



**Community Participation Team
Agenda**

**Hanover County Government Building
Board Conference Room: Second Floor
7156 County Complex Road
Hanover, VA 23069**

**Wednesday, November 30, 2022
2:00 p.m.**

- I. Call to Order**
- II. Adoption of Agenda**
- III. Citizens' Time**

Members of the public may provide feedback regarding the Comprehensive Plan Update (up to 3 minutes per speaker).
- IV. Organizational Items**
 - a. Approval of Minutes: October 17, 2022
- V. New Business**
 - a. Discussion: Suburban Service Area (SSA) as a Growth Management Strategy
 - b. Upcoming Public Meetings (January/February 2023)
- VI. Adjournment (Next Meeting Date: To Be Determined)**



Agenda Item IV.a
Minutes: October 17, 2022

ENVISION HANOVER
Community Participation Team
Regular Meeting
Hanover County Government Building
October 17, 2022
6:00 p.m.

VIRGINIA: At the fourth meeting of the Envision Hanover Community Participation Team (CPT) held in the Hanover County Government Building on the 17th day of October, 2022, at 6:00 p.m.

Present:

Alan Abbott – Ashland Magisterial District
Jerry Bailey – Henry Magisterial District
Rod Morgan – Ashland Magisterial District
Edmonia Iverson – Beaverdam Magisterial District
Steve Hadra – Chickahominy Magisterial District
Jason Voorhies – Chickahominy Magisterial District
Fred McGhee, Jr. – Cold Harbor Magisterial District
Kristie Proctor – Cold Harbor Magisterial District
Charlie Waddell – Henry Magisterial District
Randy Whittaker – Mechanicsville Magisterial District, Planning Comm. Chairman
Larry Leadbetter – South Anna Magisterial District

Staff:

Jo Ann Hunter – Senior Director of Community Development
Andrew Pompei – Principal Planner and Project Manager

I. Call to Order

Mr. Pompei called the meeting to order at 6:05 p.m.

II. Adoption of Agenda

Mr. Pompei asked members of the CPT if any changes to the agenda were recommended or needed. With no changes identified, the agenda was approved.

III. Citizens' Time

Mr. Pompei asked if any members of the public were interested in providing comments to the CPT. No members of the public spoke.

IV. Organizational Items

a. Introduction: Jo Ann Hunter (Senior Director of Community Development)

Jo Ann Hunter (Senior Director of Community Development) introduced herself. She started working for Hanover County after the last CPT meeting and will be working on the Comprehensive Plan Update.

b. Appointment of Team Facilitator/Leadership

i. Elect Chair

ii. Elect Vice Chair

Mr. Pompei opened the floor for nominations for the position of Chair and Vice Chair. There was an election at the previous meeting, but since there were concerns regarding the nomination process, the election was reheld.

Mr. Waddell nominated Mr. Voorhies to the position of Chair, which was seconded by Mr. Whittaker. Seeing as there were no other nominations, Mr. Pompei closed the floor to nominations, and Mr. Voorhies was selected Chair by the majority of members raising their hands in consensus.

Mr. Waddell nominated Mr. Leadbetter to the position of Vice Chair, which was seconded by Mr. Whittaker. Seeing as there were no other nominations, Mr. Pompei closed the floor to nominations, and Mr. Leadbetter was selected Vice Chair by the majority of members raising their hands in consensus.

CPT Action: Selected Jason Voorhies as Chair and Larry Leadbetter as Vice Chair.

c. Approval of Minutes: August 30, 2022

The CPT accepted the minutes from the meeting on August 30, 2022 as presented.

CPT Action: Accepted minutes from August 30, 2022 as presented.

d. Member Emails

Mr. Pompei provided information on the County e-mail addresses for team members.

e. Overview of Revised Schedule

Ms. Hunter provided an update regarding the proposed schedule for developing and adopting the updated Comprehensive Plan. After the presentation, members provided feedback:

- One member requested that the Economic Development Director speak to the CPT to provide information regarding economic development trends within the County.
- One member provided information about an interactive GIS tool being developed by state agencies to compile data from different sources into one accessible resource, which could help inform the planning process.
- One member requested that the working maps the project team is using be sent to the CPT.

V. New Business

a. Land Use Designations

Mr. Pompei provided an overview of concepts presented in the draft descriptions for each of the proposed land use designations that would be applied to the General Land Use Plan. As these concepts were presented, members were asked to provide feedback regarding certain concepts. Discussion addressed the following issues:

- *Use of Private Roads in Rural Areas:* There was discussion as to whether the use of private roads in rural areas should be further limited, as current regulations allow up to 31 lots to be served by a private road. Members discussed how this issue relates to affordable housing and their experience regarding the long-term maintenance of private roads, and they had questions about the cost for public roads versus private roads to the developer. No consensus was reached regarding this issue.
- *Open Space in Non-Cluster Subdivisions (Rural Areas):* There was consensus that open space is not needed in non-cluster subdivisions requiring rezoning (such as proposed developments within the AR-6 zoning district).
- *Thoroughfare Buffers (Residential Projects):* There was general consensus that buffers should be maintained along major thoroughfares, but there was not consensus regarding how this should be addressed in the updated Comprehensive Plan. Members thought there should be some flexibility regarding the width and design of thoroughfare buffers, so that this issue could be addressed based upon the context of a specific development site. There was some discussion that the proposed buffer width of 100 feet may be too restrictive and impact housing affordability. Some members indicated that they did not want to see major thoroughfares lined with privacy fences, since that does not reflect the rural character of the County. Many members expressed interest in incorporating berms into thoroughfare buffers to help screen residential development from view.
- *Transitional Residential (New Designation):* There was general consensus regarding the concept of introducing a new lower-density residential designation on the edge of the Suburban Service Area (within the SSA).
- *Mixed Use Designation:* There was discussion regarding the location of parking within mixed-use projects, as well as minimum project size. There was discussion about the appropriateness and effectiveness of the related MX zoning district. One member requested that the Economic Development Department provide feedback regarding the economic benefits of mixed-use development.
- *Industrial Designations:* There was general consensus that residential should not be allowed within the proposed *Employment Center Flexible*

designation (and that *flexible* should be removed from the name of that designation). There was additional emphasis placed on having significant buffers around the perimeter of industrial development.

- *Transitions*: There was general consensus that transitions between use types should be addressed through various techniques, including buffers and by located lower-intensity uses on the perimeter of projects.

There was discussion regarding the date/time for the next meeting. Based on feedback provided by members, Mr. Pompei indicated that he would send a follow-up email listing potential meeting dates, including times during the afternoon and evening on November 30 and December 1.

VI. Adjournment (Next Meeting Date: To Be Determined)

With no further business, Mr. Voorhies adjourned the meeting at 7:50 p.m.

Approved by CPT on _____, 2022



Agenda Item V.a

**Discussion: Suburban Service Area (SSA) as a Growth Management Strategy
Memo + Supporting Materials**



SUBURBAN SERVICE AREA (SSA): GROWTH MANAGEMENT TOOL

Memo: November 22, 2022

Meeting Purpose

- Discuss Using Suburban Service Area as a Growth Management Tool
- Discuss Extent of the Suburban Service Area (SSA)

Overview

Growth management tools are used to implement Hanover County's vision by making intentional decisions about **how and where growth occurs** and **what areas are protected**. The Comprehensive Plan, zoning ordinance, and subdivision ordinance are all tools localities throughout Virginia use to manage growth.

One growth management tool outlined in the Comprehensive Plan is the Suburban Service Area (SSA). Since the 1980s, Hanover County has managed growth by directing higher-intensity residential, commercial, and industrial development to the SSA, where public utilities exist or can be expanded in an efficient way. In the current Comprehensive Plan, the SSA makes up 22% of the County's total land area.

Growth is directed to the SSA through:

- Land use decisions (including the Comprehensive Plan and zoning decisions); and
- Capital investment, including public investment in water, sewer, and roads.

Policy History

The SSA was first identified in the 1982 Comprehensive Plan. That plan stated that:

- *The costs to the County over the past ten years in dealing with uncontrolled growth have been high. The lesson learned is that future urban development should locate in those areas of the County in which public services and facilities can most efficiently and economically be provided (p. 3-1).*
- *The intent of the land use plan is to use the location of public facilities, primarily stormwater drainage and sewer, to control the location, timing and density of new development (p. 3-12).*
- *By accommodating future growth in these areas through provision of public services and facilities, development in Hanover is expected to be guided away from widely scattered sprawl to a more compact pattern (p. 3-13).*

From 1982 to the late 1990s, the SSA primarily included areas along the U.S. Route 1/I-95 Corridor and the I-295 Corridor east of I-95 (including areas along U.S. Route 301 and 360). Beginning in the late 1990s, the SSA began expanding westward to include more significant portions of the U.S. Route 33 Corridor, with the largest expansion in 2007. On www.envisionhanover.com/project-resources, there are maps showing how the boundaries of the SSA have evolved over time ([Evolution of Hanover County's Growth Area](#)).

In the current Comprehensive Plan, it is recommended that 70% of residential growth occur within the SSA, with the remaining 30% occurring within rural areas. In recent years, actual new home construction has generally aligned with that recommendation. From 2012 through 2022, 73% of new homes have been built in the SSA, while 27% have been built within rural areas.

Other Localities

Localities throughout Virginia have adopted policies within their comprehensive plans delineating designated growth areas (similar to the SSA). For example:

- ***Albemarle County***
The 2015 Comprehensive Plan (which is currently being updated) directs growth to designated Development Areas, which make up approximately 5% of Albemarle County's land area. Remaining portions of the County are intended to remain rural. This policy has been maintained with few revisions since 1971.
- ***Goochland County***
Since the 1970s, Goochland County has directed development to Designated Growth Areas, which include different "villages." In the 2015 Comprehensive Plan, about 15% of Goochland County is within designated growth areas.
- ***James City County***
Since the 1970s, James City County has directed growth to the Primary Service Area (PSA), where public services exist or are planned.

Benefits and Implications

- ***More Efficiently Direct Investment and Services***
Directing development to the SSA makes the provision of public utilities and other public services more economical and efficient, since suburban-level infrastructure and services only need to be provided to a relatively compact area.
- ***More Orderly and Predictable Development***
Directing development to the SSA through zoning decisions and by limiting utility extensions prevents higher-intensity development from "leapfrogging" into rural areas.

- ***Limits Area for Higher-Density Residential Development***

Higher-density residential development can only be possible with public water and/or sewer, so limiting public utilities to the SSA controls the location of higher-density residential development and minimizes land use conflicts in rural areas.

- ***Potential Conflict between Land Uses***

As higher-density development occurs in the SSA, there is the potential for conflicts between different uses. During engagement efforts, respondents indicated that there should be greater emphasis placed on the transition between different uses and transitions from suburban to rural areas.

Feedback: Public Engagement

Directing development to the SSA aligns with major themes identified during public engagement:

- ***Preserve Rural Character***

Many respondents indicated that the rural character found in much of Hanover County should be maintained. In the Envision Hanover: Visioning Survey, loss of farmland, forests, and open space was identified as the most critical issue Hanover County is currently facing, and the second-biggest concern looking into the future. Directing growth to the SSA can help limit development within parts of the County that are intended to remain rural.

- ***Manage Growth***

Many respondents think that growth should be managed and directed to areas with adequate infrastructure, limiting new development within rural areas.

Feedback received also seems to indicate that those living within the SSA expect higher levels of service. For example, as part of the engagement process, members of the public have indicated that there should be more amenitized parks and recreational opportunities for people of all ages, especially within suburban areas.

The capacity of the SSA to accommodate residential growth influences the availability, cost, and design of housing. During public engagement, respondents have indicated an interest in providing quality and diverse housing options at appropriate locations.

Discussion

At the CPT meeting on November 30, there will be discussion of the SSA as a growth management tool and the extent of the SSA. In addition to the information above, below is some data that indicates the influence of the SSA and its ability to accommodate development moving forward:

- Population Forecast
- Vacant Parcel Heat Maps
- Growth Management Data



DRAFT / May 23, 2022

POPULATION FORECAST: METHODOLOGY & RESULTS

POPULATION FORECAST: METHODOLOGY & RESULTS

METHODOLOGY

In this brief report, RKG Associates, Inc. prepared a population forecast and related analysis to help inform the Envision Hanover Comprehensive Plan update. This report depicts an assumed growth rate, compared with two other projections that provide context. Those alternative methodologies include a baseline forecast from the Weldon Cooper Center at the University of Virginia, which is the Commonwealth's state data center and produces annual population estimates and projections for all Virginia counties, cities, and planning districts. This report also includes an alternative population projection for Hanover County based on residential development trends over the past 20 years, broken down into six different subareas (Figure 1). The County's Board of Supervisors selected a reasonable growth rate between these high and low ranges.

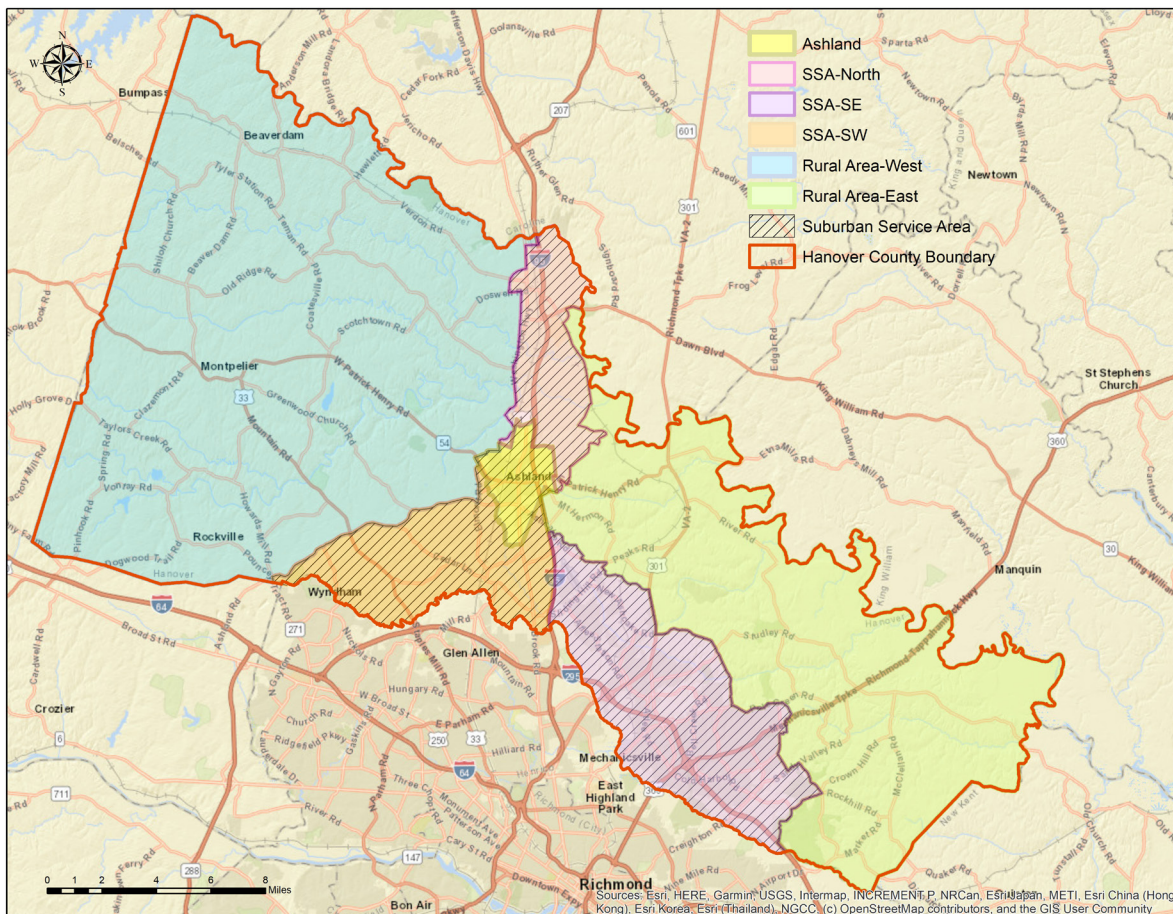
RESIDENTIAL SUBAREAS

- Town of Ashland
- Suburban Service Area North
- Suburban Service Area Southwest
- Suburban Service Area Southeast
- Rural Area West
- Rural Area East

This report also documents subarea development activity from the County's real property assessment records, which report the 'year-built' for each new housing unit (both ownership and rental) once they are issued a final occupancy permit and a property assessment record is created for real estate taxing purposes.

Using 2020 Census estimates as the start year, RKG projected future changes in housing construction based on housing development activity during the 2010 to

FIGURE 1: HANOVER COUNTY HOUSING SUBAREAS



POPULATION FORECAST: METHODOLOGY & RESULTS

RESIDENTIAL SUBAREAS, cont.

2020 period. Subarea housing development activity was broken out by type of residential unit (e.g., single-family detached, townhouses, condominiums, apartments, etc.) to document the predominant housing types being constructed in each subarea.

The past decade started with a deep economic recession caused by the mortgage and financial crisis, also known as the 'Great Recession,' which occurred during the 2009-2010 period. Following the recession, a prolonged period of housing growth occurred throughout most of the country, starting around 2012 and continuing until today, with only a brief market interruption caused by the COVID-19 pandemic during part of 2020.

To convert future housing development into future population projections, the consultants used specific household and housing characteristics within each subarea. Those variables included: (1) average household size, (2) estimated housing vacancy rates, and (3) population living in group quarters. The population of persons living in group quarters include those living in correctional facilities for adults, student housing, nursing facilities, inpatient hospice facilities, and military barracks. People living in group quarters were added to the population living in traditional ownership- and

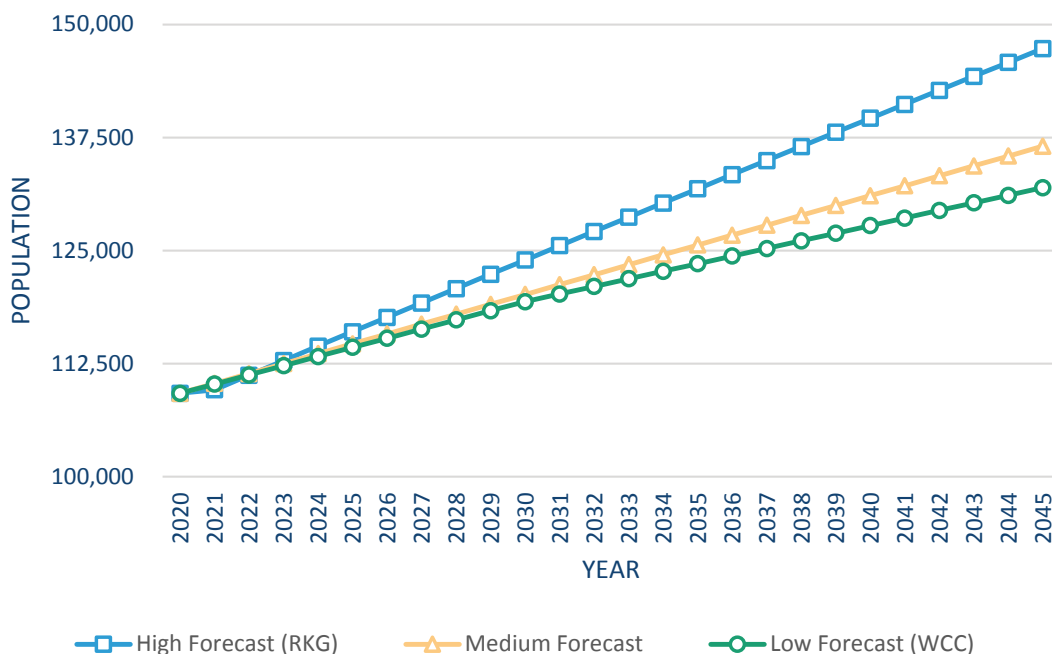
renter-occupied housing units, after adjusting for housing vacancy rates in each subarea.

PROJECTION RESULTS

While developing a reasonable population forecast, RKG examined two alternative approaches. The Weldon Cooper Center produced a population projection that indicates a .77% increase from the 2020 base year to 2045. Then RKG created an alternative development-based projection that produced a higher population growth rate of 1.4%. This estimate accounts for the fact that some subareas will grow faster than others and they will reflect the specific population and housing characteristics of their subarea.

With this context, the Hanover County Board of Supervisors selected a 1% rate as a reasonable growth expectation for long-range planning purposes. The Board of Supervisor's 1% growth rate assumption is roughly the median between Weldon Cooper's forecast and RKG's development-based projections. Over 25 years, this results in a 2045 population of 136,536, for an increase of 27,307 in new population. This annual growth rate is not compounded annually but calculates to an average annual rate of 1% over the 25-year forecast period.

FIGURE 2: 2020-2045 POPULATION FORECAST



POPULATION FORECAST: METHODOLOGY & RESULTS

RECONCILIATION OF POPULATION FORECASTS TO LAND CAPACITY

The following analysis attempts to reconcile future population forecasts with Hanover County's available land resources. The analysis focuses on the County's three Suburban Service Areas known as SSA-Southeast, SSA-Southwest, and SSA-North.

HOW MUCH POPULATION DOES A 1% ANNUAL FORECAST PRODUCE OVER 25 YEARS?

RKG Associates applied the 1% annual growth rate and distributed this population to the County's six different geographic housing submarkets. While each submarket has the potential to capture some share of future population and housing growth, the vast majority of this growth is likely to be captured within the three suburban service areas, since there is infrastructure present in each to support new development. According to the 1% forecast, over 87% of the County's forecasted populations increase (27,307 pop.) is expected to be captured in the suburban service districts. The remaining 3,465 population will be spread out in scattered development in the Town of Ashland and the two rural areas.

WHAT ARE THE IMPLICATIONS OF 1% AVERAGE ANNUAL GROWTH OUT TO 2045?

Utilizing a series of household and population metrics for each subarea, RKG compared future population changes to the availability of existing land resources to support the 1% growth forecast. The implication was that areas experiencing strong growth pressures could only continue to grow if there were sufficient land resources available to accommodate new development. Once land resources are exhausted in one subarea, either growth patterns shift to other subareas, or changes are made in allowable densities to permit higher density development to occur.

Because the County is trying to minimize development in the County's two rural areas (east and west), future growth is being directed to the three existing suburban service areas. The capacity of these SSAs to accommodate future growth is based on their available land resources. The County's planning department conducted a thorough inventory of existing land that could be developed in the future. This included vacant land, but also land with structures on them valued at less than \$250,000.

The land capacity analysis did not attempt to net out land acres that were impacted by environmental features such as steep slopes, wetlands, brownfield conditions, and

TABLE 1: 1% GROWTH FORECAST

Population Forecast and Land Capacity Estimates
Hanover County, VA

% Developable Gross Acre		50%						
Planning Sub Area	Gross Acres	Net Acres	Forecast Denisty	Avg. Persons	Population	2045 Pop.	Acres Suplus/	
			2.5 Units/AC	Per/HH	Capacity	Forecast	(Deficit)	
SSA-SE	3,479	1,740	4,349	2.730	11,872	15,651	(554)	
SSA-SW	4,668	2,334	5,835	2.500	14,588	3,253	1,814	
SSA-North	378	189	473	2.272	1,074	4,938	(680)	
	8,525	4,263	10,656		27,533	23,842	579	

Source: RKG Associates, Inc. and Hanover Planning Department, 2022.

Planning Sub Area	2045 Pop. Forecast	Avg. Persons Per/HH	Forecast Households	Net Acres	Acres		Acres		Acres	
					Consumption 1 Units/AC	Suplus/ (Deficit)	Consumption 2.5 Units/AC	Suplus/ (Deficit)	Consumption 3 Units/AC	Suplus/ (Deficit)
SSA-SE	15,651	2,730	5,733	1,740	5,733	(3,993)	2,293	(554)	1,911	(171)
SSA-SW	3,253	2,500	1,301	2,334	1,301	1,033	520	1,814	434	1,900
SSA-North	4,938	2,272	2,173	189	2,173	(1,984)	869	(680)	724	(535)
	23,842		9,208	4,263	9,208	(4,945)	3,683	579	3,069	1,193

Source: RKG Associates, Inc. and Hanover Planning Department, 2022.

POPULATION FORECAST: METHODOLOGY & RESULTS

WHAT ARE THE IMPLICATIONS OF 1% AVERAGE ANNUAL GROWTH OUT TO 2045?, cont.

other conditions that would remove them from future development. However, the planners did assume that the gross total acres would only be 50% developable and the remaining 50% would be undevelopable. This is considered a conservative estimate, which reduces the available acreage to support future growth, and represents a “worst case” scenario regarding the ability of the existing Suburban Service Area to accommodate growth over the ensuing 20-year period.

As shown in Table 1, the gross acres measured in the three subareas is 8,525 acres, of which, 4,263 acres (50%) are assumed to be developable. Based on an average density of 2.5 units per acre, the existing land supply could accommodate 27,533 new residents, based on average household sizes in each subarea. According to the 1% forecast to 2045, the County would only need land to support 23,842 new residents in the three SSAs. As a result, there would be surplus of 579 land acres after meeting this population forecast based on the 2.5 units/AC assumption. It is important to note that population demands in SSA-SE and SSA-North would exceed the available land supply, but in theory, the land surplus available in SSA-SW (1,814 acres) would be significant enough to absorb this growth and still result in a surplus.

WHAT HAPPENS TO THE LAND SURPLUS IF RESIDENTIAL DENSITIES CHANGE?

As shown in the lower half of Table 1, if residential densities are reduced to just 1 dwelling unit per acre, there is not enough land in the suburban service areas to support the 1% population forecast to 2045. In fact, an additional 4,945 acres would be required to support a low-density development pattern of this type. At 2.5 units per acre, as shown above, there is a 579-acre net land surplus, even though SSA-SE and SSA-North exhaust their land supplies. Finally, at 3 units per acre, the demand for land is reduced slightly as densities increase and the net land surplus stands at 1,193 acres in 2045.

WHAT ARE THE POLICY IMPLICATIONS TO THESE POPULATION FORECASTS?

What the analysis clearly shows is a dwindling land supply in suburban service areas may be sufficient to accommodate the next 25 years of 1% population growth, but the supply is quite limited unless adjustments are made in the future to allow for additional growth. As alluded to earlier in the analysis, if one subarea's

land supply is exhausted, it is possible, although not guaranteed, that future development will be attracted to other SSAs with land capacity and infrastructure available. At the same time, it is very likely that as land resources get scarce in one SSA, the purchase price of land per acre or per lot will start to increase. This will force developers to request increased housing density (units per acre) to keep their unit price of land in line with the cost of housing. If that does not happen, the price of housing in Hanover County will start to rise with the increased scarcity and cost of land. Ultimately, this could put pressure on Hanover County's rural areas as developers seek expansion of the suburban service areas, which abut them.

METHODOLOGY FOR THE DEVELOPABLE LAND ANALYSIS

Hanover County staff reviewed property records in GIS to identify developable lands for the capacity analysis of available land. County staff assumed that property was developable under the following criteria:

Smaller Parcels Zoned A-1 within SSA Designated for Residential/Mixed-Use Development: Includes parcels that are 4 – 20 acres in area, are currently zoned A-1, are located within the SSA in areas currently designated for residential/mixed-use development on the General Land Use Plan, and have an improved value of \$225,000 or less.

Larger Parcels Zoned A-1 within the SSA Designated for Residential/Mixed-Use Development: Includes parcels that are more than 20 acres in area, are currently zoned A-1, and are located within the SSA in areas currently designated for residential/mixed-use development on the General Land Use Plan (no maximum improved value).

R-1, R-2, and R-3 Parcels Outside of Subdivisions: Includes parcels that are zoned R-1, R-2, and R-3 that are 4 acres or more in area, are not within a subdivision, and have an improved value of \$225,000 or less.

Remove Parcels Encumbered by a Conservation Easement: Excludes parcels encumbered by a known conservation easement.

Remove Parcels Owned by Governmental Entities: Excludes parcels owned by governmental entities (including the Hanover County School Board, National Park Service, etc.) and recreational- and conservation-based non-profit organizations.

1% PROJECTIONS WITH SUBAREA ESTIMATES
HANOVER COUNTY POPULATION PROJECTIONS (2020-2045)
(2021-2040)

County Submarket	Ann. Growth Rate	Housing Units [2]	PROJECTION YEAR				
	2010-21	2021	2025	2030	2035	2040	2045
Ashland	0.6%	3,190	3,206	3,234	3,267	3,306	3,349
Rural East	1.2%	6,028	6,199	6,419	6,645	6,877	7,114
Rural West	0.9%	6,659	6,767	6,913	7,069	7,233	7,405
SSA-North	16.5%	658	1,063	1,553	2,028	2,493	2,949
SSA-SE	1.5%	22,413	23,311	24,445	25,592	26,752	27,925
SSA-SW	2.7%	2,521	2,739	3,007	3,272	3,535	3,797
TOTAL RESIDENTIAL UNITS		41,470	43,284	45,569	47,873	50,196	52,539

Note: [1] Dormitory rooms and fraternities removed to avoid double counting number people in group quarters

[2] Housing unit estimates based on Hanover County Property Assessment database, 2021

PROJECTED CHANGE IN AVERAGE HOUSEHOLD SIZE
(2020-2045)

County Submarket	2000 HH Size [3]	2021 HH Size [3]	Avg Ann Chge (2000-21)	2021	2025	2030	2035	2040	2045
Ashland	2.36	2.26	(0.0050)	2.26	2.24	2.22	2.19	2.17	2.14
Rural East	2.81	2.67	(0.0070)	2.67	2.64	2.61	2.57	2.54	2.50
Rural West	2.77	2.70	(0.0035)	2.70	2.69	2.67	2.65	2.63	2.62
SSA-North	2.48	2.35	(0.0065)	2.35	2.32	2.29	2.26	2.23	2.19
SSA-SE	2.73	2.73	-	2.73	2.73	2.73	2.73	2.73	2.73
SSA-SW	2.50	2.50	-	2.50	2.50	2.50	2.50	2.50	2.50

Note: [3] Data obtained from ESRI, Inc., 2021

**PROJECTED POPULATION CHANGE
(2020-2045)**

County Submarket	Housing Vac % (2021) [4]	Pop. in Group QTRs [4]	2020	2021	2025	2030	2035	2040	2045
Ashland	6.1%	1,090	7,138	7,209	7,182	7,162	7,155	7,158	7,168
Rural East	5.2%	571	15,936	16,095	16,378	16,734	17,092	17,448	17,800
Rural West	5.9%	29	17,801	17,979	18,176	18,447	18,739	19,049	19,372
SSA-North	7.6%	39	1,532	1,547	2,471	3,558	4,582	5,550	6,469
SSA-SE	3.8%	185	60,583	61,189	63,638	66,733	69,865	73,033	76,234
SSA-SW	6.4%	38	6,240	6,302	6,846	7,517	8,180	8,838	9,493
ANNUAL POPULATION ESTIMATES		1,952	109,229	110,321	114,690	120,152	125,613	131,075	136,536
Annual Population Change				1,092	1,092	1,092	1,092	1,092	1,092
Annual Percent Change				1.00%	0.96%	0.92%	0.88%	0.84%	0.81%
ANNUAL AVERAGE HOUSEHOLD SIZE				2.61	2.60	2.59	2.58	2.57	2.56
				1.00%	5.00%	10.00%	15.00%	20.00%	25.00%

County Submarket	Nominal Chge. 2020-2030	Nominal Chge. 2030-2040	Nominal Chge. 2040-2045	Total Change (2020-2045)
Ashland	25	(5)	10	30
Rural East	798	714	353	1,864
Rural West	646	602	323	1,571
SSA-North	2,027	1,992	919	4,938
SSA-SE	6,151	6,299	3,201	15,651
SSA-SW	1,277	1,321	655	3,253
ANNUAL POPULATION ESTIMATES	10,923	10,923	5,461	27,307
Annual Population Change	1.00%	0.91%	0.83%	

**PROJECTED ANNUAL POPULATION GROWTH RATES BY SUBMARKET
(2020-2045)**

County Submarket			2020	2021	2025	2030	2035	2040	2045
Ashland				1.00%	-0.08%	-0.04%	-0.01%	0.02%	0.04%
Rural East				1.00%	0.43%	0.43%	0.42%	0.41%	0.40%
Rural West				1.00%	0.28%	0.30%	0.32%	0.33%	0.34%
SSA-North				1.00%	10.07%	6.34%	4.57%	3.54%	2.86%
SSA-SE				1.00%	0.98%	0.94%	0.91%	0.88%	0.85%
SSA-SW				1.00%	2.02%	1.81%	1.64%	1.51%	1.40%
ANNUAL POPULATION % CHANGE				1.00%	0.96%	0.92%	0.88%	0.84%	0.81%

Note: [d] Data obtained from ESRI, Inc., 2021

**PROJECTED CHANGE IN ANNUAL POPULATION SHARE BY SUBMARKET
(2020-2045)**

[illegible]

RKG ASSOCIATES POPULATION PROJECTIONS WITH SUBAREA ESTIMATES
HANOVER COUNTY POPULATION PROJECTIONS (2020-2045)

High Range Projections

County Submarket			Ann. Growth Rate	Housing Units [2]	PROJECTION YEAR				
					2025	2030	2035	2040	2045
Ashland			0.6%	2,862	2,936	3,029	3,121	3,214	3,307
SF Residential			1.0%	1,577					
Duplex			0.0%	4					
Townhouse/SF Condo			1.7%	195					
Multiple Residence/Multifamily			0.0%	773					
Fraternity House_Residential [1]			0.9%	-					
Dormitory [1]			0.0%	-					
Mobile Home Park			0.0%	313					
Rural East			1.2%	6,093	6,387	6,755	7,122	7,490	7,858
SF Residential			1.2%	6,073					
Duplex			0.0%	20					
Rural West			0.9%	7,020	7,263	7,568	7,872	8,176	8,480
SF Residential			0.9%	7,020					
SSA-North			16.5%	690	1,146	1,715	2,285	2,855	3,424
SF Residential			16.5%	690					
SSA-SE			1.5%	23,076	24,438	26,140	27,842	29,544	31,247
SF Residential			1.0%	19,626					
Duplex			0.0%	4					
Townhouse/SF Condo			22.8%	1,387					
Multiple Residence/Multifamily			1.8%	2,059					
SSA-SW			2.7%	2,660	2,944	3,298	3,652	4,007	4,361
SF Residential			1.4%	2,151					
Townhouse/SF Condo			65.5%	353					
Multiple Residence/Multifamily			0.0%	156					
TOTAL RESIDENTIAL UNITS				42,401	45,114	48,504	51,895	55,286	58,677

Note: [1] Dormitory rooms and fraternities removed to avoid double counting number people in group quarters

[2] Housing unit estimates based on Hanover County Property Assessment database, 2021

PROJECTED CHANGE IN AVERAGE HOUSEHOLD SIZE (2020-2045)

County Submarket	2000 HH Size [3]	2021 HH Size [3]	Avg Ann Chge (2000-21)	2021	2025	2030	2035	2040	2045
Ashland	2.36	2.26	(0.0050)	2.26	2.24	2.22	2.19	2.17	2.14
Rural East	2.81	2.67	(0.0070)	2.67	2.64	2.61	2.57	2.54	2.50
Rural West	2.77	2.70	(0.0035)	2.70	2.69	2.67	2.65	2.63	2.62
SSA-North	2.48	2.35	(0.0065)	2.35	2.32	2.29	2.26	2.23	2.19
SSA-SE	2.73	2.73	-	2.73	2.73	2.73	2.73	2.73	2.73
SSA-SW	2.50	2.50	-	2.50	2.50	2.50	2.50	2.50	2.50

Note: [3] Data obtained from ESRI, Inc., 2021

**PROJECTED ANNUAL POPULATION GROWTH RATES BY SUBMARKET
(2020-2045)**

County Submarket			2020	2021	2025	2030	2035	2040	2045
Ashland				0.36%	0.35%	0.33%	0.31%	0.30%	0.28%
Rural East				0.36%	0.87%	0.80%	0.74%	0.69%	0.64%
Rural West				0.36%	0.71%	0.68%	0.65%	0.62%	0.59%
SSA-North				0.36%	10.55%	6.73%	4.90%	3.83%	3.12%
SSA-SE				0.36%	1.41%	1.32%	1.23%	1.16%	1.10%
SSA-SW				0.36%	2.45%	2.19%	1.97%	1.79%	1.65%
ANNUAL POPULATION % CHANGE				0.36%	1.39%	1.29%	1.20%	1.12%	1.05%

Note: [d] Data obtained from ESRI, Inc., 2021

**PROJECTED CHANGE IN ANNUAL POPULATION SHARE BY SUBMARKET
(2020-2045)**

[illegible]

PROJECTED POPULATION CHANGE
(2020-2045)

High Range Projections

County Submarket	Housing Vac % (2021) [4]	Group QTRs [4]	2020	2021	2025	2030	2035	2040	2045	Nominal Chge. 2020-2030	Nominal Chge. 2030-2040	Nominal Chge. 2040-2045	Total Change (2020-2045)	% Ann Change (2020-2045)
Ashland	6.1%	1,090	7,138	7,164	7,266	7,390	7,509	7,624	7,735	252	235	111	597	0.33%
Rural East	5.2%	571	15,936	15,993	16,568	17,265	17,937	18,585	19,208	1,329	1,320	623	3,272	0.82%
Rural West	5.9%	29	17,801	17,865	18,387	19,032	19,666	20,290	20,904	1,231	1,258	614	3,104	0.70%
SSA-North	7.6%	39	1,532	1,537	2,499	3,671	4,809	5,912	6,981	2,139	2,241	1,069	5,449	14.23%
SSA-SE	3.8%	185	60,583	60,801	64,378	68,850	73,321	77,792	82,264	8,267	8,943	4,471	21,681	1.43%
SSA-SW	6.4%	38	6,240	6,262	6,926	7,755	8,585	9,414	10,243	1,515	1,659	829	4,004	2.57%
ANNUAL POPULATION ESTIMATES		1,952	109,229	109,622	116,025	123,962	131,826	139,618	147,336	14,733	15,656	7,718	38,107	1.40%
Annual Populationn Change				393	1,596	1,582	1,567	1,552	1,538	1.35%	1.26%	1.11%		
Annual Percent Change				0.36%	1.39%	1.29%	1.20%	1.12%	1.05%					
ANNUAL AVERAGE HOUSEHOLD SIZE				2.54	2.53	2.52	2.50	2.49	2.48					

WELDON COOPER CENTER PROJECTIONS WITH SUBAREA ESTIMATES (2020-2045)
HANOVER COUNTY POPULATION PROJECTIONS

Low-Range Projections

County Submarket	2020	2025	2030	2035	2040	2045	Nomial Chge. 2020-2030	Total Change (2030-2040)	Total Change (2040-2045)	Total Change (2020-2045)	% Ann Change (2020-2045)
Ashland	7,138	7,158	7,115	7,038	6,976	6,927	(23)	(139)	(49)	(211)	-0.12%
Rural East	15,936	16,322	16,624	16,812	17,006	17,203	382	382	197	197	0.05%
Rural West	17,801	18,114	18,325	18,432	18,566	18,722	241	241	156	156	0.03%
SSA-North	1,532	2,462	3,535	4,507	5,410	6,252	1,875	1,875	843	843	2.20%
SSA-SE	60,583	63,422	66,294	68,722	71,183	73,675	4,889	4,889	2,492	2,492	0.16%
SSA-SW	6,240	6,823	7,467	8,046	8,614	9,174	1,147	1,147	560	560	0.36%
ANNUAL POPULATION ESTIMATES	109,229	114,302	119,360	123,557	127,755	131,953	8,511	8,395	4,198	21,104	0.77%
Annual Population Change		1,015	1,012	839	840	840					
Annual Percent Change		0.90%	0.85%	0.68%	0.66%	0.64%	0.78%	0.70%	0.66%		

**PROJECTED CHANGE IN ANNUAL POPULATION SHARE BY SUBMARKET
(2020-2045)**

County Submarket	2020	2025	2030	2035	2040	2045	Percentage Change In Population Share
Ashland	6.5%	6.26%	5.96%	5.70%	5.46%	5.25%	-1.29%
Rural East	14.6%	14.28%	13.93%	13.61%	13.31%	13.04%	-1.55%
Rural West	16.3%	15.85%	15.35%	14.92%	14.53%	14.19%	-2.11%
SSA-North	1.4%	2.15%	2.96%	3.65%	4.23%	4.74%	3.34%
SSA-SE	55.5%	55.49%	55.54%	55.62%	55.72%	55.83%	0.37%
SSA-SW	5.7%	5.97%	6.26%	6.51%	6.74%	6.95%	1.24%
TOTAL POPULATION SHARE	100.0%	100.00%	100.00%	100.00%	100.00%	100.00%	

ATTACHMENT #2
Mapping: Vacant Land Availability



Developable Land

Hanover County, VA

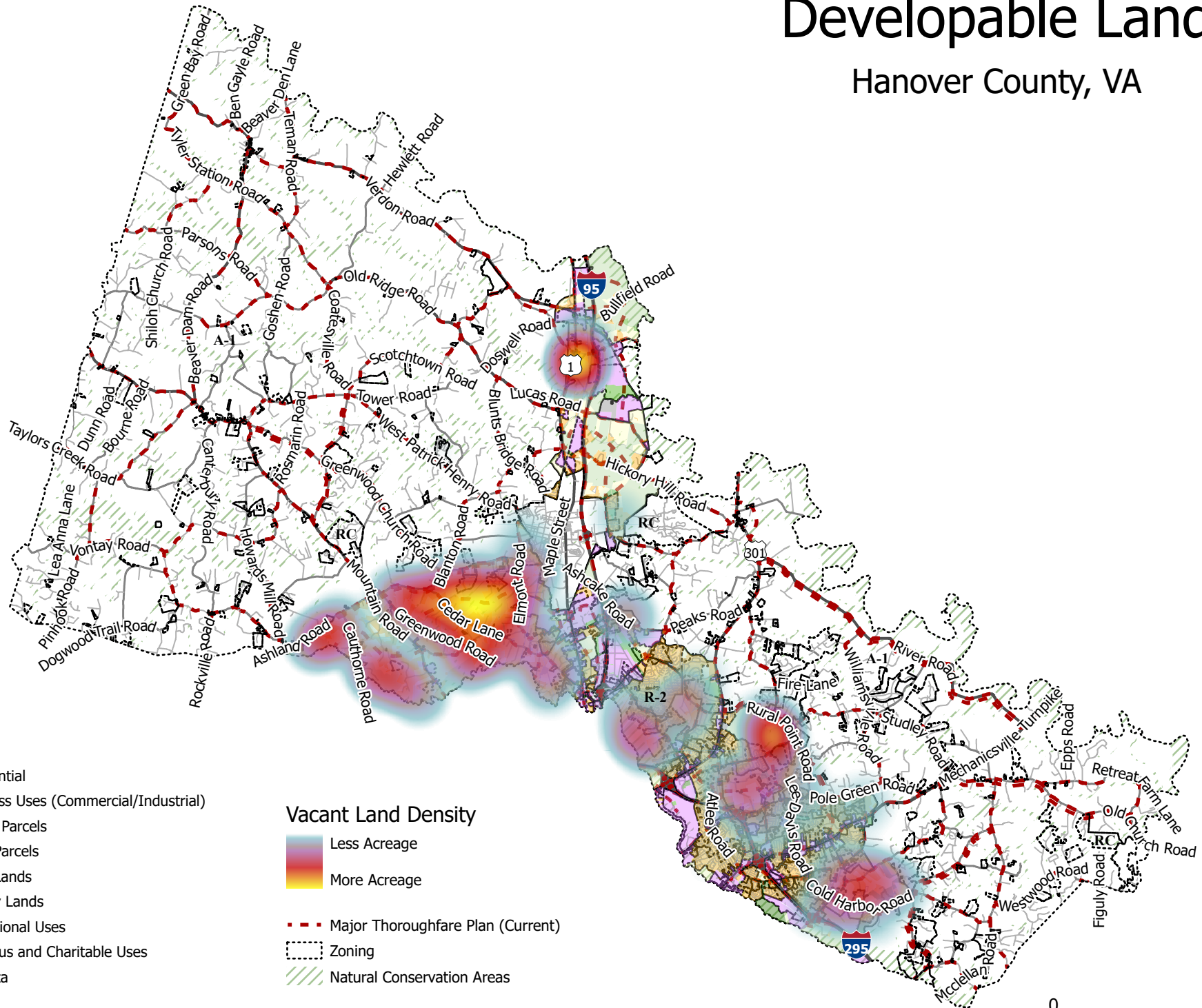
Land Use

- Residential
- Business Uses (Commercial/Industrial)
- Larger Parcels
- Rural Parcels
- State Lands
- County Lands
- Educational Uses
- Religious and Charitable Uses
- No Data

Vacant Land Density

- Less Acreage
- More Acreage

- Major Thoroughfare Plan (Current)
- Zoning
- Natural Conservation Areas



Developable Land

Suburban Service Area - East of I-95

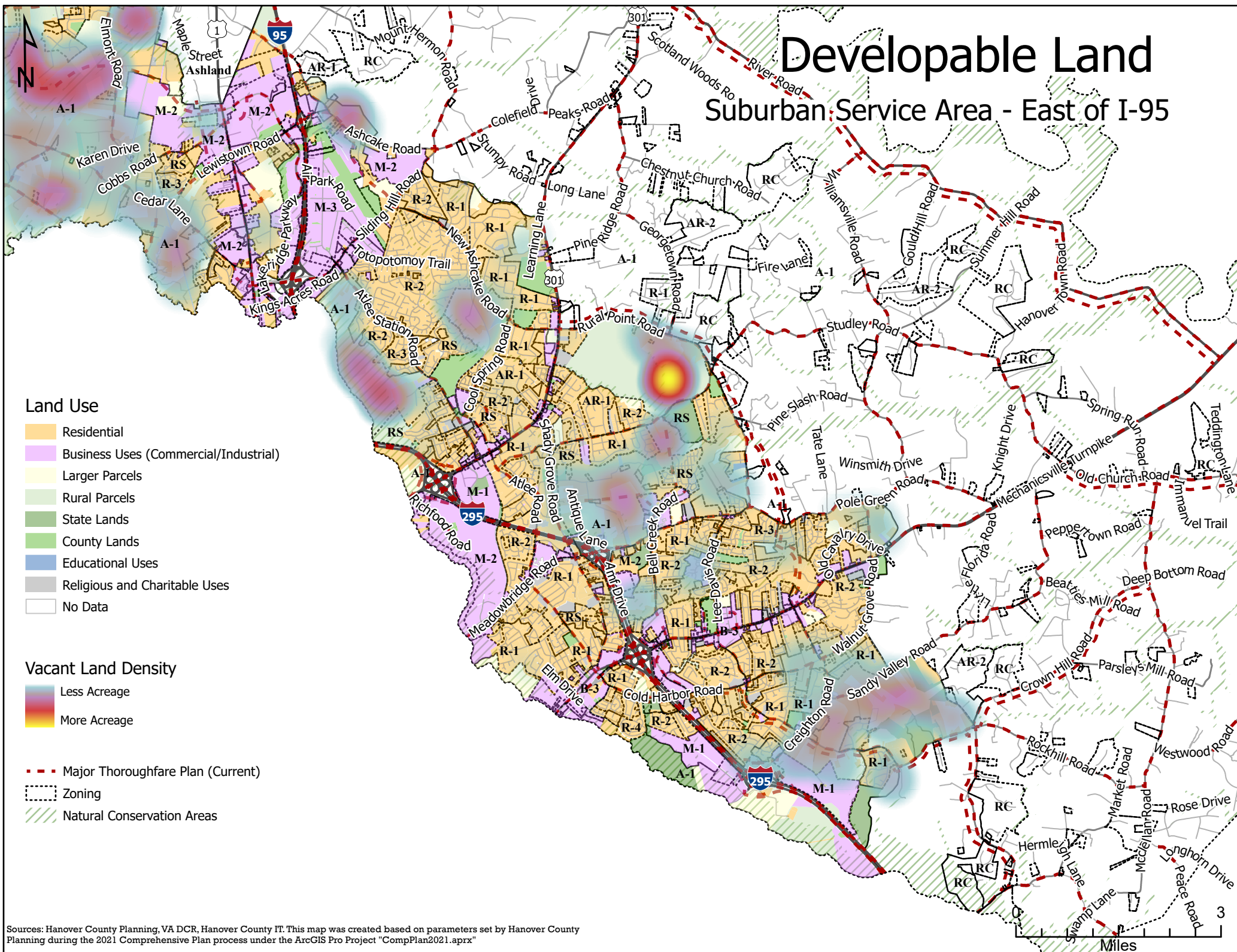
Land Use

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- Business Uses (Commercial/Industrial)
- Larger Parcels
- Rural Parcels
- State Lands
- County Lands
- Educational Uses
- Religious and Charitable Uses
- No Data

Vacant Land Density

- Less Acreage
- More Acreage

- Major Thoroughfare Plan (Current)
- Zoning
- Natural Conservation Areas



Developable Land

Suburban Service Area - North of I-95

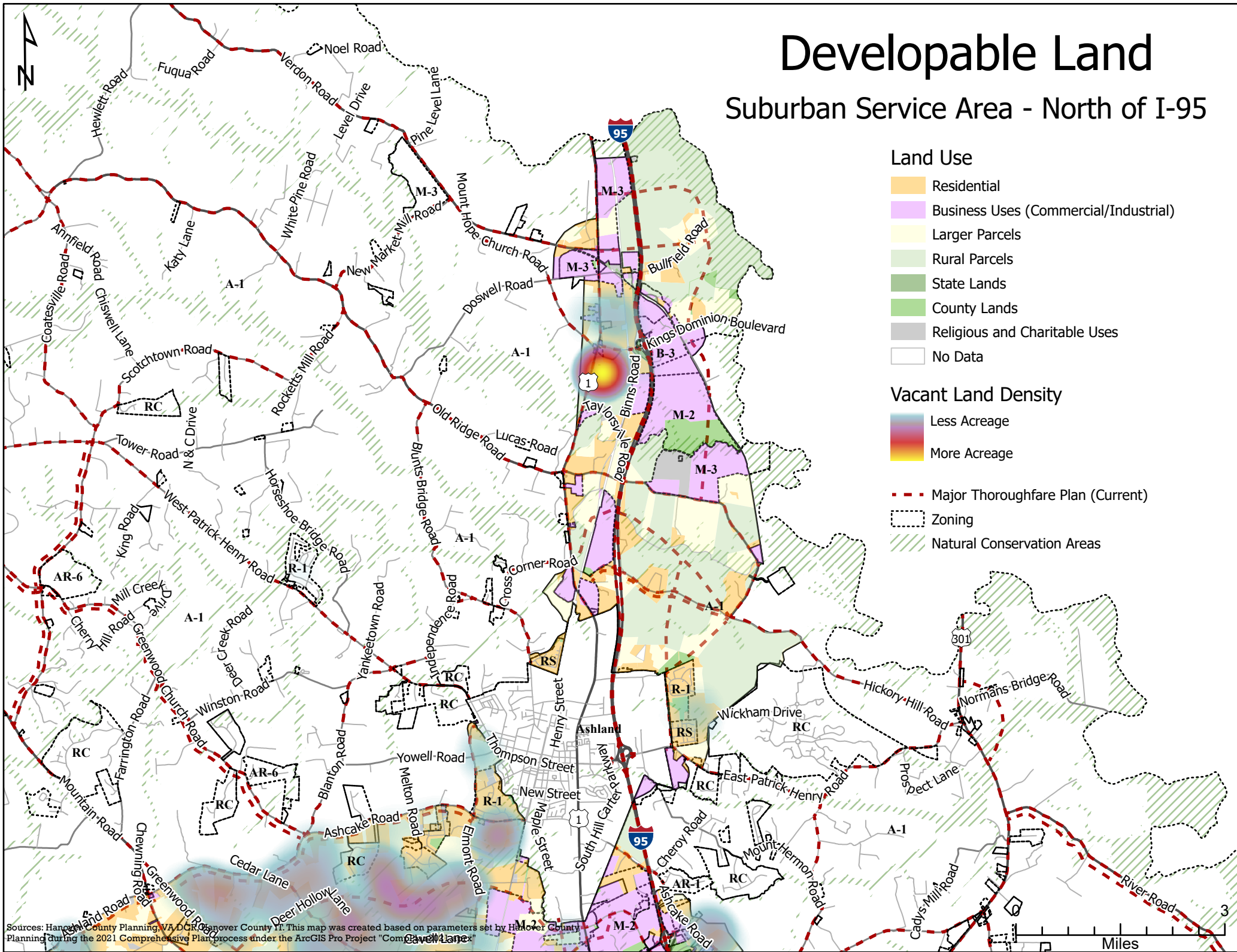
Land Use

- Residential
- Business Uses (Commercial/Industrial)
- Larger Parcels
- Rural Parcels
- State Lands
- County Lands
- Religious and Charitable Uses
- No Data

Vacant Land Density

- Less Acreage
- More Acreage

- Major Thoroughfare Plan (Current)
- Zoning
- Natural Conservation Areas



Developable Land

Suburban Service Area - West of I-95

Land Use

- Residential
- Business Uses (Commercial/Industrial)
- Larger Parcels
- Rural Parcels
- State Lands
- County Lands
- Religious and Charitable Uses
- No Data

Vacant Land Density

- Less Acreage
- More Acreage

- Major Thoroughfare Plan (Current)
- Zoning
- Natural Conservation Areas

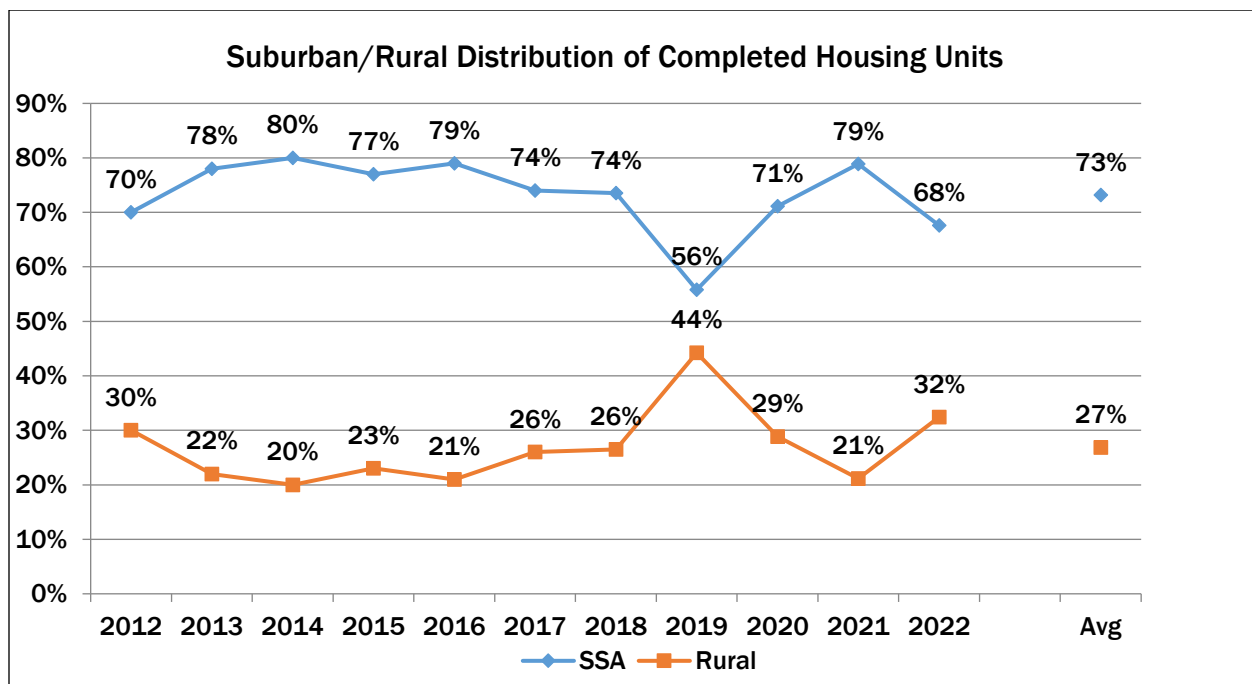


ATTACHMENT #3

Growth Management Data (FY22)

Residential Growth Distribution (Suburban/Rural)

The Hanover County Comprehensive Plan identifies the Suburban Service Area (SSA) as the area in which suburban development will be concentrated (along with the majority of commercial and industrial development). The SSA is planned to accommodate 70% of residential growth over a 20-year planning horizon. In FY22, 651 new residential units were completed countywide (excluding the Town of Ashland). 68% of those new units were located within the SSA, with the remaining 32% located within rural areas.

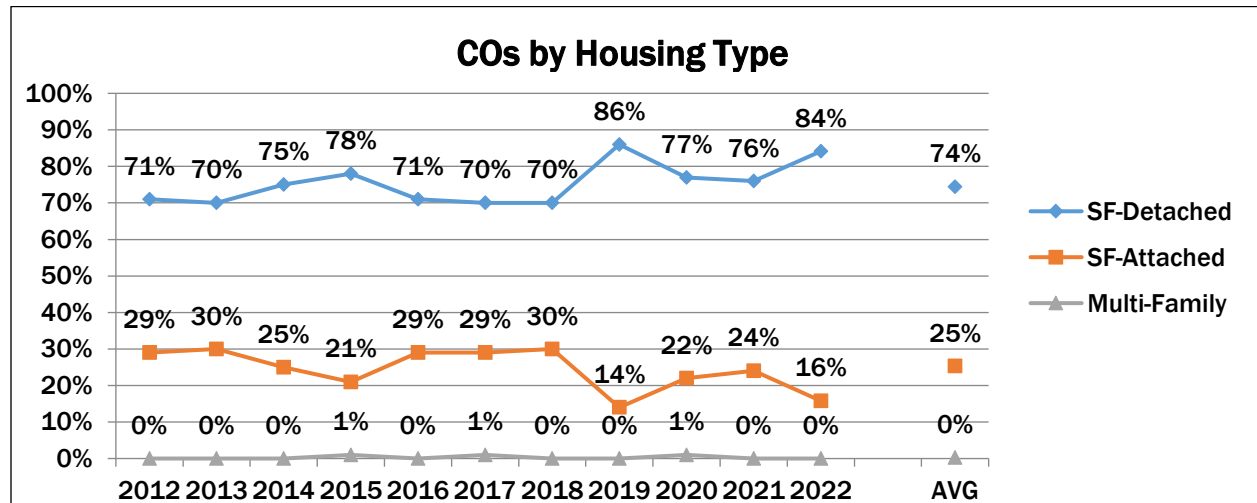


Hanover County's land use policies have directed growth to the SSA since the early 1980s, with the intent of preserving the character of rural areas and improving the efficiency of delivering high-quality public services to residents. For the past 10 years, the distribution of residential development between the SSA and rural areas has generally followed the 70%/30% suburban/rural split forecast in the Comprehensive Plan. FY19 was an anomaly, when the suburban to rural development distribution fell to 56% and 44% respectively.

Housing Types

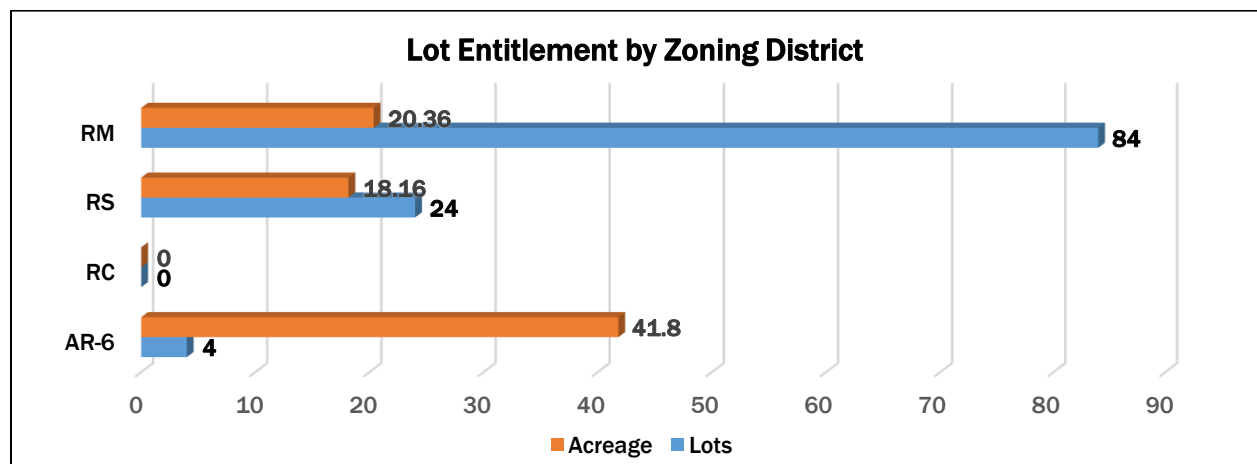
The Comprehensive Plan encourages development of a range of housing types to meet the varied needs of citizens. New units completed in FY22 included a mix of attached and detached housing types:

- 84% of completed units were single-family detached (SFD) residences;
- 16% were single-family attached (SFA) units (townhouses generally); and
- 0% were multi-family units.



Accommodating Future Growth

The Board of Supervisors reviewed and approved several residential rezoning requests in FY22. In total, more than 80.32 acres were rezoned to facilitate development of up to 112 residential units. Some of these planned developments are suburban in character (with attached and/or detached units), while others accommodate low-density, large-lot residential development in rural areas.



These zoned lots contribute to the building lot inventory. Building lot inventory is based upon:

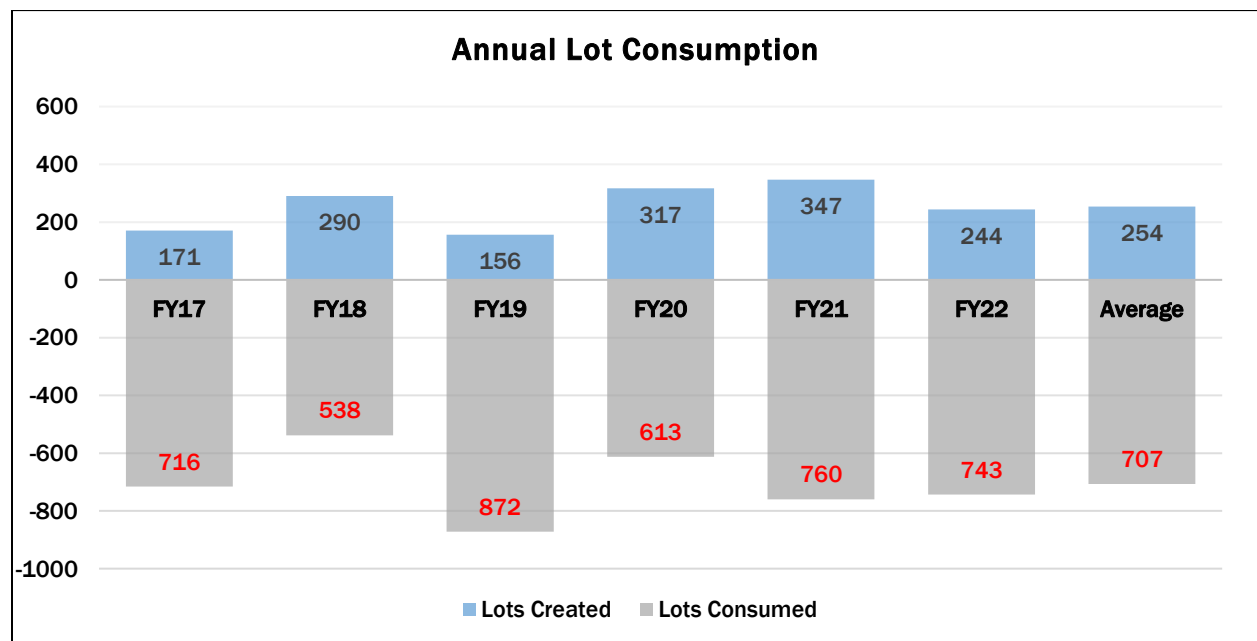
- The number of zoned available lots as of July 1, 2021;
- Adding the number of lots zoned during FY22;
- Adding the number of A-1 (Agricultural) lots that were recorded in FY22;
- Adding lots created through the Homestead and Family Subdivision processes; and
- Subtracting the number of lots for which residential building permits were issued in FY22.

This analysis does not include the Town of Ashland. The results of this analysis are contained in the following chart.

Residential Lot Inventory (July 1, 2021)	3,104
Residential Units Approved	+244
Residential Units Permitted*	-743
Ending Residential Lot Inventory (June 30, 2022)	2,605

*Data regarding the number of building permits issued provided by Building Inspections.

As the following chart suggests, more lots are being consumed than are being created. This is an ongoing trend dating to at least FY17.



Economic Development

In FY22, several site plans were approved for commercial and industrial development within the SSA. The following chart show the five largest projects by square footage of building space. These projects combined represent an increase of nearly 3.1 million square feet of new commercial and industrial space with concurrent investment in materials and equipment.

