## **SECTION 1** Growth Management

## **Purpose**

"The General Policies Plan: An Element of the Comprehensive Plan" adopted in April 1981, and the 1982 County Comprehensive Plan update established an operating framework for Hanover County to manage growth within its borders. The current Comprehensive Plan is intended to uphold those policies that have served the County well in practice, and amend those policies that are no longer practical or functional due to economic, market, and societal shifts. As with previous plans, the purpose of this document is not to regulate, but rather guide land use, transportation, and infrastructure decisions. This guidance is to ensure continued economic and community vitality while ensuring necessary policies and infrastructure are in place to provide for the continuation of quality services to Hanover's residents.

#### Vision

Hanover County is a place, inspired by its people, tradition and spirit, which will be the premier community for people and businesses to achieve their full potential.

#### Goals

Building on the central County Vision, Hanover County will be known as a community that exemplifies orderly growth and development of both residential and non-residential uses to accommodate existing and future residents while encouraging and promoting commerce. Infrastructure and services necessary to support residential and commercial growth will be expanded in a timely manner to ensure the provision of necessary and adequate services, while maintaining a distinct suburban and agricultural identity.

### **Objectives**

#### Hanover County will:

- Continue to promote policies that encourage suburban and commercial development to occur in a compact and contiguous manner
- Maximize the use of existing infrastructure, facilities, and services, to ensure economically and financially responsible service delivery
- Provide for the independent and harmonious development of separate and distinct agricultural and suburban areas

- Take into consideration the existing and planned development of its regional neighbors in formulating land use and transportation policies
- Maximize the use of existing public utility infrastructure to ensure the most financially responsible operation and maintenance of the system for the benefit of its customers

As used in the Hanover County Comprehensive Plan the term "growth management" is considered a means for ensuring local resources and infrastructure are either in place for the existing population, or adequately planned to serve future residents. Hanover County's most fundamental growth management policies, (initially adopted in1981) are highlighted below. Although the following policies do not represent a complete list of those adopted in the original 1981 plan, they are included in this update because they continue to provide the fundamental basis for guiding land use, infrastructure, and service delivery decisions:

- Provide for the orderly and timed development of land consistent with the County's ability to provide services
- Maximize the use of existing public facilities and plan for economic and efficient expansion of public facilities to serve a growing population
- Protect natural and man-made features necessary to maintain environmental health and quality
- Strive for decent, safe, and sanitary housing for county residents
- Promote social, educational, and cultural institutions to assist in the advancement of individual achievement
- Promote long-term balanced economic development
- Preserve and enhance profitable private enterprise
- Provide adequate commerce scaled to serve individual neighborhoods, the larger Hanover community, and the Richmond region as a whole
- Promote the development of a diversified industrial and commercial tax base
- Provide for the independent but harmonious development of rural and urban areas of the County for optimal agricultural, forest, residential, commercial, and industrial uses
- Concentrate urban development in areas of the county with existing infrastructure
- Provide for expansion of urban services in accordance with natural watershed boundaries

It is not difficult to realize that following these central tenets provide a solid direction for the County and remain valid for the future. The County has received numerous achievements and accolades at the state and national level since the 1982 Comprehensive Plan which include:

100 Best Communities for Young People

- Go Green awards given by VACo and VML to recognize local governments that reduce energy usage and promote sustainable practices
- VACo Achievement Awards for Motorist Assistance Program and for the Strategic Zoning Initiative
- Excellence in Recycling award for "Outstanding Organics Program" from the Virginia Recycling Association.
- Governor's Award for Excellence in Virginia's Fire Service for state and national leadership related to tactical fire suppression
- Emergency Fire Dispatch Center of Excellence by the International Academies of Emergency Dispatch (IAED). Hanover is the 14<sup>th</sup> Emergency Fire Dispatch Accredited Center in the world
- 5<sup>th</sup> consecutive international accreditation through the Commission on Accreditation for Law Enforcement Agencies (CALEA)
- Recognition of wastewater plants for being among the peak performers in the nation
- Finance and Management Services awards for financial reporting and the budget
- International Association of Chiefs of Police Community Policing Award from CALEA
- Certified Crime Prevention Community Program by the Virginia Department of Criminal Justice Services

This list of accolades demonstrates a level of commitment in pursuit of excellence exhibited by the County's residents. Without sound land use, infrastructure, and growth management philosophies and policies in place which guide day-to-day decision making, many of these accomplishments could not have been realized. Hanover's constant pursuit of excellence will continue to be reflected in the plans and policies articulated in this 2017 update.

#### **Suburban Service Area**

The 1982 Comprehensive Plan is based on the premise that in order "....to control premature development, urban growth should be restricted to areas where public facilities can be economically and efficiently provided." Responding to this premise, Hanover County designated a Suburban Service Area (SSA) to concentrate development so that it occurs in a logical, compact and contiguous manner and to maintain rural character in areas where utilities are not provided. The SSA is the area of the County where public water and sewer service is planned to be made available allowing higher density development to occur. The existing limits of the SSA are shown on the *Conservation and Suburban Development Plan* map. Other public facilities, such as stormwater management, are also anticipated to be provided in the SSA.

The Conservation and Suburban Development Plan and General Land Use Plan should be considered together. These two plans represent the County's plan for the type of future development. Based on projected growth and anticipated needs, public water and sewer facilities are planned to be compact and contiguous within the existing Suburban Service Area.

Expansion of the boundaries of the Suburban Service Area could be considered apart from the Comprehensive Plan update if any one of the following conditions occur:

- (1) Economic development purposes where a private sector applicant is willing to fund public improvements
- (2) Locations where the County has determined the change is consistent with the Comprehensive Plan
- (3) Locations where the County has determined there is a demonstrated risk to the public health, safety, and welfare as a result of failing water or wastewater facilities necessary to serve an identified community
- (4) Locations for Hanover County public sites and facilities

# Planning Assumptions for the 2017 Comprehensive Plan update

The following assumptions form the basis for future demographic projections and demands on the use of land:

- Population Growth: The average annual growth rate for the period 2017-2037 will range from 1 percent to 2percent per year
  - o For calculation purposes, the plan will assume an average annual growth rate of 1.5% per year
  - Based on the 2010 U.S. Census, it assumed the average residential occupancy is
     2.68 persons per household
- 2. **Suburban/Rural Residential Distribution**: To plan for future growth, it is assumed 70 percent of future residential growth will occur within the Suburban Service Area (SSA), while the remaining 30 percent will occur in the planned rural portions of the County located outside the SSA
- 3. **Suburban Density**: Average residential density for the suburban service area will be 3 dwelling units per acre

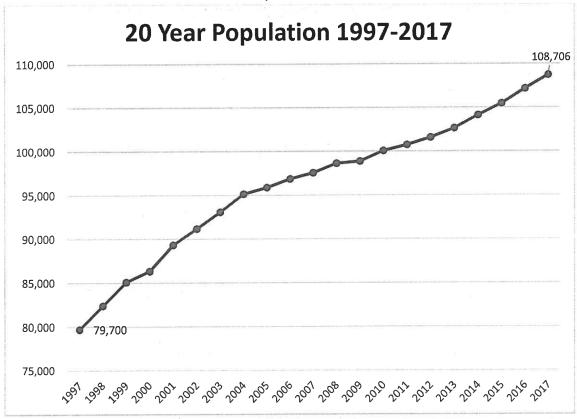
#### **Assumption 1: Population Growth**

The County relies upon population forecasts to predict the future demand for County services such as water and sewer, transportation, education, and public safety in an economically cost effective and efficient manner. The plan is also intended to protect those very features and characteristics Hanover's residents hold in such high regard including vibrant and safe residential communities, a strongly diversified local economy, rich historical, cultural, and environmental resources, and the rural characteristics of a major portion of the County's land area.

To anticipate and forecast future demands on resources and services, Hanover must first look to the past to understand future population growth trends. Ultimately, demand on services is generated by the county's population growth, as it is the growth in the number of residents that ultimately places the demand on existing services, facilities, infrastructure, and resources.

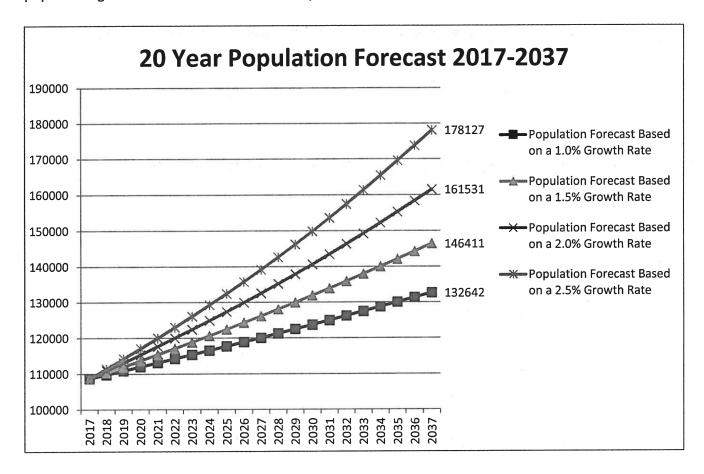
Once population growth forecasts are established, using a variety of sources including the U. S. Census Bureau, the County can also predict the number of future households required to house future residents, which in turn allows the County to plan and predict land consumption necessary to accommodate future dwelling units.

The following chart shows the County's growth rate for the period 1997-2017 based on Census Bureau data from 1997 -2010 and County estimates from 2010-2017



When predicting trends, it should be understood that there will likely be significant periodic fluctuations which deviate from the long range forecast. The plan will assume a 20-year growth rate that fluctuates between 1 and 2 percent per year, but for purposes of projecting future population growth it is assumed Hanover County will experience a 1.5 percent average annual population growth rate.

Using the County's 2010 population data, and the population growth assumptions, future population growth can be forecast as the Population Forecast chart below reveals:



Utilizing the 2017 base population of 108,706 and the 1.5 percent average annual growth rate assumption, it is estimated that Hanover's population will increase by approximately 37,705 residents for a 2037 population of 146,411.

Future housing demand is based on 2010 Census data for housing occupancy. The 2010 census data indicates that the average number of persons per household is 2.68. Based on projected 37,705 new residents over the 20-year planning horizon, and utilizing the 2.68 persons per household census figure, Hanover County will require 14,069 additional dwelling units to accommodate future residents.

## Assumption 2: Suburban/Rural Residential Distribution

The second assumption driving the County's growth management strategy is that 70 percent of new dwelling units will be located within the Suburban Service Area while the remaining number of dwellings will be located within the rural areas of the County. As such, of the 14,069 forecast

residential units for the next 20-year period, 70 percent or approximately 9,848 will be located within the Suburban Service Area while the remaining 4,221 will be located in the rural areas of the County.

## **Assumption 3: Suburban Density**

Table 1 below shows different land consumption scenarios based on the planning parameters and assumptions outlined.

Table1

PPH 2010 Census	2037 Population 1.5% Growth Rate (70% in the SSA)	Gross Suburban Dwelling Demand (70% in the SSA	Zoned Dwelling Capacity*	Net Dwelling Demand (Dwelling Demand less Zoned Lots)
2.68	26,394*	9,848*	4,515	5,333

<sup>\*</sup> Zoned Dwelling Capacity is an estimate as of June 30, 2017; does not include the Town of Ashland

Table 2

Average Density	Acreage Demand (Net Demand / Average Density)	Required Availability (Acreage Demand x 2)	Available Acreage*
1.0 DU/AC	5,333	10,666	10,098
1.5 DU/AC	3,555	7,110	10,098
2.0 DU/AC	2,667	5,334	10,098
2.5 DU/AC	2,133	4,266	10,098
3.0 DU/AC	1,778	3,556	10,098
3.5 DU/AC	1,524	3,048	10,098
4.0 DU/AC	1,333	2,666	10,098

<sup>\*</sup>Does not include the Town of Ashland

Based on the assumed 1.5% average annual growth rate, 2.68 persons per household, Table 2 illustrates the acreage demand based on average density within the Suburban Service Area. Currently there are approximately 10,098 acres of undeveloped land available and designated

for residential development within the SSA; Table 3 illustrates the expected capacity of the SSA based on the population forecast and the various density scenarios included in the table.

Table 3

Average Density	Acreage Demand	Acres Required	Acres Available	20 Year Planning Cycles (Ac. Avail./Ac. Req.)	Years of Avail. Acres
1.0 DU/AC	5,333	10,666	10,098	0.9	18
1.5 DU/AC	3,555	7,110	10,098	1.4	28
2.0 DU/AC	2,667	5,334	10,098	1.9	38
2.5 DU/AC	2,133	4,266	10,098	2.4	46
3.0 DU/AC	1,778	3,556	10,098	2.8	56
3.5 DU/AC	1,524	3,048	10,098	3.3	66
4.0 DU/AC	1,333	2,666	10,098	3.8	76