, the National Park Service created the Belle Grove and Cedar Creek Battlefield National Historic Park in an effort to protect the integrity of this important battle of the Civil War.

All park land remains under the operation of the Cedar Creek Battlefield Foundation and the Belle Grove Plantation or private ownership. The Battlefield Foundation sponsors reenactments of the Battle of Cedar Creek and other battles of importance throughout the year. Belle Grove operates as a historic house museum and guided tours are available.

At the Third Battle of Winchester, General Philip Sheridan's Union troops successfully attacked Confederate troops at Winchester. With the high numbers of losses on both sides, a new war of attrition began in the Valley from which the southern forces would never recover. For three weeks in 1864, Sheridan's troops undertook the infamous "Burning" to end Confederate strength in the Valley. Virginia's richest valley was left desolate.

In October of 1864, Jubal Early's Confederate troops were entrenched south of Cedar Creek. General **Sheridan's Union troops were encamped** just north of Cedar Creek. A surprise attack by the Confederates drove the Union troops to the north. General

Sheridan, arriving from Winchester upon hearing of the attack, rallied his **troops and launched a massive counter attack which drove Early's troops back** across Cedar Creek. The Confederate defeat at the Battle of Cedar Creek meant the loss of Confederate control of the crucial Shenandoah Valley for the remainder of the war. **Thomas Buchanan Read wrote a poem, "Sheridan's Ride," to memorialize the general's horseback dash** from Winchester to the battlefield. This Union victory, in combination with **General Sherman's victory** in Georgia, helped to secure President Lincoln's reelection.

The Civil War took both a physical and economic toll on Frederick County and the surrounding area. **As the primary "bread basket" of Virginia, the** Shenandoah Valley was affected more by the Civil War than any other war fought on American soil.

Reconstruction:

Through six major battles and countless minor skirmishes, the Civil War brought much destruction to Frederick County. Many farms, mills, and dwellings were damaged or destroyed by the cannon fire from the battlefields or by soldiers raiding for food and supplies. The county's economic productivity was greatly reduced. This period was characterized by a slow economic recovery, but by the 1880s, economic stability gradually returned. After the war, previous economic activities resumed and new activities began. New businesses included the emergence of apple production, tanning, dairying, machinery production, and the shipping industry. These new avenues of commercial growth allowed the **county's economy to rebound at a steady rate** and by the 1880s, some of the **county's agricultural crop** production had returned to pre-war levels. By 1890, Frederick County had 37

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

mills, eight woolen factories, a steam elevator, two iron foundries, four glove factories, a boot and shoe factory, ten broom factories, four tanneries, a large paper mill, three newspapers, a book bindery, eight cigar factories, three marble yards, and two furniture factories.

There was also a tremendous building boom in the county between 1880-1900. In addition to new construction, older structures were often enlarged and updated using modern building techniques and styles. This growth occurred in both rural areas and in small communities that had previously developed in the 18th and 19th centuries. New communities were also formed as a result of newer, more advanced transportation systems. Among the communities that experienced growth during this period were Meadow Mills, Hayfield, Gore, Mountain Falls, Mount Williams, Gravel Springs, Gainesboro, Albin, Brucetown, White Hall and Armel.

Centers of African American culture also developed during this period as a result of the segregation which followed the end of the Civil War.

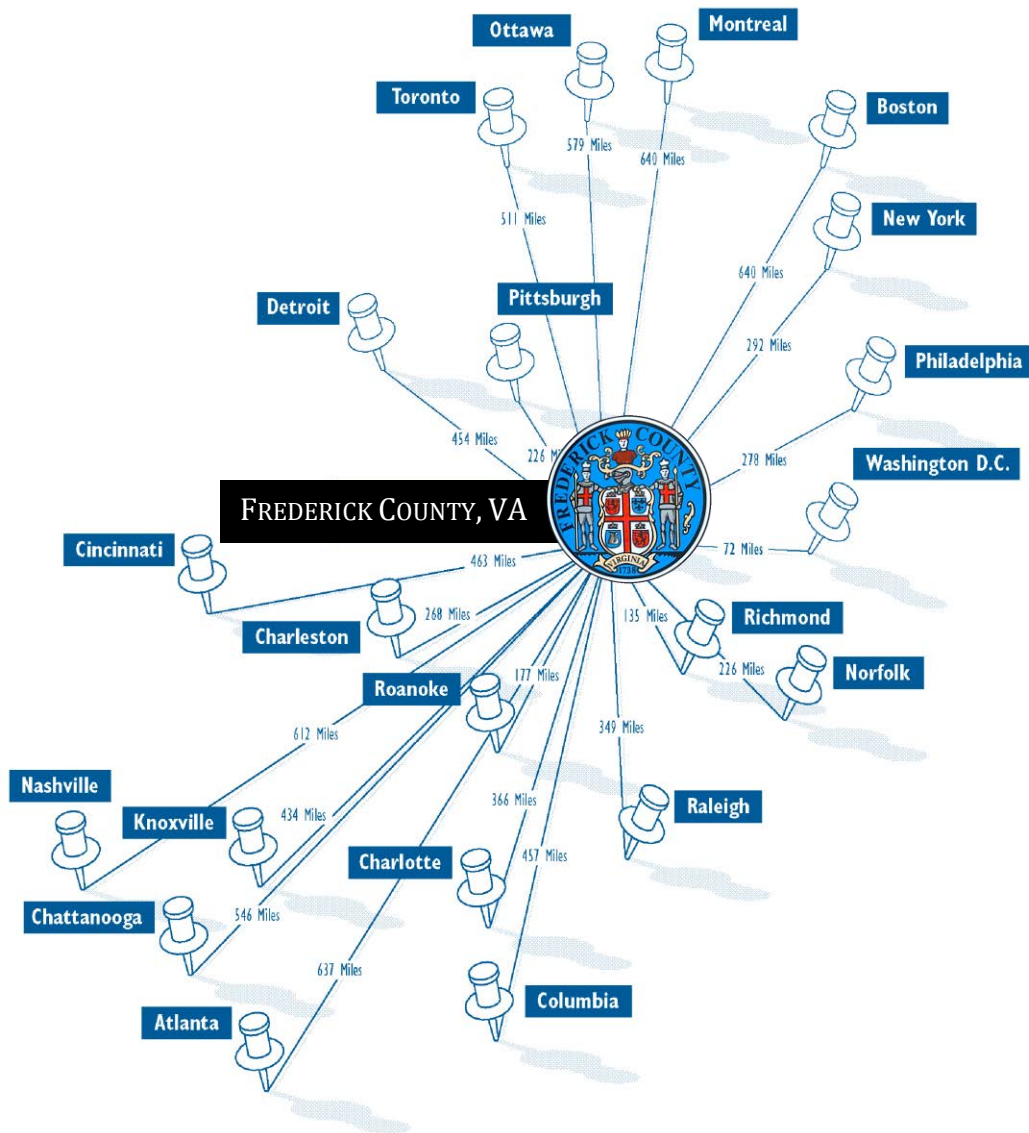
Communities such as Cedar Hill, Freetown, and Leetown became cores of the African American culture in Frederick County. To mediate the impact of segregation on daily activities, these communities developed public buildings and facilities such as schools and churches, for their own use.

- **GEOGRAPHICAL SETTING**

GEOGRAPHICAL SETTING

LOCATION

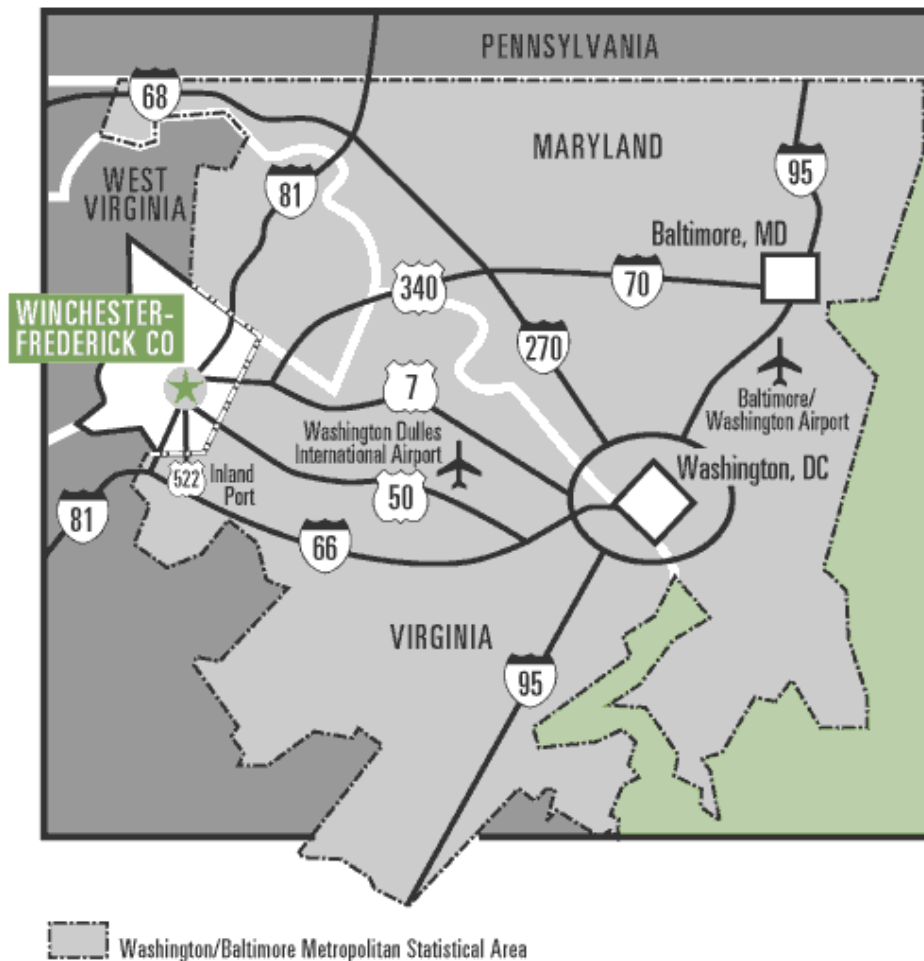
Frederick County is the northernmost jurisdiction in the Commonwealth of Virginia. It lies at the northern, lower end of the Shenandoah Valley west of the Blue Ridge Mountains and east of the Alleghenies. With the formation of the Washington-Baltimore Metropolitan Statistical Area after the 1990 US Census, the fifth largest USA market begins, literally, at the County Line.



APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

Located in the mid-Atlantic region of the United States, Frederick County's location on the eastern seaboard is a valuable asset to companies serving the US markets and Europe. It places local businesses halfway between the markets of the north and south, within one-day haul of 50% of the U.S. population. Over 60% of the goods manufactured in the United States are distributed from the 750-mile (1,207 kilometers) area. For national and international companies being in the Eastern Time Zone maximizes their hours of operations, which helps to improve efficiencies. In addition to being half way between Boston and Atlanta, Winchester-Frederick County is well positioned equidistant between Los Angeles and London. Excellent road, rail, inland ocean port and Dulles World Cargo Center provide access to the major markets in North America, Latin America, and globally.

Metropolitan Washington/Baltimore



APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

TOPOGRAPHY

Generally, the topography of Frederick County is characterized by the rolling Shenandoah Valley, 8 to 10 miles wide, and on its west flank, mountains, ridges and valleys of the Appalachian system. Frederick County and the City of Winchester comprise 436 square miles, or 279,000 acres. Winchester City **occupies 9.3 square miles within the County's boundaries. The average** altitude of the broad valley is about 700 feet and that of the ridgetops and mountaintops is about 1,950 feet. The most prominent mountains are along the Virginia-West Virginia boundary, with Pinnacle Knob (2,844 feet) the highest point in the County. The lowest point in the County is about 500 feet. Handley Library, in the center of Winchester, is at 714 feet.

Three aspects of the topography provide the area with a highly favorable visual environment. The Blue Ridge Mountains on the east serve both as a barrier to overly ambitious development from the mid-Atlantic metropolitan area, and provide a backdrop to a verdant landscape of farms and orchards. The easy rolling topography also provides character, but is not an impediment to development. The easily traversed Valley and the fabled Shenandoah River defined the outstanding network of modern transportation providing easy accessibility to the most important North American cities.

GEOPHYSICAL CHARACTERISTICS

The County has three geophysical areas as shown on the Physical Characteristics and Geologic Formations map.

The eastern area of the County is underlain by the Martinsburg shale which consists of a band running north-south along the length of the County, generally east of Interstate 81. It consists of broad, level ridges separated by steep stream valleys. The soils derived from the shales tend to be thin, poorly fertile, and have high seasonal water tables. The soils are highly compacted and not well suited for intensive agriculture or onsite sewage disposal systems. Primarily the historical use of this land is pasture and has in recent years been developed for residential and urban uses. Substantial suburban development served by public water and sewer is located within this area.

The central area is located between Interstate 81 and Little North Mountain. It consists of a band approximately five miles wide that also trends southwest to northeast, is underlain by limestone/carbonate bedrock, and displays gently rolling karst topography. This area contains the bulk of the prime agricultural soils in the County and supports apple and other fruit production, beef cattle operations, and some crop production, primarily hay and corn. The western area is the Ridge and Valley which is underlain by a variety of shale, sandstone, and limestone formations. This mostly forested area consists of alternating valleys and ridges that run southwest to northeast.

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

The western area is the Ridge and Valley which is underlain by a variety of shale, sandstone, and limestone formations. This mostly forested area consists of alternating valleys and ridges that run southwest to northeast. Ridges are often very steep and are the highest elevations in the County. Some stress fractures are present along the fold lines of the highly folded vertical beds. The vertical bedrock layers provide a barrier to most groundwater movement across the beds. Groundwater moves laterally along the folded bedrock, with little movement through the fold system.

These three geographic regions can be further divided into four distinct drainage areas. The southern third of the county drains towards the south and east to Cedar Creek and Stephens Run and is in the Shenandoah River basin. The northern two-thirds of the County are divided north-south by Apple Pie Ridge, Round Hill and Little North Mountain forming the boundary between the Back Creek and Opequon Creek watersheds. These areas drain toward the north and the east, respectively, and are in the Potomac River Basin. The limestone-carbonate geology drains to the east, but includes random flow patterns throughout this topography, including some areas that are internally drained. Drainage areas provide a good basis for planning sewer and water service areas through gravity flow design. The movement of public sewage flow between the limestone-carbonate and the Ridge and Valley area requires pumping.

Regional geophysical characteristics influence suitability for more intensive forms of development. Urban development is predominant in the eastern shale belt and uses public sewer and water facilities. Rural residential development is predominantly in the limestone belt west of Winchester, Interstate 81 and Route 37. Despite the presence of prime soils, agricultural land use in this area has decreased due to development pressures. The relatively steep areas in the western portions of the County remain rural; however, development is increasing.




CLIMATE

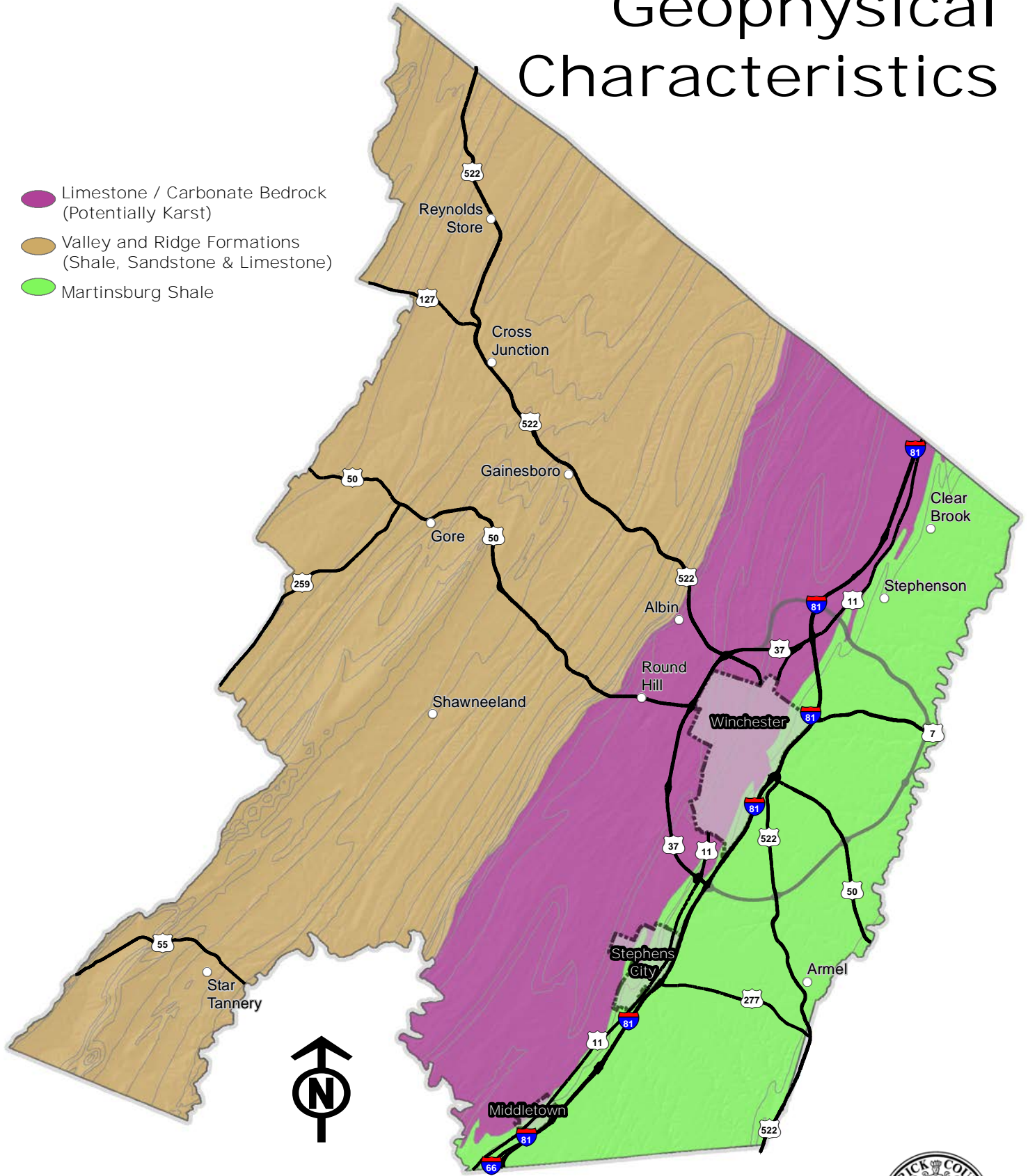
There are four distinct seasons. Few days fall near zero. Nine years in ten will have growing seasons from 148 to 219 days, depending on daily minimum temperature. The average number of growing degree days is 6,989.4, and the latest freeze (one year in ten; 28^o or lower) is April 15th. Only two years in ten will have extreme temperatures of more than 103^o or less than -10^o F.

- Average January temperature 32^oF
- Average July temperature 77^oF
- Average annual precipitation 35.3" inches
- Average annual snowfall 26.5" inches

The area is the heavily planted in apple and peach orchards, and is the "apple capital" of Virginia. In springtime, the explosion of apple blossoms is a spectacular event, announcing the Apple Blossom Festival, which draws an estimated 250,000 visitors each year.

Geophysical Characteristics

-  Limestone / Carbonate Bedrock (Potentially Karst)
-  Valley and Ridge Formations (Shale, Sandstone & Limestone)
-  Martinsburg Shale

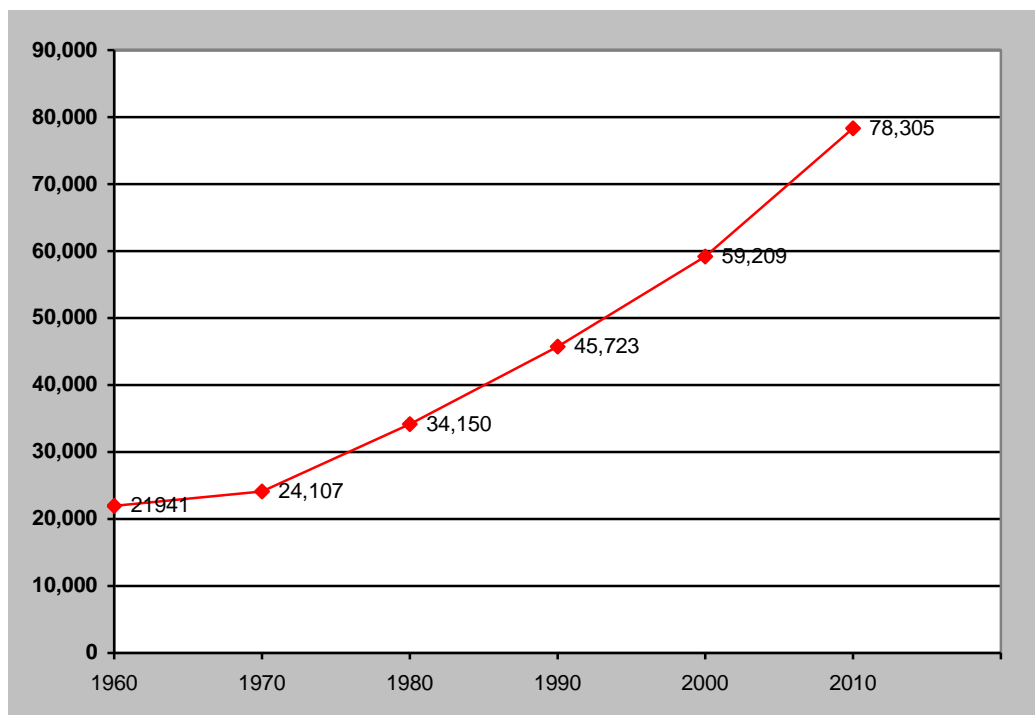


- **DEMOGRAPHIC ANALYSIS**

DEMOGRAPHIC ANALYSIS

HISTORICAL POPULATION

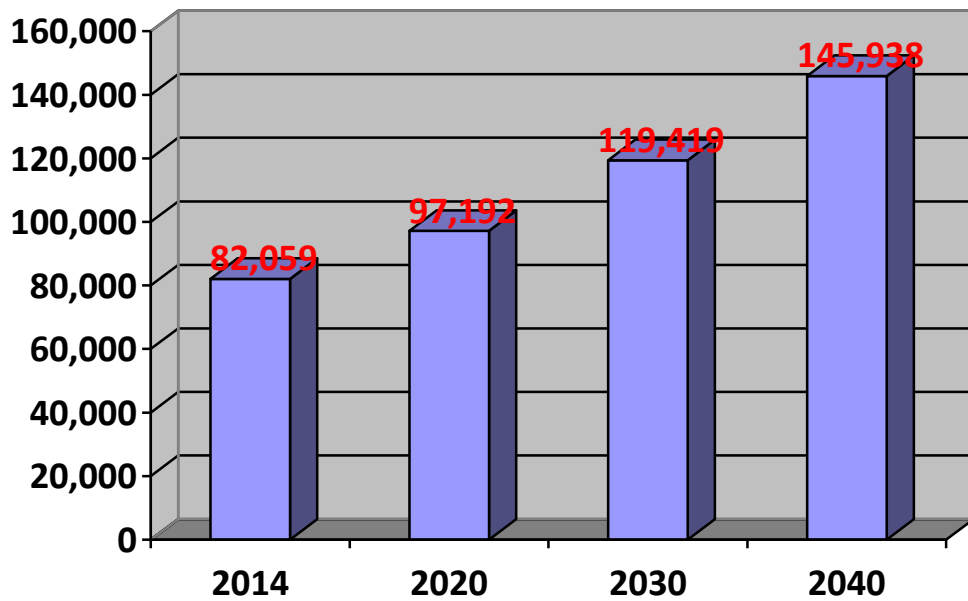
Settlement of Frederick County began in the early 1700's, but it was not until 1840, that the boundary of Frederick County was set at what we know today. Frederick County supports one of the faster growth rates of population in Virginia, and the rate of growth has accelerated in recent decades. During the 1970's, the population of the county grew by as many people as in the previous seven decades combined. In 2010, the population of Frederick County was 78,305. More recently, the population estimate for Frederick County in 2014 was 82,059. Since 1980 Frederick County population growth averaged 29.3% per decade.



APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

POPULATION ESTIMATES

Frederick County's growth rate is expected to continue in future decades and is estimated to be one of the faster growing in the Commonwealth of Virginia and the greater Washington D.C. region. The Weldon Cooper Center for Public Service population projections for 2020, 2030, and 2040 indicate this trend by projecting the population of Frederick County to be 97,192, 119,419, and 145,938 in the respective years. This trend is shown in the following figure.



Source: Weldon Cooper Center for Public Service

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

POPULATION AND AGE DISTRIBUTION

On average, the age of people living in Frederick County is increasing. Between 1990 and 2010, the median age of the population increased from 33 in 1990 to 39 in 2009. Overall, Frederick County's population is slightly older than the Commonwealth as a whole (37.6 yrs) and the USA (37.1).

Population Distribution: Frederick County

	Percent Change					
	1990 Census	2000 Census	2009 Estimate	2014 Projection	1990 to 2000	2009 to 2014
0 - 4	6.5%	7.6%	6.4%	6.2%	52.3%	7.0%
5 -19	22.2%	21.8%	20.4%	19.4%	26.8%	5.5%
20 - 24	4.7%	6.3%	6.1%	6.5%	73.5%	17.4%
25 - 44	31.9%	34.6%	27.8%	25.0%	40.5%	-0.6%
45 - 64	24.1%	20.3%	27.5%	29.1%	9.2%	17.1%
65 and over	10.6%	9.4%	11.9%	13.8%	14.6%	28.2%
Median Age	33.4	37.3	38.8	39.4		

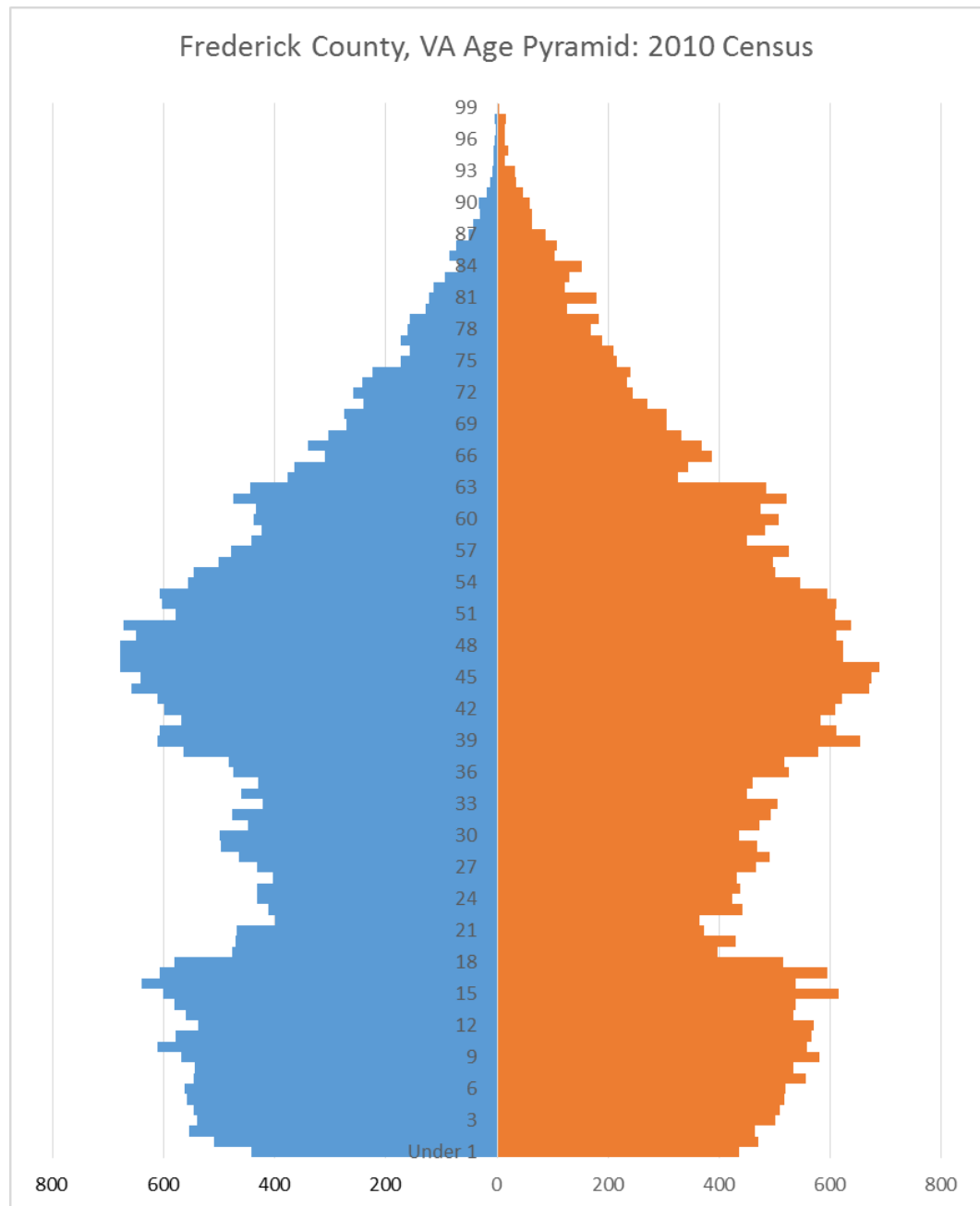
As the median age rose, the proportion of the population in the older age groups also increased. The percentage of the population age 65 or older in Frederick County has increased from 10.6% in 1990 to 11.9% in 2009. Projections for 2014 indicate a trend of increasing numbers of people of 65 or older.

The population under the age of 18 has not increased as rapidly in recent decades. The proportion of the population under eighteen in Frederick County now sits at 20%, down from 22.2% in 1990. This element should be evaluated further with the release of the complete 2010 census information.

Current projections for 2014 indicate a continuation of this trend -- an aging population. One major labor force category (25 – 44) is expected to have negative growth. This fact furthers enforces the need to analyze our regional labor force market to meet future employment needs.

Projections show an increase of over 6,000 individuals who are 45 and older. The school-aged segment of the population (5 – 19) is not expected to significantly increase.

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES



Source: Weldon Cooper Center for Public Service.

DIVERSITY

Diversity is becoming increasingly apparent in Frederick County. From 1990 to 2010, the area's population has experienced substantial increases in individuals of Hispanic (over 5,000) and black ethnicity (over 3,000). The 2010 census has shown a continuation of these trends, which reflect those on the national level.

- **ECONOMIC ANALYSIS**

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

ECONOMIC ANALYSIS

The study of the economy of Frederick County involves many factors. 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 2005-2010. While the absolute number of employment change is significant for some of the largest employers, 4 of the top employers in 2005 remain ten years later. Health Care and Social Assistance and Accommodation and Food Services employment are the two new arrivals 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 (+1,677). **Manufacturing's overall net increase is noteworthy given its decrease in the Commonwealth overall.**

Sector	2005 # Employed	Sector	2015 # Employed
Manufacturing	4,584	Manufacturing	5,033
Educational Services	2,552	Retail Trade	3,405
Construction	2,322	Educational Services	2,891
Retail Trade	1,728	Accommodation and Food Services	2,217
Wholesale Trade	1,481	Construction	2,004
Administrative and Support and Waste Management and Remediation Services	1,254	Health Care and Social Assistance	1,925

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

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.

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 397 new establishments in the past ten years. Service based businesses; health care (+265) and accommodation and food services (+56) produced the largest net gain in new establishments since 2005. 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.**

Sector (# of Firms)	2005 # Employed	Sector (# of Firms)	2015 # Employed
Construction (23)	307	Health Care and Social Assistance (62)	313
Retail Trade (44)	163	Construction (23)	217
Other Services (except Public Administration) (81)	117	Retail Trade (44)	195
Professional, Scientific, and Technical Services (54)	102	Professional, Scientific, and Technical Services (54)	132
Administrative and Support and Waste Management and Remediation Services (56)	97	Other Services (except Public Administration) (81)	132
Wholesale Trade (42)	88	Accommodation and Food Services (72)	119

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

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 2004, 82.2% of all employers in Frederick County had less than 19 employees. Advance 10 years later, Frederick County experience a slight increase to 83.5% of employers with less than 19 employees. Given the number of arrival/increase of large employers like Kraft, HP Hood, Federal Emergency Management Administration (FEMA), and Valley Health Systems, **the ability of small business to hold their role in Frederick County’s economy is impressive.**

Sector	2004 # of Firms	Sector	2014 # of Firms
Health Care and Social Assistance	38	Health Care and Social Assistance	274
Construction	261	Construction	186
Retail Trade	126	Retail Trade	148
Other Services (except Public Administration)	106	Other Services (except Public Administration)	126
Professional, Scientific, and Technical Services	81	Professional, Scientific, and Technical Services	120
Administrative and Support and Waste Management	95	Administrative and Support and Waste Management	97

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**

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

undeveloped entrepreneurial culture has often been highlighted in studies as a hurdle to continued economic growth.

CURRENT TOP EMPLOYERS

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

Over ten years ago (2004), Frederick County’s economy was chiefly led by major manufacturers and local government entities. Manufacturers established deep roots due to the area’s immense access to the East Coast, Virginia’s favorable cost of business and Frederick Count’s productive workforce.

Employer	Industry	Size Class
Frederick County School Board	Educational Services	1000 and over employees
County of Frederick	Executive, Legislative, and Other General Government Support	500 to 999 employees
World Wide Automotive LLC	Merchant Wholesalers, Durable Goods	500 to 999 employees
Action Executive Services	Administrative and Support Services	250 to 499 employees
American Woodmark Corporation	Furniture and Related Product Manufacturing	250 to 499 employees
H.P. Hood, Inc.	Food Manufacturing	250 to 499 employees
Lord Fairfax Community College	Educational Services	250 to 499 employees
GE Lighting	Electrical Equipment, Appliance, and Component Manufacturing	250 to 499 employees
Shockey Brothers, Inc.	Nonmetallic Mineral Product Manufacturing	250 to 499 employees
Glaize and Brothers	Wood Product Manufacturing	100 to 249 employees

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

Today, the make-up of the largest employers is quite more diverse than 2004. While manufacturers still hold several slots in the top ten, many service base employers, like Navy Federal, Home Depot and Department of Homeland Defense, have provided a more diverse economy than 10 years ago. These new additions provide enhanced stability during instance of plant closures and national economic downturns.

Employer	Industry	Size Class
Frederick County School Board	Educational Services	1000 and over employees
Navy Federal Credit Union	Credit Intermediation and Related Activities	1000 and over employees
U.S. Department of Homeland Defense	Administration of Economic Programs	500 to 999 employees
County of Frederick	Executive, Legislative, and Other General Government Support	500 to 999 employees
Lord Fairfax Community College	Educational Services	500 to 999 employees
Axiom Staffing Group	Administrative and Support Services	500 to 999 employees
H.P. Hood, Inc.	Food Manufacturing	250 to 499 employees
Kraft Foods	Food Manufacturing	250 to 499 employees
The Home Depot	Building Material and Garden Equipment and Supplies Dealers	250 to 499 employees
Trex Company Inc & Subsid	Plastics and Rubber Products Manufacturing	250 to 499 employees

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

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. The full list follows below.

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

NICHE INDUSTRY TARGETS					
IT Service Centers	Small & Medium-scale Manufacturing	Medical Device Manufacturing	Packaged Foods	Medical Focus	Plastics
Regional Headquarters	Life Sciences Applications	Biotech & Pharmaceutical Research	Perishable Foods	Computer & Electronic Products	Printing
Data Centers	Software Development		Organic Foods	Plastic Products	Metal Fabrication
Call Centers (high value add)	Business Services		Beverages	Fabricated Metal Products	Food Processing
Back Office Services					Business Services
Software Design					

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING
STUDIES

CURRENT WORKFORCE DRAW

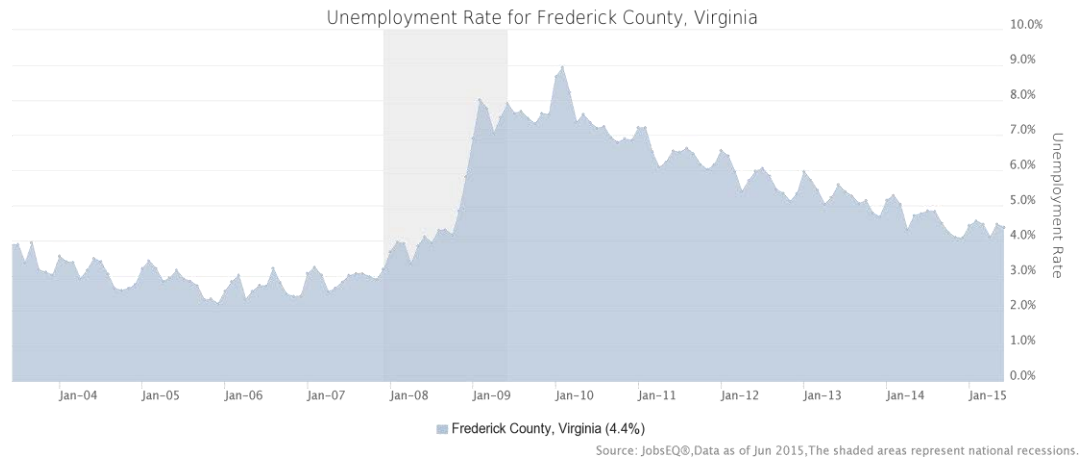
Frederick County’s labor supply is drawn from a 45-mile radius and includes the counties of Shenandoah, Page, Clarke, Warren, Loudoun in Virginia, and the counties of Berkeley, Hampshire, Hardy, Jefferson, and Morgan in West Virginia and Washington County, Maryland

As the table shows below, Frederick County possesses a diverse and ample labor force within its draw area as of 1st quarter 2015.

Title	Employment	Avg. Annual Wages ¹	Unempl	Unempl Rate
Total - All Occupations	253,809	\$42,900	n/a	n/a
Office and Administrative Support Occupations	40,060	\$33,800	3,244	5.9%
Sales and Related Occupations	28,909	\$31,500	2,140	5.7%
Food Preparation and Serving Related Occupations	23,855	\$21,200	2,846	8.4%
Transportation and Material Moving Occupations	20,316	\$33,800	1,697	6.9%
Education, Training, and Library Occupations	16,550	\$50,800	1,079	5.0%
Production Occupations	16,456	\$36,000	1,326	6.7%
Healthcare Practitioners and Technical Occupations	14,704	\$74,700	421	2.5%
Management Occupations	11,573	\$101,900	343	2.2%
Business and Financial Operations Occupations	10,620	\$68,100	531	3.3%
Installation, Maintenance, and Repair Occupations	9,390	\$42,900	588	4.4%
Construction and Extraction Occupations	9,308	\$39,500	1,233	8.4%
Building and Grounds Cleaning and Maintenance Occupations	8,648	\$24,700	1,080	8.0%
Personal Care and Service Occupations	8,297	\$23,800	765	7.0%
Protective Service Occupations	8,130	\$44,400	410	4.2%
Healthcare Support Occupations	7,444	\$28,500	430	4.7%
Computer and Mathematical Occupations	5,331	\$81,100	308	2.6%
Community and Social Service Occupations	3,919	\$43,400	142	3.3%
Architecture and Engineering Occupations	3,166	\$76,600	156	2.9%
Arts, Design, Entertainment, Sports, and Media Occupations	2,852	\$46,800	242	6.0%
Life, Physical, and Social Science Occupations	1,644	\$64,100	89	3.4%
Legal Occupations	1,379	\$87,800	43	2.3%
Farming, Fishing, and Forestry Occupations	1,261	\$25,400	100	7.3%

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

Frederick County’s unemployment rate has continued to decrease since the last recession. Currently the rate stands close to full employment rate of 4.0%.



EMPLOYMENT AND BUSINESS

	Value		
	Frederick County, Virginia	Virginia	USA
Labor Force Participation Rate and Size (civilian population 16 years and over) ⁴	41,878	4,188,480	157,113,886
Armed Forces Labor Force ⁴	95	115,131	1,083,691
Veterans, Age 18-64 ⁴	4,694	483,075	11,977,656
Median Household Income ^{3,4}	\$68,424	\$63,907	\$53,046
Poverty Level (of all people) ⁴	5,547	887,595	46,663,433

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING
STUDIES

	Frederick County, Virginia	Virginia	USA
Labor Force Participation Rate and Size (civilian population 16 years and over) ⁴	67.3%	64.9%	63.8%
Armed Forces Labor Force ⁴	0.2%	1.8%	0.4%
Veterans, Age 18-64 ⁴	9.5%	9.5%	6.2%
Median Household Income ^{3,4}	—	—	—
Poverty Level (of all people) ⁴	7.1%	11.3%	15.4%

COMMUTING PATTERNS

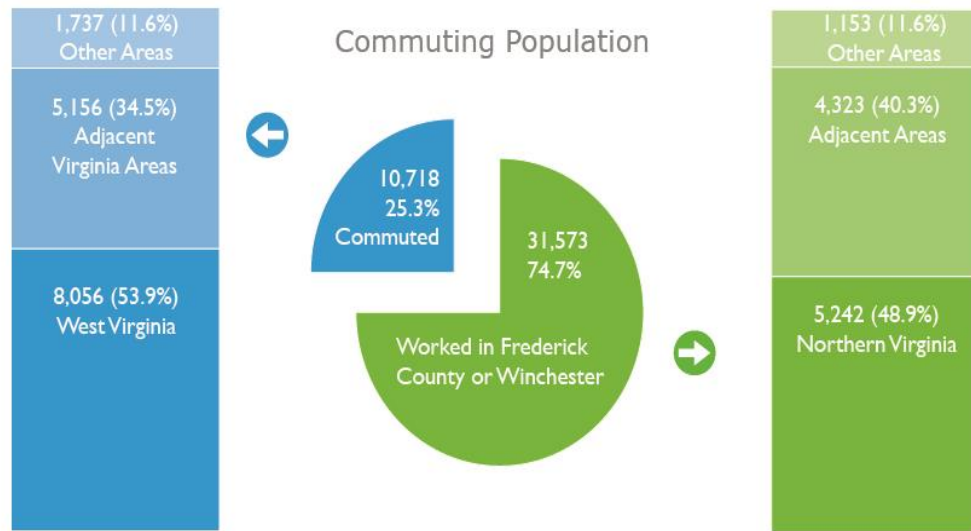
The Winchester-Frederick County community is the regional economic epicenter for the Northern Shenandoah Valley region. One reason for this statement is found in the area’s commuting patterns. The 2000 Census showed just over 4,000 more workers commuted into this community than out-commuted, double the 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

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES



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.

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

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. In Frederick County the overall value of taxable sales grew from \$413 million from to just over \$1 billion 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.

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 2004, miscellaneous store retail topped all with sales over nearly \$115 million. Fast forward to 2014, the top ranking changes to general merchandise stores taxable sales, which exceeded \$271 million.

Sector	2004	Sector	2014
Gasoline Stations	\$104,881,954	General Merchandise Stores	\$271,764,942.00
Misc Retail	\$115,325,402	Food and Beverage	\$161,493,402.00
Building Materials	\$64,735,846	Merchant Wholesalers, Durable Goods	\$100,667,998.00
Grocery Stores	\$54,407,471	Food Services and Drinking Places	\$82,792,777.00
Food Services and Drinking Places	\$59,059,004	Gasoline Stations	\$60,836,162.00

- **LAND USE ANALYSIS**

LAND USE ANALYSIS

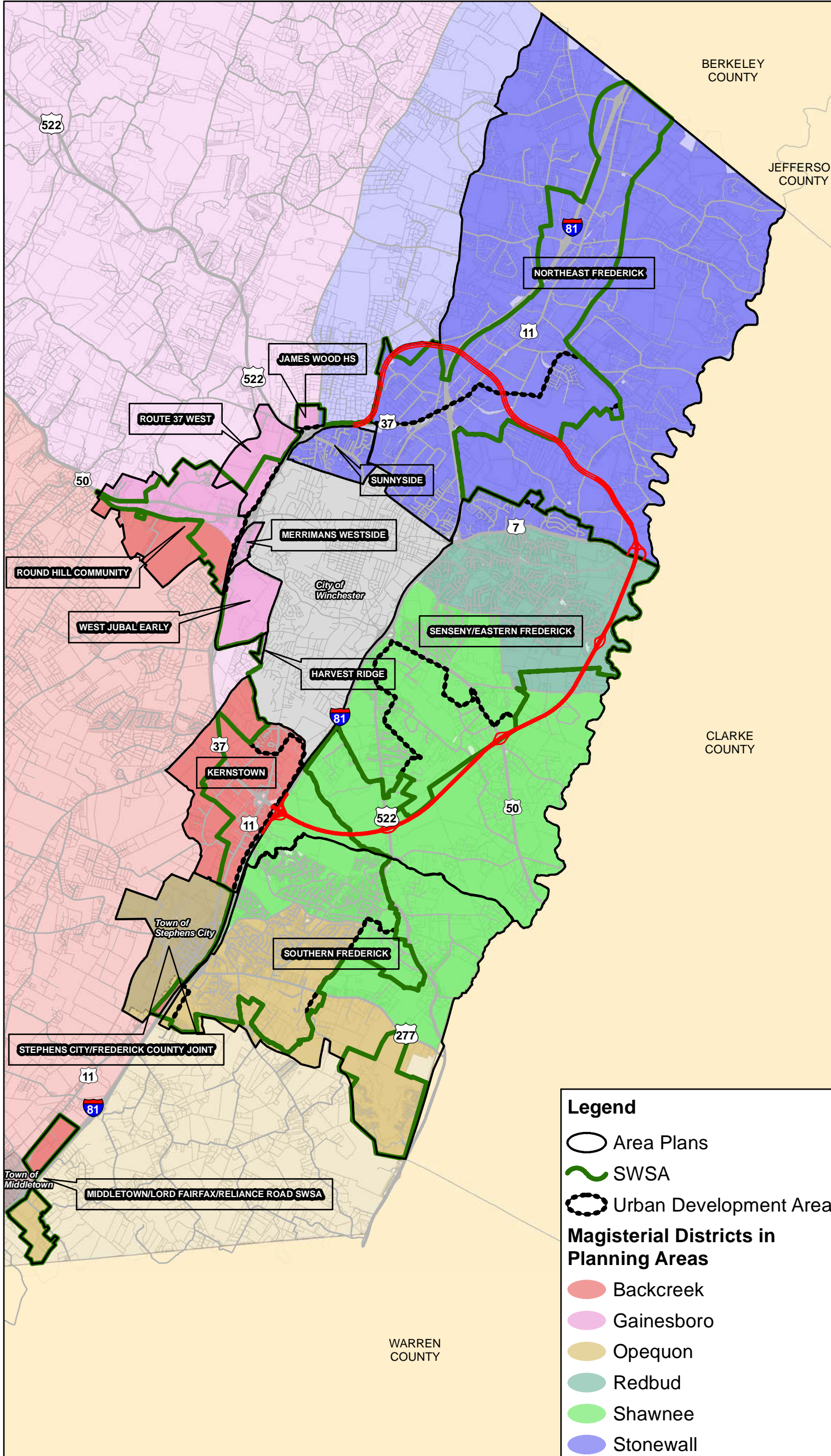
PLANNING AREA ANALYSIS 2015

The Land Use Analysis includes the Planning Area Analysis and a review of the UDA (Urban Development Area) Report. When combined together, these two pieces of information help to provide an understanding of the current make-up of the County in terms of zoning, land use, and residential development. It also helps us to understand the future development of the County and the demands associated with the growth and development of the County. This information is useful in many ways but has been used to better understand the balance of future land uses so the County can continue to strive for a balanced approach to the 25% Commercial/Industrial – 75% Other Real Estate Tax Assessment Ratio and the water and wastewater needs associated with the Frederick County Sanitation Authority.

The Planning Area Analysis has been completed revised to better reflect the **improvements made in the County's Area Plans in support of the 2035 Comprehensive Plan**. Each Planning Area directly relates to each Area Plan and also includes those urban areas not covered in specific Area Plans. All of the County's Urban Areas are included in the Planning Area Analysis.

Planning Area Analysis 2016 - Frederick County's Urban Areas

Planning Areas



Gross Acreage - 54340 acres
 UDA Acreage - 17181 acres
 Total SWSA Acreage - 29131 acres
 Main SWSA Acreage - 27469 acres
 Lake Frederick SWSA Acreage - 1113 acres
 Middletown SWSA Acreage - 549 acres
 (All acreages based on Parcel calculated acreages)

Residential

RESIDENTIAL UNITS	# UNITS
Existing	18668
Planned	13563
Potential RP	2992

Zoning

ZONING	TOTAL ACRES	VACANT ACRES
B1	57	26
B2	3010	1289
B3	449	196
EM	1361	489
HE	30	9
M1	3335	1421
M2	600	234
MH1	441	67
MS	180	50
R4	1622	1494
R5	931	759
RP	7728	3811
RA	33607	17850

Land Use

Land Use	TOTAL ACRES	VACANT ACRES
Residential	1254	557
MHC	68	3
PUD	1392	1247
Urban C	2414	1507
N Village	304	204
Res, 4 u/a	6672	2717
HDR, 6 u/a	85	85
HDR, 12 u/a	916	599
Business	2966	1531
Mixed-Use	61	50
MUCO	201	136
Highway C	69	23
B2 / B3	1008	644
Industrial	6177	3319
MUIO	2455	1410
Warehouse	337	141
H Industrial	141	72
E Mining	1372	485
Employment	370	342
Commercial R	306	35
REC	300	134
NRR	161	101
Park	545	475
ERR	1235	1235
Hist / DSA	2507	1571
Institutional	2221	783

Legend

- Area Plans
 - SWSA
 - Urban Development Area
- Magisterial Districts in Planning Areas**
- Backcreek
 - Gainesboro
 - Opequon
 - Redbud
 - Shawnee
 - Stonewall

ACHIEVING FISCAL BALANCE THROUGH LAND USE PLANNING

THE 25% COMMERCIAL/INDUSTRIAL – 75% OTHER REAL ESTATE TAX ASSESSMENT RATIO

Local governments throughout the country rely on the revenue collected from real estate taxes to fund their general operation. Therefore, it is understandable that the revenue-generating potential for properties receives strong consideration during land use and development decisions. In many **circumstances, a site's ability to generate revenue, and an applicant's** capability to adequately mitigate negative fiscal impacts, are driving factors behind the development approval process.

Prompted in part by fiscal concerns, local governments plan and ultimately zone large tracts of land for commercial and industrial use, to ensure that there is not only adequate land available for current demand but also for future demand. This practice of using land use policies (a.k.a. Comprehensive Plan) and the zoning ordinance to achieve fiscal objectives rather than purely land-use objectives is commonly referred to as **'fiscal zoning'**. Under the fiscal zoning approach, local governments discourage proposed developments that have the potential to create a net financial burden on the county and will instead encourage development that promises a net financial gain. Fiscal consideration is a significant element of land use planning.

The county has successfully utilized the Comprehensive Policy Plan to designate areas of the county for future commercial and industrial (C/I) land use opportunities since the early 1970s. Over the years this practice has helped reserve designated land for vital tax generating land uses. Through the policies of the Comprehensive Plan areas designated for C/I land uses can be implemented through the rezoning process, which then allows the property owner to develop the site into commercial and/or industrial uses. Once the C/I use has been constructed, the county is then able to bring in additional tax revenues from the site. Through the support and encouragement of C/I uses, the county over the past decade has successfully maintained a relatively low (0.51 to 0.71 percent) real estate tax rate while continuing to provide a high quality of public services to its citizens.

The Frederick County 2035 Comprehensive Plan strives to incorporate a more comprehensive analysis of the C/I land uses and their contribution towards **the county's fiscal health into its overall community planning effort. The** importance of the C/I land use has elevated in recent years as the country strives to overcome the challenging economic times. In an effort to plan for **the county's prosperous future, the** 2035 Comprehensive Plan has been drafted to designate sufficient acreage for C/I land use opportunities that is necessary to generate tax revenue that is **necessary to offset the county's** costs for providing public services to the important but more financially burdensome residential land use.

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

It is the county’s goal to create a policy plan that balances land uses and their associated tax contributions to ensure that those contributions offset the countywide cost of community services. This goal should be achieved by utilizing the land use plan to assist the county in achieving a real estate tax assessment ratio of 25 percent C/I to 75 percent Other land uses such as residential. Ultimately, the land use plan should be designed to plan for adequate revenue opportunities to ensure that the county is capable of providing its citizens with desired public services without having to place additional tax burdens on those citizens to fund the services.

This document strives to provide additional background materials and a better understanding in support of the C/I policies and goals of Frederick County.

ANALYSIS

Evaluation of Costs of Community Services (COCS) by land use

A Cost of Community Services study is one of the simplest forms of fiscal analysis available to local government. This study groups major land use categories together and evaluates all revenues and expenditures of the land uses throughout the county. In 2003, the American Farmland Trust (AFT), in **working with the Frederick County Farm Bureau, analyzed Frederick County’s FY02 budget, its revenue and expenditures, in an effort to determine the Costs of Community Services (COCS) by land use.** This study was targeted to illustrate the minimal impact that agricultural lands place on county services, but residential and commercial/industrial land uses were also analyzed. The study concentrated on fiscal year 2002 (July 2001 to June 2002), and represented a 12 month ‘snap-shot’.

The American Farmland Trust study of Frederick County, VA found the following:

Land Use	Cost of Service per \$1 Revenue Generated
Residential	\$ 1.19
Commercial/Industrial	\$ 0.23
Agricultural/Open Space	\$ 0.33

The AFT study found that residential land uses receive \$1.19 in community services for every \$1 contributed in tax revenue. More importantly, this study also found that the revenue generated by C/I land uses are more than four times their projected costs for community service.

While it is noted that this study was conducted a few years ago, the premise **behind the analysis does capture a key aspect of the county’s typical financial situation: C/I is vital to the county’s tax base, and that in 2002, the C/I land uses contributed 18.82% of the total real estate tax revenue.**

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

In order to project the capital fiscal impacts that would be associated with residential developments, Frederick County utilizes a Development Impact Model (DIM). This DIM is a micro-level model with the ability to analyze site specific land use data. In 2010, as part of the annual review of the DIM, the Development Impact Model-Oversight Committee (DIM-OC) utilized the DIM to evaluate the costs for service for residential land uses. The DIM projects **fiscal analysis over a 20 year period (a 20 year 'snap-shot'), and considers full** revenue contributions and expenditure demands, traditional budget elements as well as the associated Capital Improvement Plan projects. The DIM considers the various revenue sources such as real estate and property taxes, as well as sales, meals, and other potential taxes enabled within the community. The findings that were generated from the residential analysis were surprising. The DIM projected that over a 20 year period a single family residence valued at \$270,000 would cost the county \$1.95 for every \$1 contributed. The DIM's projections indicate a significant disparity in the relationship between residential tax contributions and its associated service expectations.

2010 Development Impact Model (DIM) projections over 20 year period		\$270,000 Single Family Dwelling
Tax Revenue		\$72,881
	Real Estate (<i>direct contributions</i>)	\$26,125
	Personal Property, Sales, Meals, etc (<i>indirect contributions</i>)	\$46,756
County Service Expenditures		\$142,394
	Capital (schools, public safety, library, etc)	\$ 21,672
	Operations	\$120,722

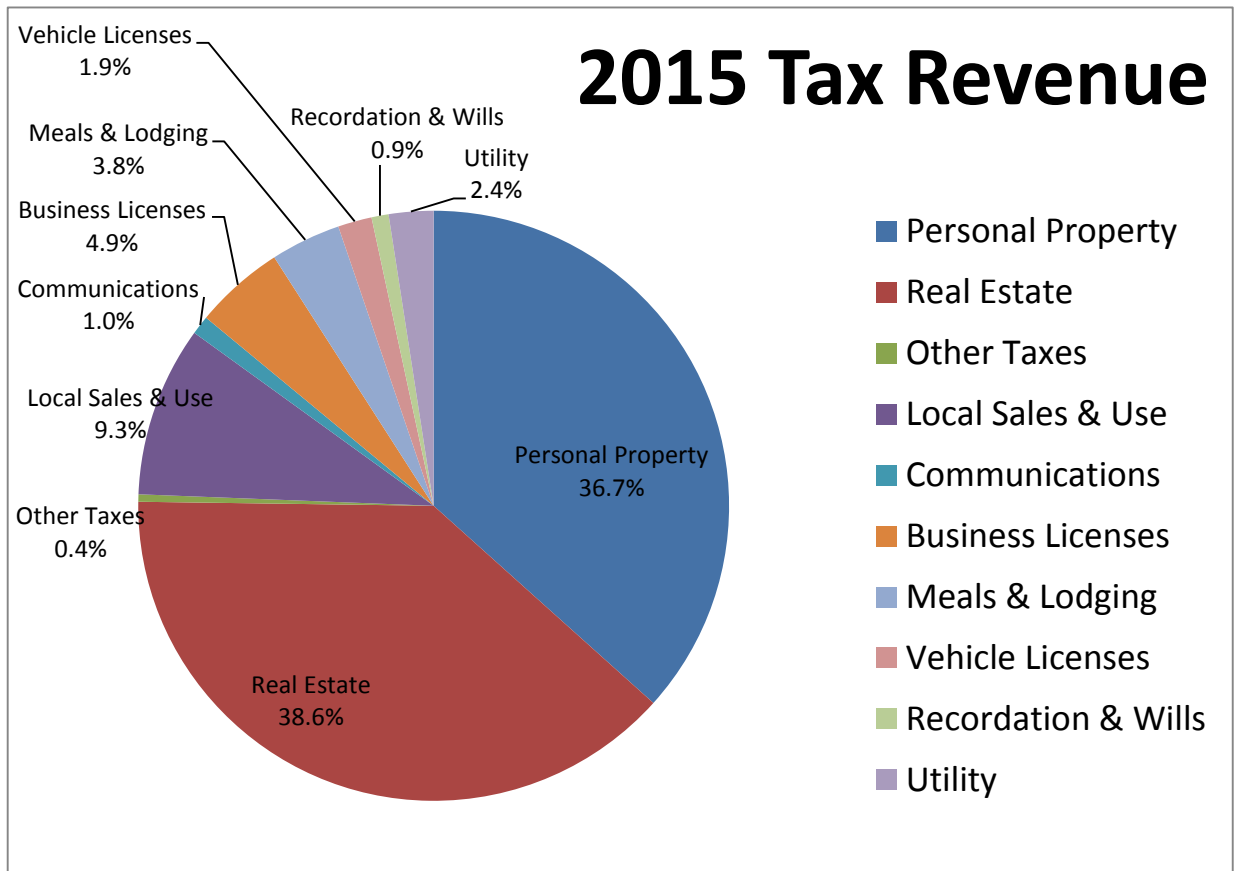
These two studies reinforce the generally accepted belief that residential land uses require more services than their associated tax contributions cover, while on the other hand commercial and industrial land uses offer significant tax revenues which exceed their associated cost for community services. More importantly, these two studies show that the revenues generated by C/I land uses are essential in the county being able to mitigate the residential land use costs for community services, and provide for more opportunities and quality of life elements that make for a great community.

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

Evaluation of County Tax Revenue and Expenditures

Utilizing figures for the county's fiscal year ending June 30, 2015, one gains a better understanding from where funds are derived, and where those funds are then spent.

Real Estate taxes represented 38 percent of the County's tax revenue in 2015, down from 43 percent (\$41.1 million) of the county's tax revenue in 2010.



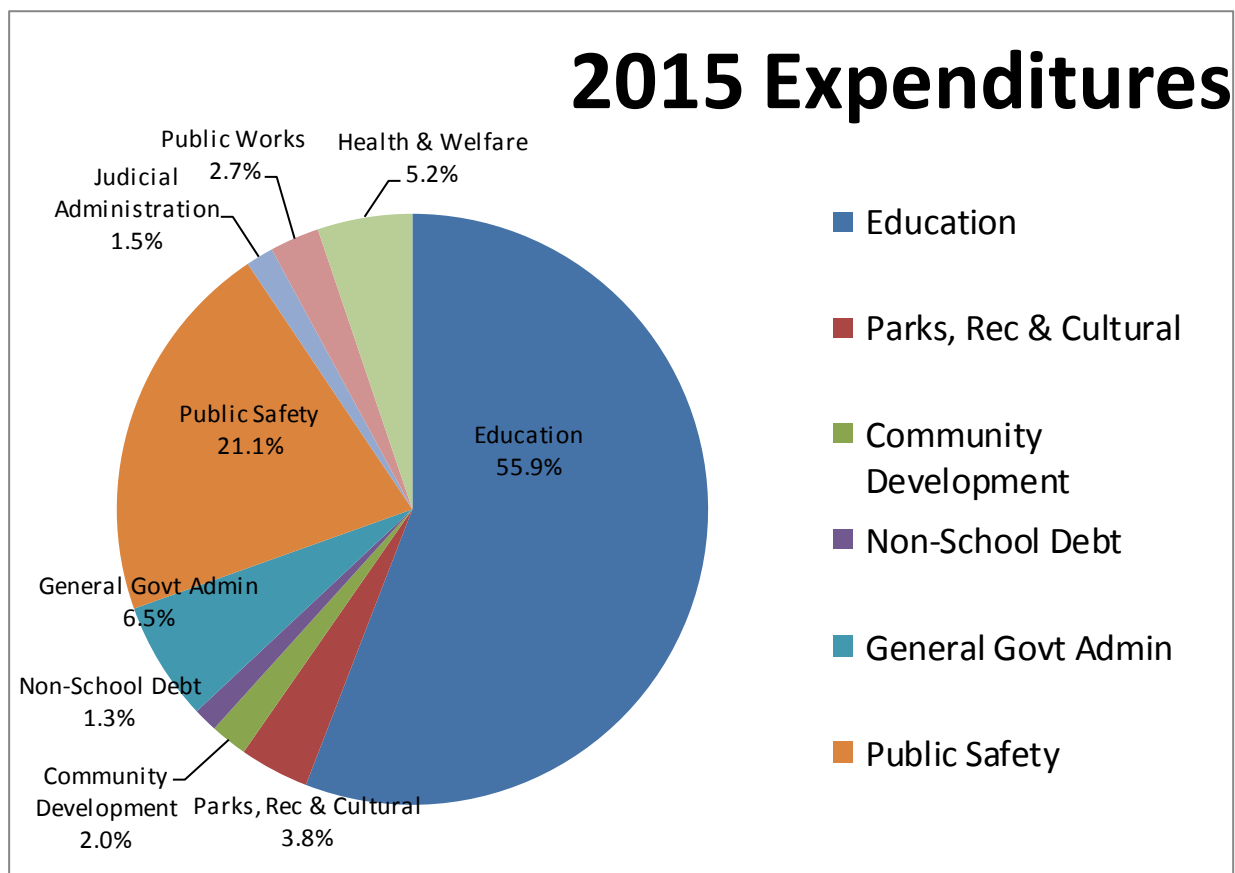
This real estate tax revenue is derived from various land uses: residential, commercial, industrial, and agricultural. In 2010 C/I land uses brought in \$5.6 million in real estate taxes, or 13.56 percent of the total real estate tax revenue. It should be noted that C/I uses only occupy 1.79 percent of the County's total land area and contribute \$1,229.5 per acre in real estate taxes.

In addition to real estate taxes, C/I land uses are also significant contributors to personal property, local sales, meals and lodging, business license, and

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

In addition to real estate taxes, C/I land uses are also significant contributors to personal property, local sales, meals and lodging, business license, and other local taxes. C/I land uses are vital contributors to the local tax revenue and ultimately contribute over 75 percent of the County's total tax revenue. At the other end of the spectrum, residential land uses brought in \$24.3 million in real estate taxes, or 59.2 percent of the total real estate tax revenue. Residential land uses make up 27 percent of the County's total land area and contribute an average of \$353.40 per acre in real estate taxes.

In reviewing the county's expenditures for the same period, a significant portion of the county's funds are directed towards education (\$65.3 million). At 52.1 percent of the expenditures, the county is clearly committed to educating its residents, preparing for the future, and providing for a high quality of life. In 2015, 55.9 percent of the expenditures are directed towards education, an increase over 2010.



APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

This review of the **County's** 2015 tax revenues and expenditures clearly illustrates that while residential land use contribute a majority of the real estate taxes collected by the County, the costs for covering services provided to those resident far exceeds their contributions. As depicted in the chart above, the expenditures for education (which is a service connected with residential land uses), is more than three times the contributions made from residential property.

Through solid land use and financial planning, the county has maintained a stable, relatively low real estate tax rate for the past decade while continuing to provide top notch services to its residents. Utilizing the benefits of C/I, an increase in C/I land uses would offer the county an even greater ability to provide services or cover the increasing costs of services.

Recognition of C/I Contributions to the Tax Base

Commercial and industrial land uses offer significant benefits to the community, in terms of tax contributions (real estate, meals, machinery, room, etc.) with minimal expectations and impacts on county services. C/I land uses also offer key employment opportunities for the residents of the county to help improve their individual quality of life and achieve their personal goals.

Based on the 2015 tax revenues, C/I properties represented more than 13 percent of the total real estate property assessments in the county, but accounted for less than 2 percent of the land area within the county. While land values will certainly fluctuate with the ebb and flow of the economy, **C/I values will continue to be significant contributors to the county's tax base and more importantly, C/I tax contributions will offset the residential land use cost for services.**

Target: Plan for C/I to Represent 25 Percent of Real Estate Assessments

In an effort to maintain the county's ability to provide high quality services while at the same time maintaining low real estate tax rates, the 2030 Comprehensive Plan is utilizing land use planning and C/I opportunities to offset impacts from existing and planned residential uses. If it is a goal for Frederick County to have 25 percent of the total county assessments come from C/I land use values, then it is obvious that at only 13.56 percent (4,556 acres) the county needs additional developed C/I uses. To achieve the 25 percent assessment target in 2010, an additional 2,761 developed acres of C/I land uses would have been needed.

Recognizing the county's 2.9 percent annual growth rate over the past 3 decades, the 2035 Comprehensive Plan should be designed to accommodate an additional 4,859 acres of new C/I opportunities. This projection indicates that the 2030 Comprehensive Plan should contain a minimum designation of 12,176 acres for C/I land uses within the Sewer and Water Service Area

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

(SWSA). Further fluctuations may be anticipated with additional residential growth.

2035 Comprehensive Plan

The 2035 Comprehensive Plan has been developed to incorporate a balance of land uses in order to achieve needed tax revenues. The Plan achieves the land use policy target of ensuring that 25 percent of the projected assessments will be in C/I land uses. This is accomplished by designating 16,700 acres for future C/I land uses, which will occupy approximately 2/3 of the 25,000-acre Sewer and Water Service Area (SWSA).

The Plan also incorporates opportunities for mixed use developments and single family residential uses at a minimum density of 4 units per acres within the designated Urban Development Area (UDA). The policy of directing residential growth into the UDA also promotes a more efficient use of land and community services, ultimately offering additional cost savings to the county.

Mixed use developments also offer additional revenues to address the demands for services generated by the residential uses. Mixed-use developments – such as urban center and neighborhood villages – are planned developments that encourage and accommodate a mix of land uses.

These projects include an appropriate mix of commercial, office, and residential development. They provide an efficient development pattern that can foster economic development, provide diversity in land use, and reduce the number and the length of automobile trips. These mixed uses projects are encouraged in appropriate locations in the 2035 Comprehensive Plan.

CONCLUSION

The land use designations contained within the 2035 Comprehensive Plan accommodate the goal of providing 25 percent C/I land uses to 75 percent Other land uses. Maintaining a healthy C/I ratio will help the county maintain its current tax rates while continuing to enhance the services provided the residents - particularly in the area of education. It is through the use of land use policies contained within the Comprehensive Plan that these goals will be supported and achieved.

In an effort to reinforce a sound policy basis that balances land use planning and fiscal policies, the ratio of 25/75 between C/I and other land uses in terms of available land areas and taxable value of the land uses shall be the established benchmark. This policy shall dictate that at least 25 percent of the taxable land value (land plus improvement value) in the county should contain C/I land uses, and conversely that no more than 75 percent of the taxable land area should be for uses other than C/I land. By achieving this

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

policy goal, the County will ensure that taxable land values equate to the projected expenditures.

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING
STUDIES

URBAN DEVELOPMENT AREA (UDA)
Residentially Zoned Development Information - vacant lot summary
Frederick County, Virginia
(Through December 2015)

Vacant Land - No Approved GDPs

2,992 potential units based on permitted densities on
442 acres of vacant
land

Zoned Land - Approved GDPs

0 Units (maximum yield based on proffered
densities)
1,153 Acres

Master Development Planned Projects

6,095 Total residential lots/units
planned
1,471 single family lots planned
1281 townhouse, duplex, multiplex lots/units planned
262 multi-family units planned
mixed units
3,081 planned

(Current Status) Residential Subdivisions Under Development - platted, vacant lots

2,627 Total residential lots/units
available
1,305 single family-detached lots available
701 townhouse, duplex, multiplex lots available
621 multi-family units available

Grand Total: **11,714** approved, planned, or potential residential
lots/units.

285 Single Family-Detached permits have been issued in 2015 within the UDA
115 Townhouse/Duplex/Multiplex permits have been issued in 2015 within the UDA
137 Apartments permits (units) have been issued in 2015 within the UDA
83% Percentage of all new residences constructed in 2015 where within the UDA

Notes:

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

- 682 Vacant single family-detached platted lots are within 6 of the single-family residential subdivisions which currently have approved subdivision plans within the UDA. (Abrams Pointe, Meadows Edge, Old Dominion Greens, Red Bud Run, Shenandoah and Snowden Bridge)
- 3,722 The number of lots planned within Age-Restricted communities
2,463 Vacant lots within Age-Restricted Communities
- Denotes an age-restricted community or component
- 5,453 The number of vacant lots within the R5 zoned residential communities in the western portion of Frederick County, outside the UDA. These communities (Lake Holiday, Shawneeland, and Mountain Falls Park) contain a total of 7,916 recorded lots.
- 1,787 The number of vacant lots within The Shenandoah development, which is located outside the Urban Development Area on the south side of Fairfax Pike; however, the proximity of the UDA will directly impact land development decisions in the county's development area. The Shenandoah MDP calls for 593 age-restricted and 1,537 traditional residential units in a community of 2,130 total residential units on 926.26 acres.

Revised: 01/06/16

APPENDIX II – BACKGROUND ANALYSIS AND SUPPORTING STUDIES

Race and Ethnicity				
	1990	2000	2009	2014
American Indian, Eskimo, Aleut	0.2%	0.2%	1.0%	2.4%
Asian	0.5%	0.7%	1.4%	1.5%
Black	1.8%	2.6%	5.2%	7.3%
White	97.4%	95.0%	91.2%	88.2%
Other	0.2%	0.6%	0.4%	0.3%
Multi-Race		1.0%	0.8%	0.3%
American Indian, Eskimo, Aleut	0.2%	0.2%	1.0%	2.4%
Hispanic Ethnicity	0.6%	1.7%	7.8%	12.0%