September 14, 2022

Directors of the Economic Development Authority,

Be advised the enclosed "Albemarle County Land Use Buildout" report (dated September 13, 2022) is still in draft form and is being provided for discussion purposes at the EDA's meeting on September 20, 2022. Chapter 6 and Chapter 8 are being finalized and are not included in this draft.

The presentation to the EDA from the consultant (Jessica Rossi at Kimley-Horn) will focus on the non-residential sections of the report. The contents of Chapter 7, which begins on page 52, will be emphasized.

Please contact the Economic Development Office if you have any questions.

**DRAFT**

# Albemarle County Land Use Buildout

September 13, 2022

# Table of Contents

# Chapter 1: Introduction

## Study Overview

Albemarle County is beginning a Comprehensive Plan (or 'Comp Plan') update. The Comp Plan update process is expected to be completed in the year 2024 and will establish a 20-year guiding document for the County. Because it is a 20-year planning horizon, the Comp Plan update process is being called Albemarle 2044, or AC44 for short. AC44 will be a four phased process, with the first phase focusing on Planning for Growth. This phase includes a review and evaluation of the County's current Growth Management Policy. To properly evaluate the current policy, it is important to establish an understanding of the existing land use and future growth projections for the County.

The County's current Growth Management Policy comes from the 2015 Comprehensive Plan. The policy divides Albemarle County into designated Development Areas (currently approximately 5% of the County, or 37 square miles) and the Rural Area (currently approximately 95% of the County, or 690 square miles). The majority of new residential, commercial, retail, office, industrial, and mixed-use development is intended to be located within the County's Development Areas. The Rural Area is envisioned to have limited residential development, and commercial and employment areas are intended to support rural land uses.
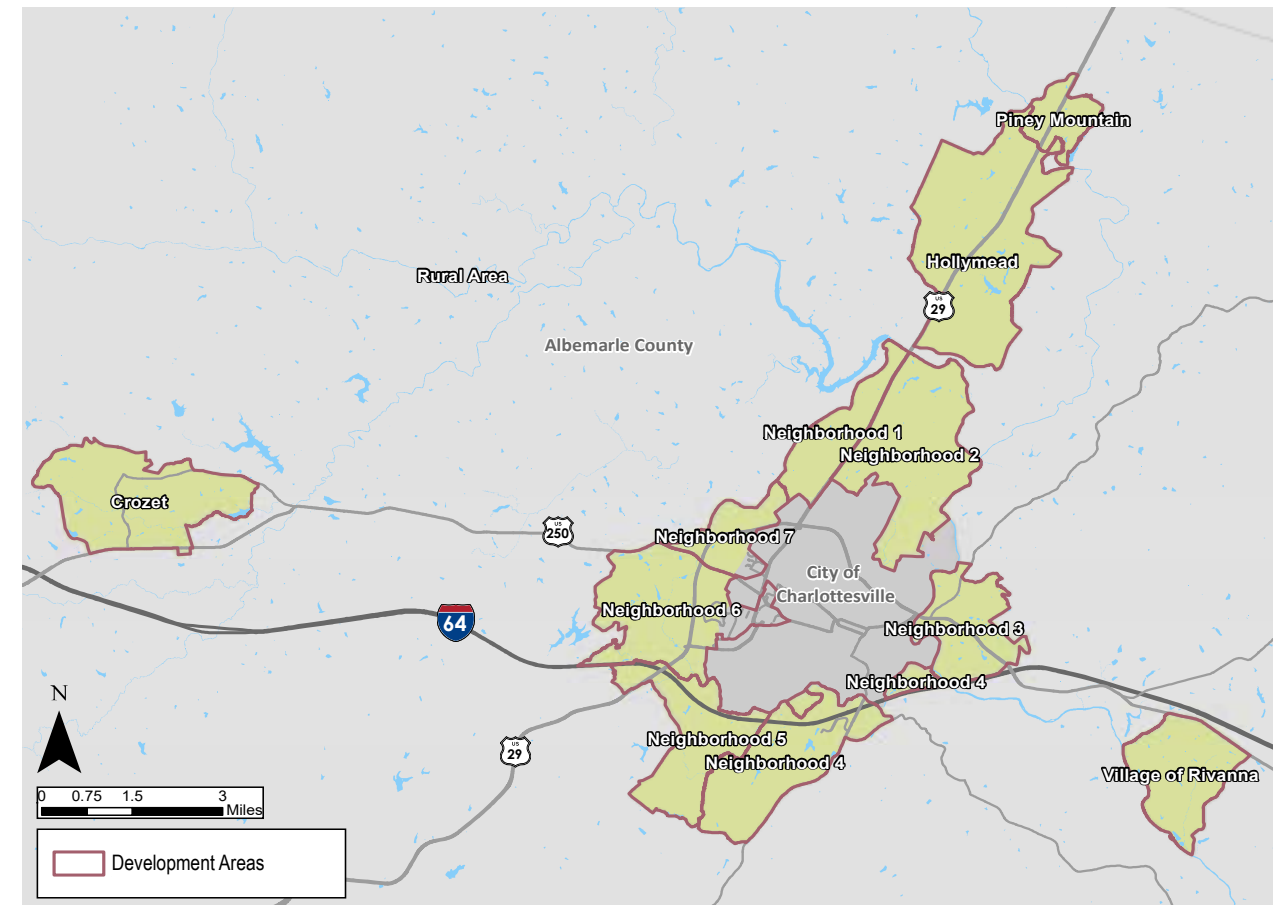


*Albemarle County Development Areas as noted in their Comprehensive Plan*

New uses or businesses in the Rural Area are expected to be mainly agricultural (such as farming) or related to forestry (such as logging). This approach to growth management requires a clear understanding of projected growth and land capacity to ensure Development Area acreage can accommodate future development.

The data and projections in this Land Use Buildout Analysis are intended to be an early step in evaluating the current Growth Management Policy. The analysis is designed to establish an understanding of existing conditions and future growth projections compared with the projected future capacity of the County's designated Development Areas. The Buildout Analysis estimates the potential for the designated Development Areas to accommodate the demand for housing and business growth in the County, looking out over a period of 20-years. This analysis combines an inventory of approved and proposed residential development projects with identification of land capacity to inform growth management policy decisions for the next generation.

## Goals of the Study

Albemarle County engaged a team of staff from Kimley-Horn to assist with the Land Use Buildout Analysis, to support the Planning for Growth phase of AC44 and in conjunction with the existing goals of the 2015 Comprehensive Plan (see Development Areas Objective #4). The goal of this Buildout Analysis is to better understand if the existing land capacity is sufficient to support future development needs and opportunities in Albemarle County, looking out over a period of 20 years.

As the Buildout Analysis is a long-range snapshot based on information currently available, it is necessary to understand that the findings should be used as a guide to inform growth management policy. Future demand forecasts estimated in this analysis use assumptions based on existing conditions, current market trends, and historical development patterns within the County. Estimated buildout totals use assumptions based on future land use designations, infrastructure and environmental features, and open space. It is important to note that the ultimate buildout of County land is contingent upon factors that are not possible to accurately predict, including environmental and economic constraints, a landowners' decision on how to use their property, and the political will to approve projects at the target residential densities or non-residential intensities. All these factors will ultimately determine the final use and buildout of County land and are not able to be fully known in advance.

## How to Use the Study

The study establishes an analysis and dataset for Albemarle County to use in the AC44 process and for future planning and economic development efforts. The findings of this study will help inform the evaluation of the current Growth Management Policy as part of the AC44 project. The dataset is also designed to be updated and manipulated to be used for future phases of AC44 or other future planning efforts. This could include running scenarios on possible adjustments to the future land use designations to evaluate how proposed changes could change an area's capacity for future growth.

This Buildout Analysis details the methodology used to determine the buildable acreage throughout Albemarle County. While it is acknowledged that some new growth will occur in the Rural Areas, this analysis considers whether the Development Areas have sufficient land area and units in the pipeline to accommodate all of the County's expected growth. The Buildout Analysis discusses the current residential development pipeline and the impacts those projects had on the process.

The Buildout Analysis forecasts market demand by land use type for the County on a ten- and 20-year horizon. The Buildout Analysis also includes land use buildout estimates by Development Area. The Buildout Analysis notes the total available acreage, total buildable acreage, known residential projects that are underway or proposed, as well as an estimated buildout based on a set of development assumptions that have been vetted by County staff and regional and local development experts.

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**2015 Albemarle County Comprehensive Plan Development Area Goals & Objectives**

*Goal*:

Albemarle's Development Areas will be vibrant active places with attractive neighborhoods, high quality, mixed-use areas, thriving business and industry, all supported by services, infrastructure, and multimodal transportation networks.

*Objective 4*:

Use Development Area land efficiently to prevent premature expansion of the Development Areas.
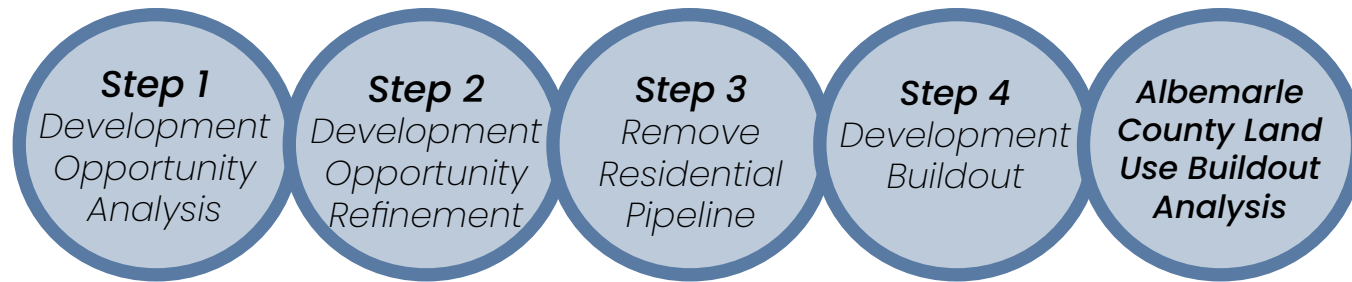
*Strategy 4a*:

Continue to monitor building activity in both the Development Areas and the Rural Area to gain information on the rate of residential and non-residential development in the County.

*Strategy 4b*:

Update the capacity analysis every two years to ensure adequate residential land exists to meet new housing needs.
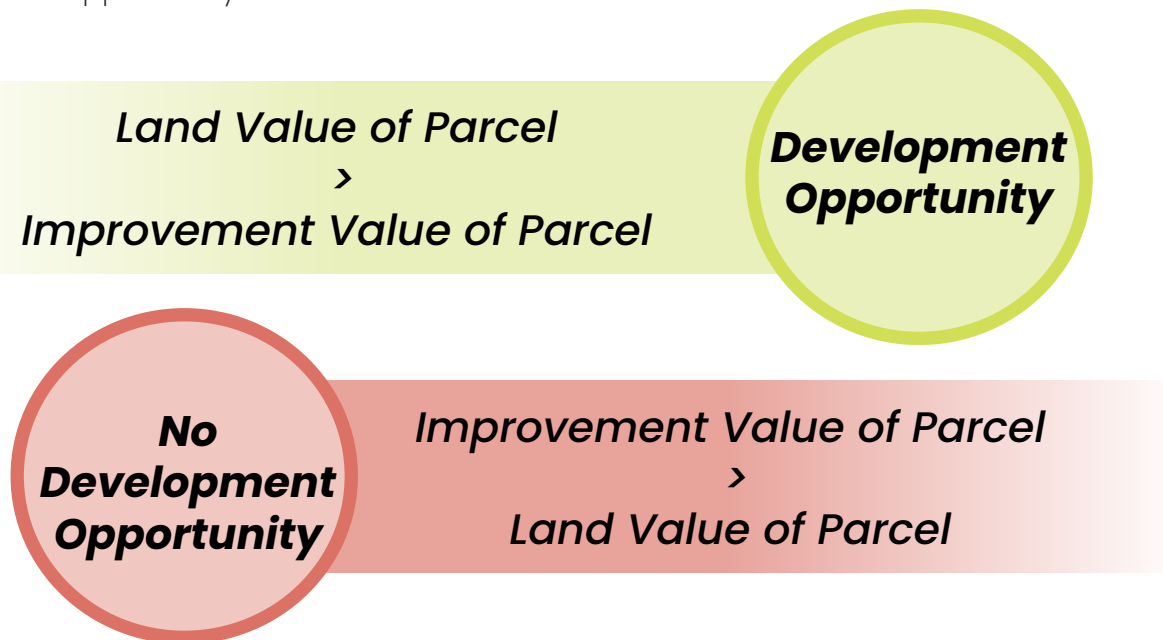
# Chapter 2: Analysis Methodology

To determine the availability of developable land within the County's current Development Areas, the Buildout Analysis relied on a phased model that determined the development opportunity of each parcel in the Development Areas. The first step in the methodology was to run a high-level development opportunity analysis on all parcels in the County's Development Areas. From there, the inventory of parcels was refined with additional criteria based on their land use type and intended use to classify a parcel with opportunity to develop or not.

**Step 1** *Development Opportunity Analysis*

**Step 2** *Development Opportunity Refinement*

**Step 3** *Remove Residential Pipeline*

**Step 4** *Development Buildout*

**Albemarle County Land Use Buildout Analysis**

## Step 1: Initial Development Opportunity Analysis

The opportunity analysis approach compares the current value of land to any existing improvements, such as built structures, for each parcel within the County's Development Areas. Parcels with "development opportunity" refer to parcels that have the potential to receive development or redevelopment within the next 20 years. In these instances, the value of the land is greater than the value of any existing improvements. Properties designated with "no development opportunity" have existing on-site improvements that are valued higher than the land itself. Therefore, the likelihood of development or redevelopment is low. The initial methodology to identify parcels with or without development opportunity is as follows:

*Land Value of Parcel* **›** *Improvement Value of Parcel*

**Development Opportunity**

*Improvement Value of Parcel* **›** *Land Value of Parcel*

**No Development Opportunity**

## Step 2: Development Opportunity Refinement by Land Use

After the team completed the initial opportunity analysis, the second step focused on properties' future land use designations as identified in the Comprehensive Plan and Master Plans. The team analyzed future land use designations and applied a methodology to each land use based on whether a property's primary land use is designated as residential, commercial, or industrial uses.

In the case that a parcel was designated with a different primary and secondary future land use type, the primary land use type was used. Land use types with multiple uses such as 'mixed-use' were evaluated using a tiered approach. These parcels were evaluated using the residential methodology first, and should the parcel be viable for residential development, the parcel was evaluated using commercial methodology for a final development designation. The methodology for each category is described below.

### Residential Refinement Methodology

The refined residential land buildout calculation adjusted the properties with development opportunity based on acreage and provided an extra layer of exclusions for properties that are unlikely to be developed despite the improvement value being lower than the land value. These exclusions were largely focused on properties that were severely environmentally constrained or have an ownership structure that limited development in perpetuity.

### Residential with Development Opportunity

- Land value > improvement value and parcel > or = 2 acres
- Vacant parcel

### Residential without Development Opportunity

- Parcel is completely in Conservation Easement
- Parcel is completely in Floodplain
- Improvement value > land value
- Parcel is part of HOA open space
- County-owned and used for stormwater management, schools, road ROW, water/sewer utilities, public park, or other use that precludes residential development
- Owned by the University of Virginia

## *Commercial Refinement Methodology*

Tax assessor valuation for commercial properties take into account building occupancy and retail sales, which created miscalculations in the first phase analysis. As such, the second phase specifically marked commercial properties of certain types as no development opportunity, including big box retailers, automotive-related uses, and mini-warehouse/storage facilities. These property types were excluded due to their low redevelopment rates in Albemarle County.

### *Commercial with Development Opportunity*

- Land value > improvement value
- Parcel is designated commercial or mixed use in the Comp Plan and/or is zoned Highway Commercial (HC), Commercial Office (CO), Commercial (C1), Planned Development Shopping Center (PDSC), Planned Development Mixed Commercial (PDMC)

### *Commercial without Development Opportunity*

- Improvement value > land value
- Big box stores (e.g. Walmart, Target, Lowe's, etc.)
- Auto stores/service/dealers
- Mini-warehouse or storage built after 2000

## *Industrial Refinement Methodology*

Consistent with commercial properties, industrial parcels required additional refinement to the initial analysis due to methodology utilized in appraising properties for tax purposes. The second phase analysis incorporates base zoning designations that support industrial development, property size, and a reduction in the ratio between land value and improvement value as noted below.

### *Industrial with Development Opportunity*

- Parcel is designated Office/Flex/R+D/LI in the Comp Plan and/or is zoned Light Industrial or Heavy Industrial or Planned Industrial (PDIP)
- Parcel is > or = 2 acres

### *Industrial without Development Opportunity*

- Improvement Value is Greater or Equal to 40% of the Total Valuation
  - AND/OR Improvement Value is Greater or Equal to $1.5M

## Step 3: Identify/Remove Known Residential Development Pipeline

Pipeline projects are projects currently under review, approved, or under construction in the County. Development pipelines were inventoried for residential and non-residential land uses; however, they are treated separately in this analysis. Pipeline projects in the 'under review' category ultimately may not be approved or may be approved at a different density or mix of uses than currently proposed.

As most of the residential projects are on vacant properties, the parcels were initially flagged as properties with development opportunity. To support an accurate residential buildout, the pipeline properties, updated in February 2022, have been removed as properties with development opportunity in the buildout analysis. The total yield from the proposed or approved development plans have been added into the final buildout numbers.

Non-residential projects represent total approved or under review square footage, regardless of land use type. The inability to distinguish between non-residential land use types is based on the County's application, review, and approval process. Since we do not have specific land uses by type in the future non-residential development pipeline, these properties and totals were not removed from the model.

## Step 4: Theoretical Maximum Buildout

After netting out the known residential pipeline projects, a set of development assumptions were applied to the remaining parcels according to their future land use. The resulting development totals represent the estimated future buildout in the County's Development Areas, based on future land use designations.

### *Description of Future Land Use Categories*

The future land use categories used to define the assumed buildout are described in the Albemarle County Comprehensive Plan including the Master Plans and Small Area Plans. Categories with similar intended uses were combined to streamline the analysis; categories with no developable land available were removed from consideration.

The following categories were used:

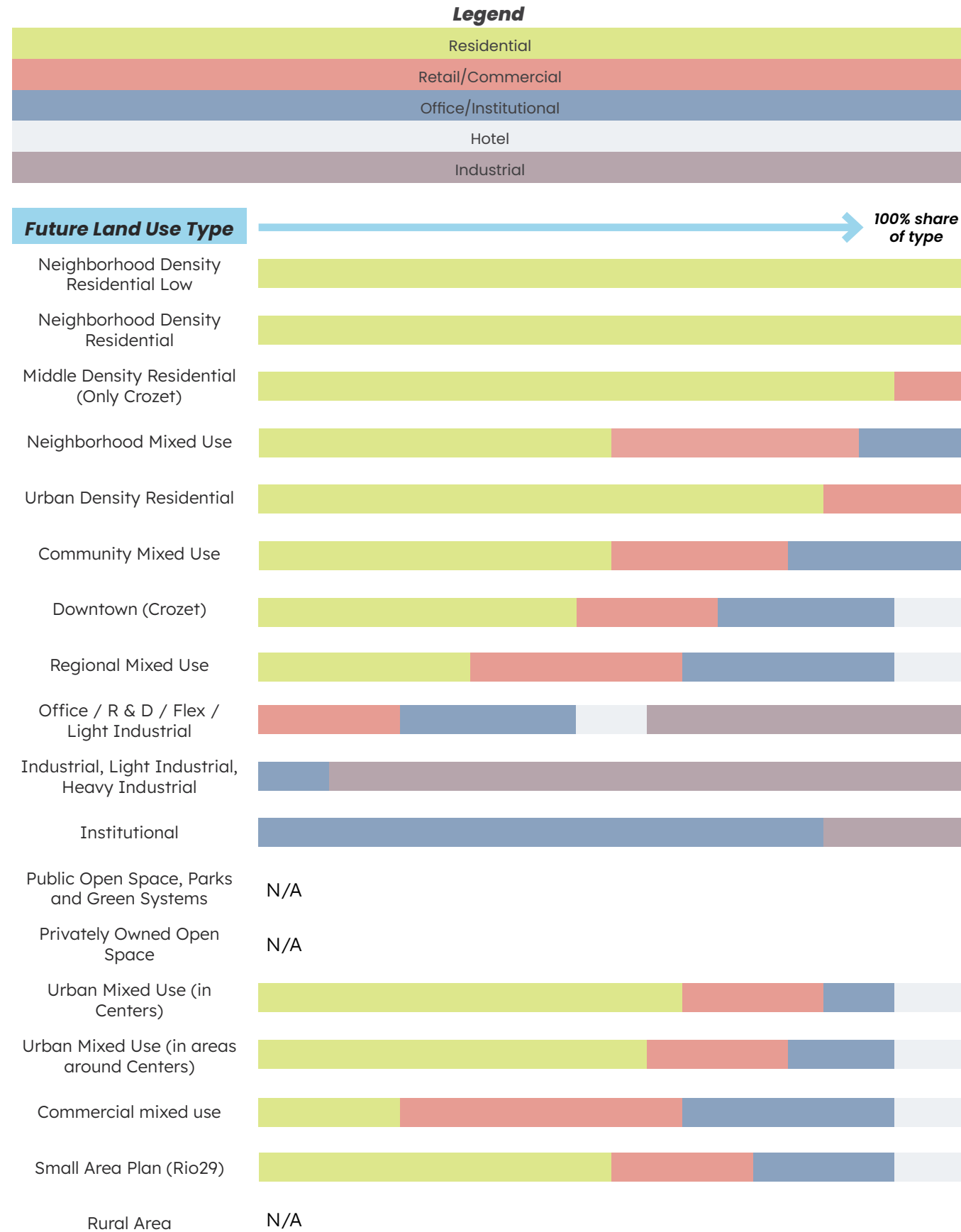| Albemarle County Future Land Use Categories |
| --- |
| Neighborhood Density Residential Low |
| Neighborhood Density Residential |
| Middle Density Residential |
| Neighborhood Mixed Use |
| Urban Density Residential |
| Community Mixed Use |
| Downtown (Crozet) |
| Regional Mixed Use |
| Office / Research & Development / Flex / Light Industrial or Employment Mixed Use, or Mixed Office R & D / Flex and Commercial |
| Industrial, Light Industrial, Heavy Industrial |
| Institutional |
| Public Open Space, Parks and Green Systems, Potential Public Park |
| Privately Owned Open Space; Environmental Features |
| Urban Mixed Use (in Centers) |
| Urban Mixed Use (in areas around Centers) |
| Commercial Mixed Use |
| Small Area Plan (Rio29) |
| Rural Area |

## *Buildout Assumptions by Future Land Use Category*

After determining the amount of developable land in each land use type, the County buildout was determined through density and intensity assumptions for residential units, retail and commercial square foot per acre, office and institutional square foot per acre, hotel rooms per acre, and industrial square foot per acre. Each of these categories received inputs guided by the Albemarle County Comprehensive Plan. The graphic on page 10 summarizes the land use mix buildout assumptions utilized for each and use type. The complete assumption table is in Appendix A.

Before applying the assumptions to the developable land, between 10-20% of each parcel's acreage was removed to account for infrastructure and environmental needs, such as roads, parking, and stormwater management. Similarly, between 10-20% of the acreage was also taken off for open space (both required open space and designated environmental features) and to account for parcels that have split designations with Parks/Green Systems (or equivalent) as a secondary land use designation. These assumptions were designed to create a conservative, but realistic, approach to determining how much land can be developed without encroaching on designated open space and environmental features (including stream buffers, floodplain, and steep slopes). The table on Page 11 denotes the percentage decrease for infrastructure, environmental impacts, and open space by land use category. It should be noted that a standard, medium, and high scale was used for open space decrease to account for Development Areas with greater environmental impacts.

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## Buildout Assumptions by Future Land Use Category

**Legend**

| | |
|---|---|
| Residential | |
| Retail/Commercial | |
| Office/Institutional | |
| Hotel | |
| Industrial | |

**Future Land Use Type** — 100% share of type →



- Neighborhood Density Residential Low
- Neighborhood Density Residential
- Middle Density Residential (Only Crozet)
- Neighborhood Mixed Use
- Urban Density Residential
- Community Mixed Use
- Downtown (Crozet)
- Regional Mixed Use
- Office / R & D / Flex / Light Industrial
- Industrial, Light Industrial, Heavy Industrial
- Institutional
- Public Open Space, Parks and Green Systems — N/A
- Privately Owned Open Space — N/A
- Urban Mixed Use (in Centers)
- Urban Mixed Use (in areas around Centers)
- Commercial mixed use
- Small Area Plan (Rio29)
- Rural Area — N/A

## Buildout Decreases for Environmental (ENV) and Infrastructure (INF) Impacts

| Future Land Use Type | % Decrease for INF & ENV | % Decrease for Open Space STANDARD | % Decrease for Open Space MEDIUM | % Decrease for Open Space HIGH |
|---|---|---|---|---|
| Neighborhood Density Residential Low | 5% | 10% | 15% | 20% |
| Neighborhood Density Residential | 5% | 10% | 15% | 20% |
| Neighborhood Mixed Use | 10% | 10% | 15% | 20% |
| Urban Density Residential | 20% | 10% | 15% | 20% |
| Community Mixed Use | 20% | 20% | 25% | 30% |
| Downtown (Crozet) | 20% | 10% | 15% | 20% |
| Regional Mixed Use | 15% | 10% | 15% | 20% |
| Office / R & D / Flex / Light Industrial | 15% | 10% | 15% | 20% |
| Industrial, Light Industrial, Heavy Industrial | 10% | 10% | 15% | 20% |
| Institutional | 10% | 65% | 70% | 75% |
| Urban Mixed Use (in Centers) | 20% | 10% | 10% | 10% |
| Urban Mixed Use (in areas around Centers) | 20% | 10% | 10% | 10% |
| Commercial Mixed Use | 20% | 10% | 15% | 20% |
| Small Area Plan (Rio29) | 20% | 10% | 15% | 20% |
| Middle Density Residential (Only Crozet) | 10% | 10% | 15% | 20% |

| Development Area Open Space Designation | | |
|---|---|---|
| **Standard** | **Medium** | **High** |
| Neighborhood 1 | Neighborhood 3 | Neighborhood 4 |
| Neighborhood 2 | Hollymead | Neighborhood 5 |
| Neighborhood 7 | Crozet | Neighborhood 6 |
| Piney Mountain | | Village of Rivanna |

## *Description of Existing Zoning Districts*

Albemarle County's Zoning Ordinance defines each of the 21 zoning districts. Each parcel in the County is zoned as one of these districts. Developable acreage totals were estimated by zoning district after the Land Use Buildout Analysis was completed. See below for a full list of the zoning districts. It should be noted that the Village Residential, Monticello Historic District, and Rural Areas districts are only located in the Rural Areas.

| Albemarle County Existing Zoning Districts |
| :---: |
| R1 Residential |
| R2 Residential |
| R4 Residential |
| R6 Residential |
| R10 Residential |
| R15 Residential |
| Planned Unit Development |
| Planned Residential Development |
| Neighborhood Model District |
| Village Residential |
| C1 Commercial |
| CO Commercial Office |
| Highway Commercial |
| Planned Development Shopping Center |
| Planned Development Mixed Commercial |
| Downtown Crozet District |
| Light Industry |
| Heavy Industry |
| Planned Development Industrial Park |
| Monticello Historical District |
| Rural Areas |

# Chapter 3: Development Pipeline

## Defining Development Pipeline

The "Development Pipeline" is a term for a project's progression through Albemarle County Community Development's permitting process. Pipeline projects are those that are under various stages of review (whether for a rezoning, site plan, or building permit), or projects that have all approvals completed, but are not yet built. County staff provided a list of the residential pipeline projects for this analysis, updated as of February 2022. Residential pipeline projects (including any residential units within mixed-use developments) make up most of all projects submitted for approval. Inventories of both residential and non-residential pipeline projects are presented in this Chapter.

Site plan approvals are typically valid for a short period after approval to ensure that the plans submitted are consistent with the most recent regulations, although this period can be extended by other entities including the General Assembly. "Legislative Review" applications, also known as rezonings and special use permits, typically feature more uncertainty in timing due to the longer review process, which introduces additional risk and uncertainty for developers regarding financing and market conditions. These projects often ask for more units than will be built, and sometimes can wait for years or decades before beginning construction. For example, several large rezonings approved in the early 2000s have developed later (or less) than expected due to the "Great Recession" of 2007-2009. Another example is Old Trail Village development in Crozet, which was initially approved in 2005 for a total of 2,200 units. As the development is completed, it is expected to deliver closer to 1,200 total units.

## Approved and Under Review Residential Development Projects

As of February 2022, an estimated 9,377 unbuilt units were in the approved development pipeline, with about 43% of these units located within the Community of Hollymead in large planned developments such as Hollymead Town Center, North Pointe, and Brookhill. Given that it is a common occurrence for larger rezonings in the pipeline to not utilize all the original approved capacity, the pipeline figure included likely overestimates the actual final buildout. However, since final buildout of these projects is not able to be predicted, no adjustments have been made to the estimated 9,377 unbuilt units.

An estimated additional 5,504 units were identified as "under review" within the pipeline projects as of February 2022. These include legislative review applications (rezonings and special use permits) and by-right applications (for projects permitted under the property's existing zoning district). Approximately 4,612 of these units are part of legislative review applications, and the remaining 892 are part of by-right applications. The 4,612-unit estimate could change as the legislative review projects work their way through the review process before potential final approval. Since the County must approve any by-right developments that meet all applicable regulations, the by-right units are unlikely to change significantly.

## Summary of Approved Development Pipeline, 2022

| Development Area | Max Units Approved | Units Built | Remaining Unbuilt Units |
|---|---|---|---|
| Neighborhood 1 | 1,186 | 299 | 887 |
| Neighborhood 2 | 901 | 647 | 254 |
| Neighborhood 3 | 389 | 88 | 301 |
| Neighborhood 4 | 431 | 260 | 171 |
| Neighborhood 5 | 817 | 117 | 700 |
| Neighborhood 6 | 0 | 0 | 0 |
| Neighborhood 7 | 197 | 142 | 55 |
| Crozet | 2,875 | 1,083 | 1,791 |
| Hollymead | 5,114 | 464 | 4,650 |
| Piney Mountain | 781 | 622 | 159 |
| Village of Rivanna | 633 | 224 | 409 |
| **Total** | **13,324** | **3,947** | **9,377** |

*Source: Albemarle County, February 2022*

## Summary of Under Review Development Pipeline, 2022

| Development Area | Max Units Under Review |
|---|---|
| Neighborhood 1 | 360 |
| Neighborhood 2 | 707 |
| Neighborhood 3 | 40 |
| Neighborhood 4 | 98 |
| Neighborhood 5 | 1,548 |
| Neighborhood 6 | 0 |
| Neighborhood 7 | 525 |
| Crozet | 526 |
| Hollymead | 1,700 |
| Piney Mountain | 0 |
| Village of Rivanna | 0 |
| **Total** | **5,504** |

*Source: Albemarle County, February 2022*

The following map shows development pipeline projects that are approved (shown in **blue**) and under-review (shown in **yellow**). It should be noted that the entire neighborhood boundaries are used for each development, even though the remaining units in the pipeline may take up only a small section of the overall neighborhood. For example, the full boundaries of Avinity are shown, even though only an estimated 14 units remain in the pipeline. As shown on the following table, there are a combined 14,881 units that have either been approved or are under review that could be developed in the future. Hollymead contains 42.6% of the total buildable units in the pipeline, followed by Crozet (15.6%) and Neighborhood 5 (15.1%).
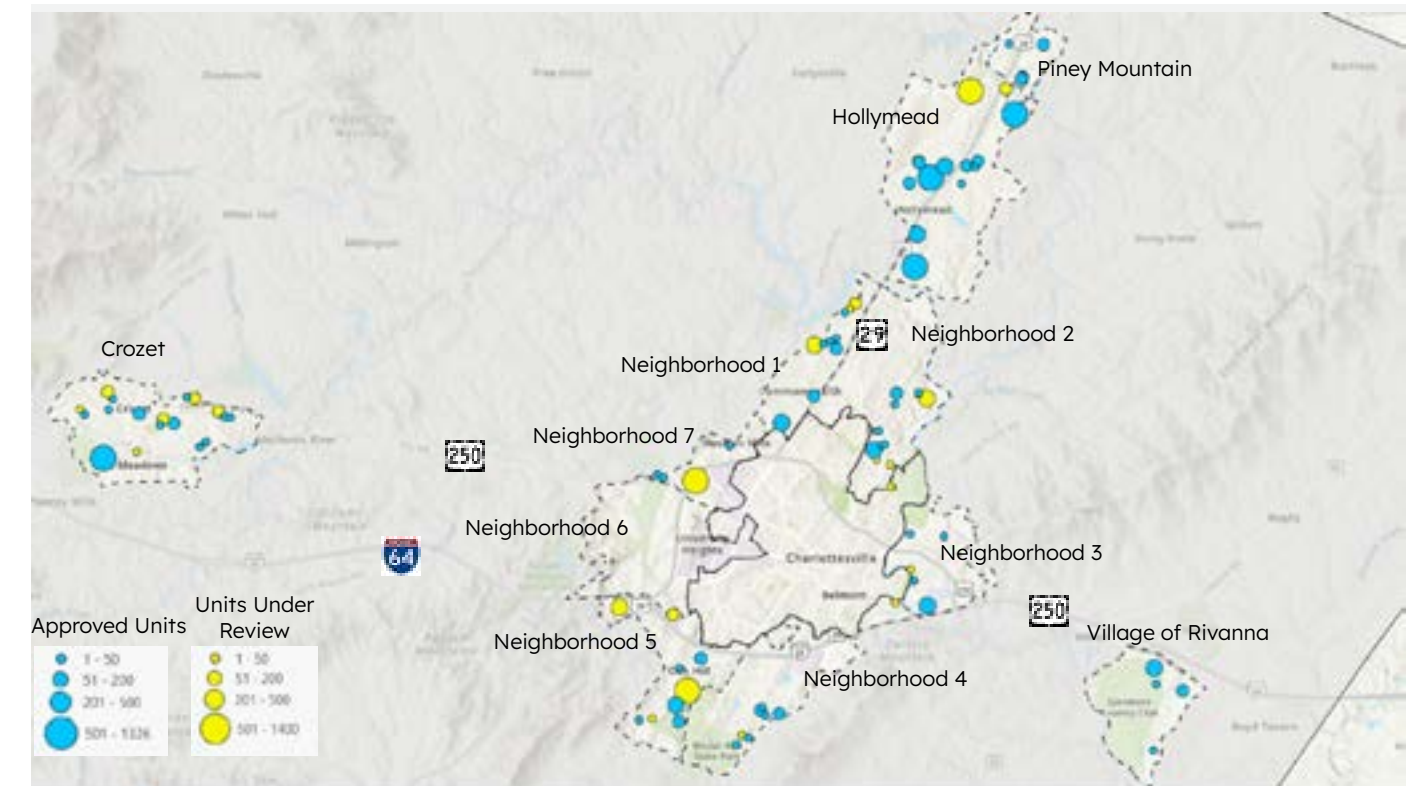


*Pipeline Project Locations within Albemarle County*

## Summary of Approved & Under Review Development Pipeline, 2022

| Development Area | Remaining Approved Units | Max Units Under Review | Total Buildable Units | Share of Total |
|---|---|---|---|---|
| Neighborhood 1 | 887 | 360 | 1,247 | 8.4% |
| Neighborhood 2 | 254 | 707 | 961 | 6.5% |
| Neighborhood 3 | 301 | 40 | 341 | 2.4% |
| Neighborhood 4 | 171 | 98 | 269 | 1.8% |
| Neighborhood 5 | 700 | 1,548 | 2,248 | 15.1% |
| Neighborhood 6 | 0 | 0 | 0 | 0.0% |
| Neighborhood 7 | 55 | 525 | 580 | 3.9% |
| Crozet | 1,791 | 526 | 2,317 | 15.6% |
| Hollymead | 4,650 | 1,700 | 6,350 | 42.6% |
| Piney Mountain | 159 | 0 | 159 | 1.1% |
| Village of Rivanna | 409 | 0 | 409 | 2.7% |
| **Total** | **9,377** | **5,504** | **14,881** | **100.0%** |

Approved and under review residential pipeline projects by Development Area, detailed by individual project, are presented in the Appendix of this report. These estimates were current as of February 2022. Since that time, projects in the under-review pipeline may have been approved, new projects may have been submitted that are now under review, and additional units may have been built for the approved pipeline projects.

# Approved and Under Review Non-Residential Development Projects

The non-residential pipeline is an estimate (based on County records and data) of the total square footage of non-residential uses that are currently under review or approved. The non-residential pipeline in this analysis differs from residential pipeline because non-residential land uses are not differentiated in the pipeline between land use (retail, office, industrial, hospitality, etc.). This is because in many cases the distinction is not clearly made through the entitlement process and, in some cases, projects do not specify a maximum approved square footage. As such, the non-residential pipeline was not able to be accurately incorporated into the land use buildout analysis because approved projects do not specify what types of uses will be built. At the time of this analysis, the non-residential pipeline projects have not been mapped. This effort is underway and can be incorporated into this analysis at a subsequent update.

There is more than 8.1 million square feet non-residential space approved and unbuilt in the pipeline. There is also an additional 668,041 square feet that is currently under review. More than 5.0 million square feet, or 62.1 percent, of the remaining approved and unbuilt non-residential space is located in the Hollymead Development Area, which includes the North Fork Research Park. North Fork is the largest non-residential project that is approved in the pipeline currently with more than 3.0 million square feet remaining to be built.

| Development Area | Square Feet Under Review | Square Feet Approved | Square Feet Built | Remaining Approved Unbuilt Square Feet |
|---|---|---|---|---|
| **Neighborhood 1** | 11,180 | 1,904,600 | 573,473 | 1,331,127 |
| **Neighborhood 2** | 6,049 | 117,150 | 54,614 | 62,536 |
| **Neighborhood 3** | 1,500 | 1,106,323 | 760,825 | 345,498 |
| **Neighborhood 4** | 89,212 | 550,600 | 453,663 | 96,937 |
| **Neighborhood 5** | 435,000 | 451,000 | 0 | 451,000 |
| **Neighborhood 6** | 11,600 | 434,722 | 0 | 434,722 |
| **Neighborhood 7** | 0 | 28,930 | 0 | 28,930 |
| **Crozet** | 113,500 | 306,500 | 104,843 | 185,657 |
| **Hollymead** | 0 | 6,297,432 | 1,246,001 | 5,051,431 |
| **Piney Mountain** | 0 | 178,800 | 90,576 | 88,224 |
| **Village of Rivanna** | 0 | 60,000 | 0 | 60,000 |
| **Total** | **668,041** | **11,436,057** | **3,283,995** | **8,136,062** |

A similar review of the non-residential pipeline was last completed in 2013 and included in the 2015 Comprehensive Plan References. The total pipeline non-residential square footage was very similar across the two inventories. However, 2013 did not include full square footage approval for North Fork Research Park, otherwise the totals would have been nearly identical for approved and unbuilt. This suggests some level of consistency year over year between total approvals and the amount remaining to be built.

Many of the non-residential projects are planned developments (e.g. Neighborhood Model District and Planned Shopping Center) that allow a variety of types of uses. These projects often take years to build out, if they ever completely build out. While many allow light industrial/flex uses per their approved rezonings, their sites may still not be suitable to accommodate industrial users (due to constraining factors that are described in Chapter 7), and they may be more likely to instead develop with other types of uses.
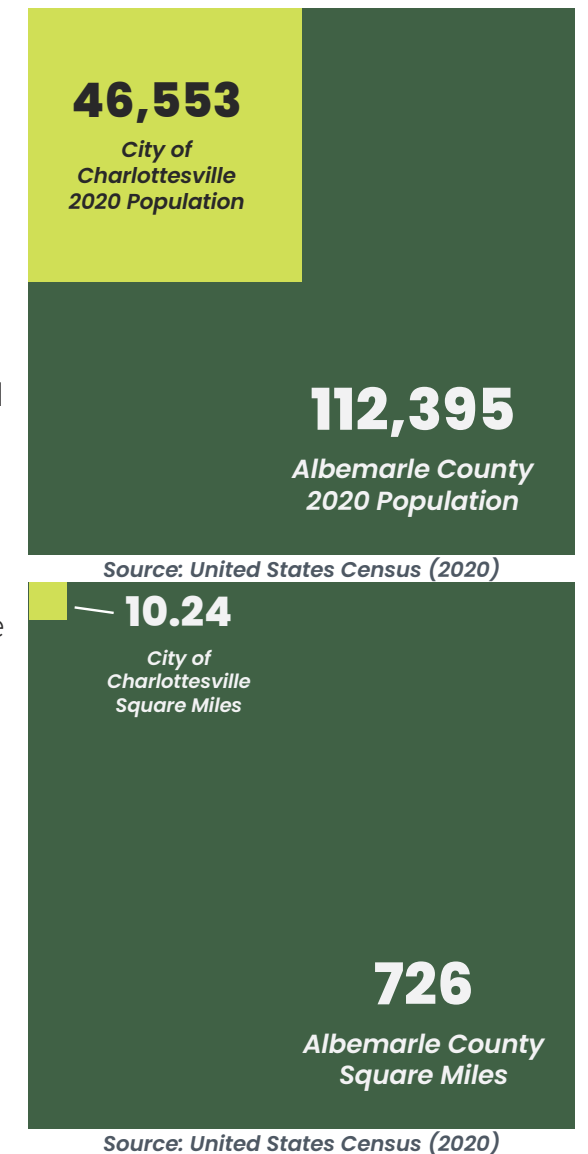
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# Chapter 4: Looking to the Future— Population and Market Projections

This section provides an estimated market demand forecast for 20-years of growth in Albemarle County. The market demand forecasts provide an estimated number of residential units, retail, office, and industrial square feet, and the number of hotel rooms expected to be built in Albemarle County over the next 20 years. The demand forecasts are estimates that are based on projected population growth combined with the historic pace of growth over the last decade in the County. While these forecasts are based on historic growth patterns and projected growth and demand, they are predicated on the assumption that conditions present in the past will continue. These forecasts do not consider potential growth limitations like the availability of land, the cost of development, or environmental constraints. The purpose of this section is to provide a high-level guide to estimate the need for housing and non-residential development to support the projected population growth over a 20-year horizon. We will consider how this compares to the potential buildout of the Development Areas.

## Population Trends and Projections

As of 2020, Albemarle County had an estimated 112,395 residents, an increase of 13,425 people, or 13.6%, from 2010. The City of Charlottesville reached 46,553 residents in 2020, an increase of 3,078 people or 7.1% over the last decade. The Town of Scottsville is included in the total population for Albemarle County as part of the US Census, however, Scottsville is an independent town that governs its own land use and zoning. Population growth varied in surrounding localities during the same period. Growth rates were strongest north and east of Albemarle County where Greene County grew by 11.7%, Louisa County increased by 13.4%, and Orange County increased by 8.3%. Counties to the south and west of Albemarle County experienced slower growth rates, including Buckingham County with a 1.9% decrease since 2010 and Nelson County which lost 1.6% of the population.

**46,553**
*City of Charlottesville 2020 Population*

**112,395**
*Albemarle County 2020 Population*

*Source: United States Census (2020)*

**10.24**
*City of Charlottesville Square Miles*

**726**
*Albemarle County Square Miles*

*Source: United States Census (2020)*

Combined, the Development Areas and the Town of Scottsville had a total estimated population of 64,682 people in 2020. Although the Development Areas account for approximately 5% of the total land mass in Albemarle County, they contain 57.5% of the population. The estimated population for the Rural Area is 47,713 people.

## Median Age of Residents

The residents of Albemarle County have a median age of 39.4 years. This is younger than many of the surrounding counties due to the influence of the University of Virginia (UVA). As a point of comparison, Louisa County has a median age of 44.8 years and Orange County's median is 42.0 years. More than 32.0% of the residents in Albemarle County are under the age of 24. However, while the median age is lower than other nearby counties, it has increased since 2010's measure of 37.6. The share of residents aged 65 and over increased from 13.7% to 18.6%.

## Households and Income

The average household size in Albemarle County was 2.42 people based on 2020 American Community Survey (ACS) data. Based on this size, the County had approximately 46,444 households as of the 2020 US Census. The median household income was estimated at $79,880 in Albemarle County, notably higher than most surrounding counties (Orange County's was $71,548 and Louisa County's was $60,975). The City of Charlottesville had a notably lower median of $59,471, which is directly influenced by the student body at UVA.

## Population Projections

Population projections for Albemarle County are based on three third-party socioeconomic data sources, as follows:

- **Weldon Cooper Center for Public Service.** The Weldon Cooper Center for Public Service is part of the University of Virginia's Center for Public Service. The Center provides a variety of services, including research and analytics, government training, and leadership development programs. Efforts under the research and analytics department include demographic estimates and forecasting for counties and cities in Virginia. The Demographics Research Group provides the official annual population estimates for Virginia and its localities. Weldon Cooper's most recent updates were released in 2021, incorporating demographic changes since the 2020 Census.

- **Woods & Poole Economics, Inc.** Woods & Poole is a private entity that produces annual projections for every county in the United States. The methodology is top-down, leveraging forecasts for the entirety of the United States to inform growth in regions, then in counties. Data is provided between the years 1970 and 2040 in one-year increments. Woods & Poole updates their data on an annual basis but has yet to comprehensively incorporate the results of the 2020 US Census.

- **ESRI Business Analyst Online.** ESRI's Business Analyst platform provides socioeconomic trends and forecasts for standard and customized geographies across the world. Forecast guidance is provided for five-year increments. The most recently released data sets from ESRI incorporate ACS data but, like Woods & Poole, have not yet fully incorporated the findings of the 2020 US Census.

The three sources have comparable forecast totals over the next 20 years. Net new population growth ranges from 25,815 residents over the 20-year period (ESRI Business Analyst Online) to 30,307 new residents by Woods & Poole. The Weldon Cooper Center for Public Service forecast results in the addition of over 26,000 new residents in Albemarle County over 20 years.

**Albemarle County Population 20-Year Forecasts, 2020-2040**
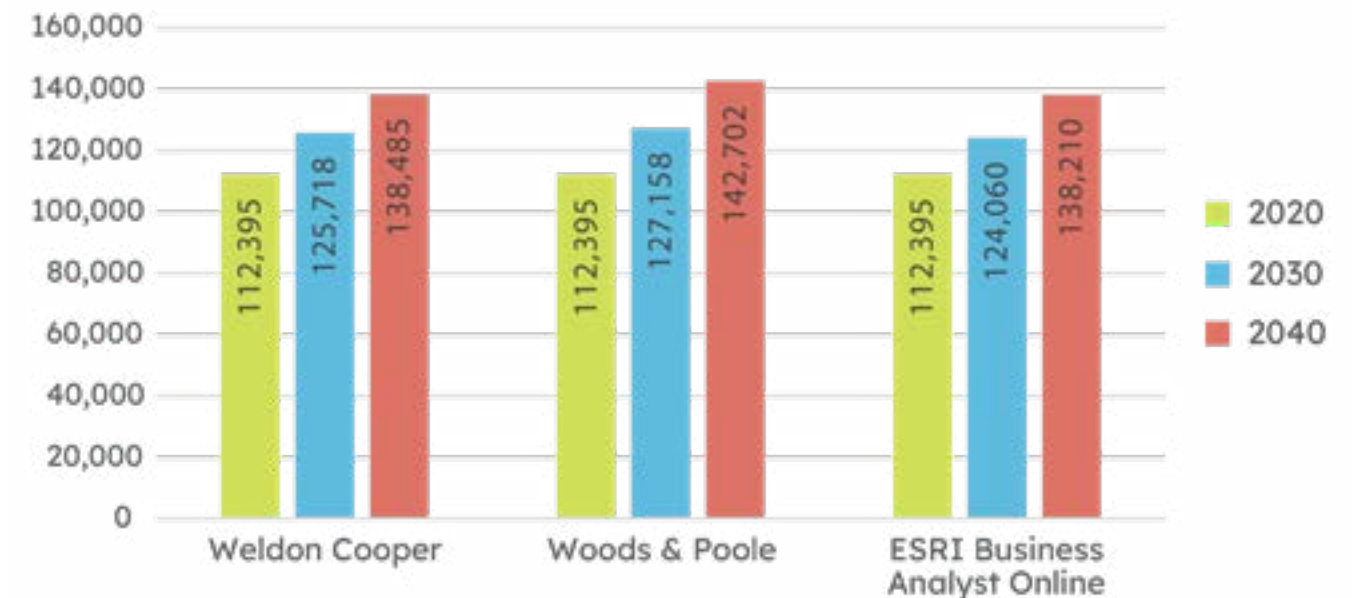


*Source: Weldon Cooper Center for Public Service (2021), Woods & Poole (2018), ESRI Business Analyst Online (2021)*

**Extrapolation of Albemarle County 20-Year Population Forecasts, 2020-2044**
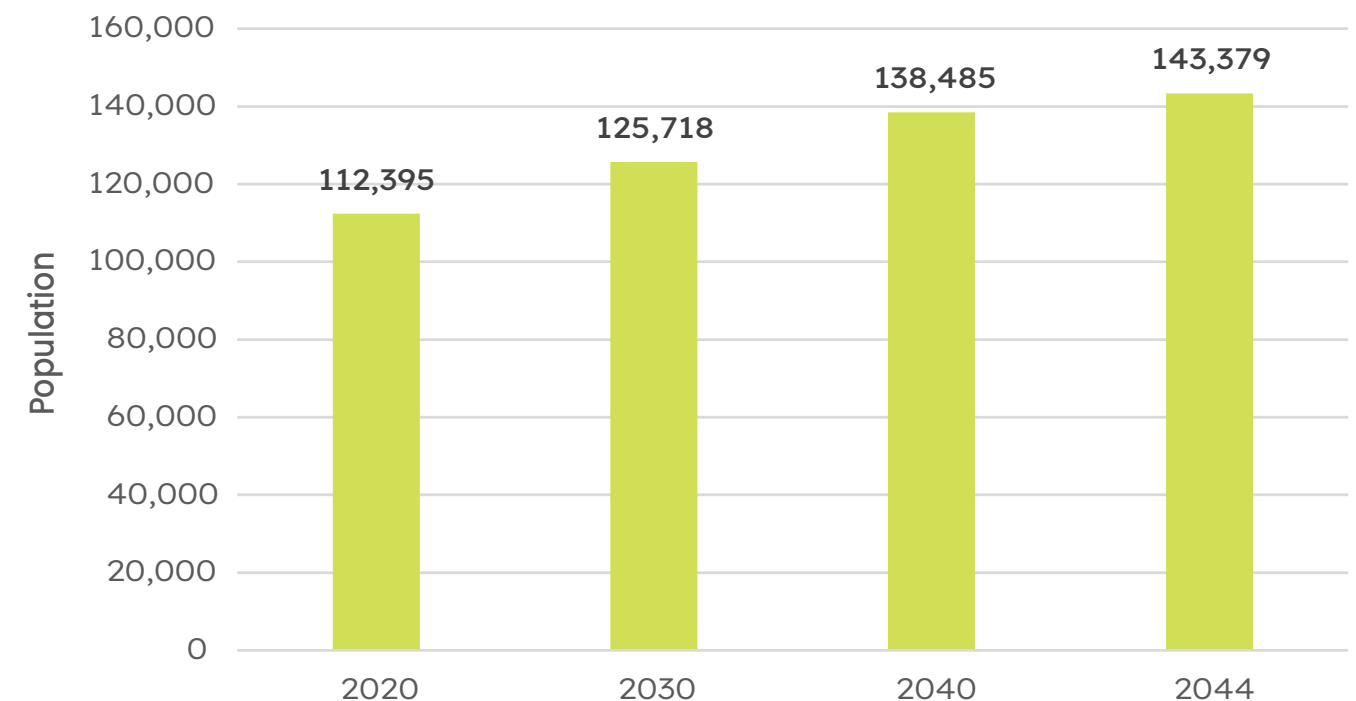


*Source: Weldon Cooper Center for Public Service (2021); Kimley-Horn*

The AC44 Comprehensive Plan will use a 20-year planning horizon, ending in the year 2044. Based on the Weldon Cooper forecasts for Albemarle County, the population could reach more than 143,000 in the timeframe of the plan. The 2044 population projections are based on extrapolations of data points provided by the Weldon Cooper Center between 2030 and 2040.

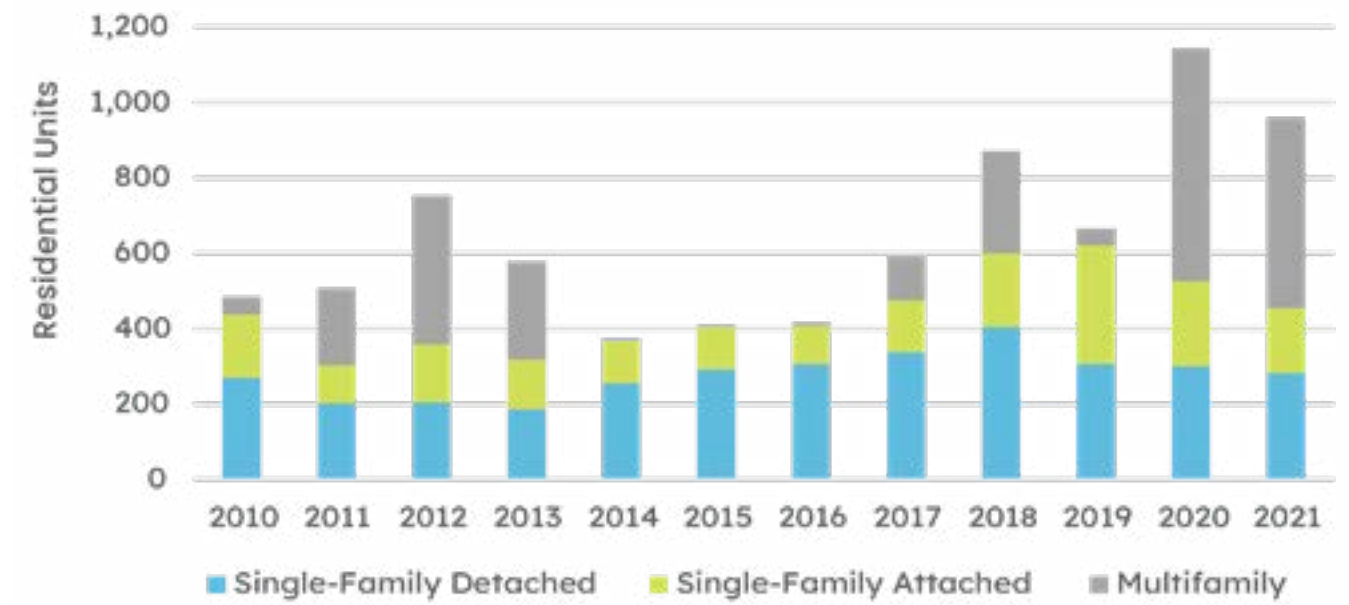# Demand Forecasts by Real Estate Sector

## *Residential*

Estimating demand for residential units is typically tied to population growth. This analysis also considers historic development trends related to the addition of new units in Albemarle County. Trends demonstrating the addition of new units since 2010 are based on Certificate of Occupancy (CO) data.

Nationally, housing has been one of the strongest performing real estate sectors following recovery from the 2007-2009 Great Recession. Demand for all types of housing has generally eclipsed supply, resulting in low inventories and increasing sales prices. While the full impact of COVID-19 remains to be seen, it is likely that the pandemic has influenced residential development in the near-, and likely, long-term.

In the last decade, an average of nearly 650 new residential units were completed each year in Albemarle County. The completion of new units was lowest in 2014, with only 408 units built and highest in 2020, exceeding 1,100 units. About 82.8% of new residential units were built in the Development Areas and 17.2% were built in the Rural Area.

**New Residential Units Completed by Development Area and Rural Area, 2010–2021**



*Source: Albemarle County Certificate of Occupancy Data (2022)*

Since 2010, 43.2% of the new units completed in Albemarle County have been single-family detached, including mobile homes. Attached units, including single-family attached, townhouses, duplexes, and condominiums, account for 24.9% of the new units since 2010, and the remaining 31.9% have been multifamily or accessory apartments. The share of multifamily units was highest in the most recent two years.

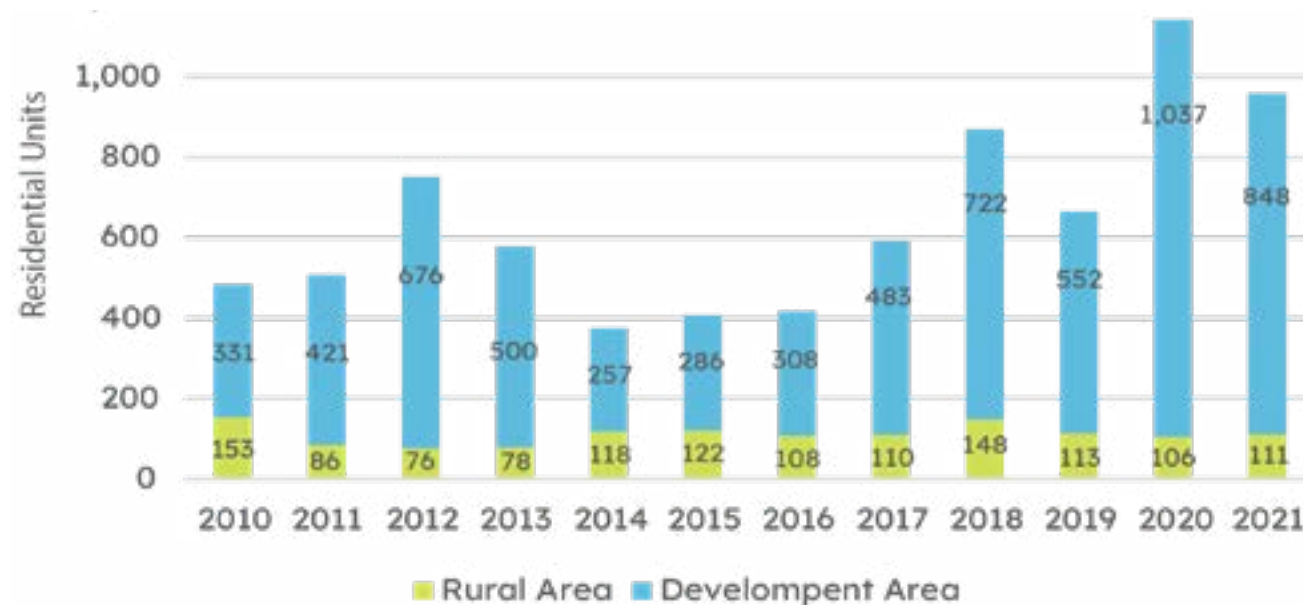**New Residential Units Completed by Type, 2010–2021**



*Source: Albemarle County Certificate of Occupancy Data (2022)*

## *For–Sale Residential Sales*

The Charlottesville Area Association of Realtors (CAAR) releases a quarterly Home Sales Report for the Charlottesville area, including the City of Charlottesville and Albemarle, Fluvanna, Greene, Louisa, and Nelson counties. In the last five years, annual home sales across the region have increased from 983 in 2017 to 1,228 in 2021, a 24.9% increase. In 2021, the sales activity in Albemarle County comprised over 40% of the CAAR region total. Sales of new construction houses across the region have remained relatively consistent year over year, ranging from 180 to 230 sales of new units per year.

### Residential Sales, 2017–2021



*Source: CAAR Charlottesville Area Home Sales Report (2022), Virginia REALTORS (2022)*

Home sales declined between 2020 and 2021 by 5% across the CAAR region. The slowing of sales activity across the region is likely influenced by rising home prices and limited available inventory. In Albemarle County, home sales declined by 1%, over the last year, from 509 in 2020 to 505 in 2021. Available housing units in the County remained on the market for 29 days in fourth-quarter 2021, compared to 57 days in 2020. The region wide available inventory declined from an average of 4.1 months of supply in 2017 to only one month of supply in 2021. Sales data is presented in this section because it provides additional information on supply and demand momentum in the residential market in Albemarle County beyond the understanding of what new units have been constructed each year.

## Residential Vacancy Rates

According to the American Community Survey, Albemarle County had an estimated 46,325 residential units with an aggregate vacancy rate of 8.3%. This vacancy rate represents the average across all housing units in the County. However, housing vacancy is not consistent across all types of units. Traditional owner-occupied housing has notably lower vacancy rates than rental units. Homeowner vacancy rates in Albemarle County were estimated at 0.4% as of the 2020 data release, marking one of the lowest measures in recent years. Homeowner vacancy rates have been in decline but have historically averaged around 1.0%.

Vacancy rates for rental multifamily units in Albemarle County have consistently remained between 3.0% and 6.0%, a range that indicates market health where there are units available to support inter- and intra-market moves. Rental units had a 2020 vacancy rate of 4.5% based on US Census data.

## Residential Price Points

The following graphic demonstrates the average sales price for single-family detached and single-family attached units (including townhouses, attached single-family units, and condominiums) between 2010 and 2021. Data is based on listed sales in Albemarle County as tracked by the Tax Assessors office and only includes transactions that have a price listed. Between 2010 and 2021, the average sales price for single-family detached units increased from $454,247 to nearly $570,000, representing a 25.4% increase over 11 years. Based on the same dataset, attached for-sale residential units experienced a modest decline in average sales price over the same period.
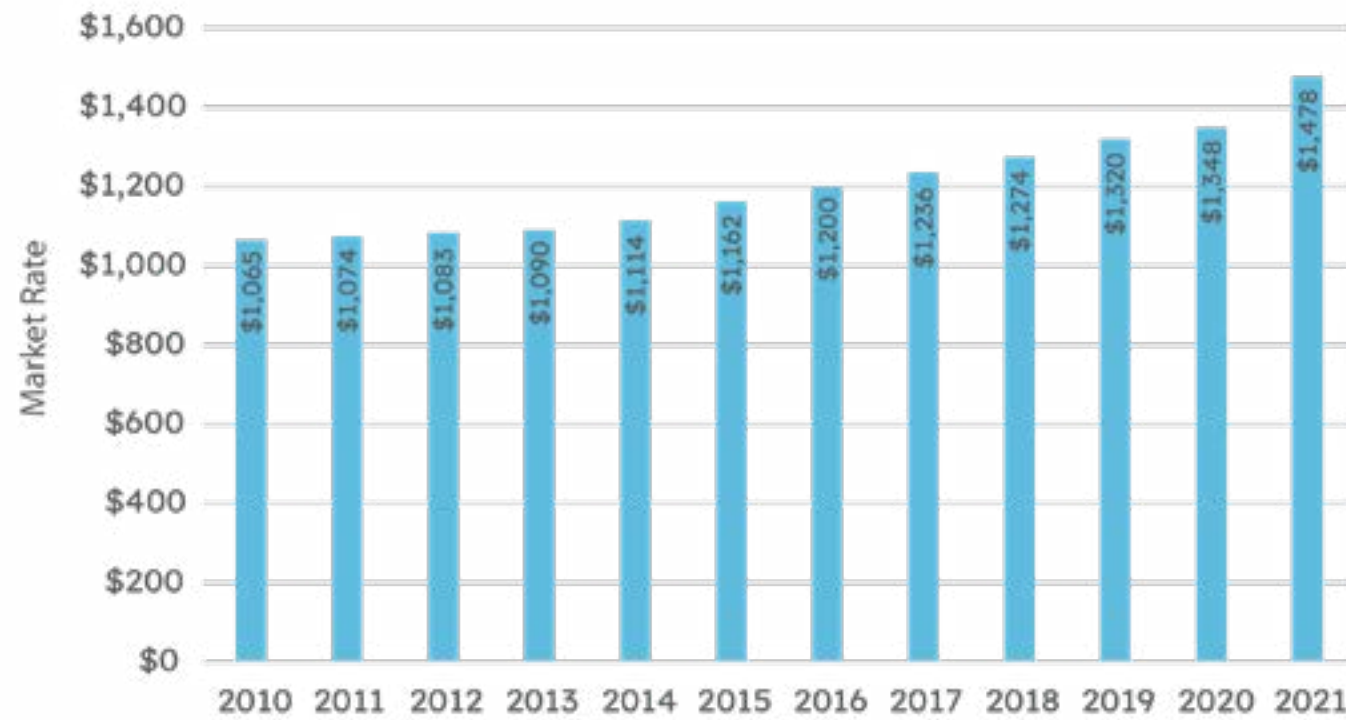
### For-Sale Residential Average Sales Prices, 2010–2021
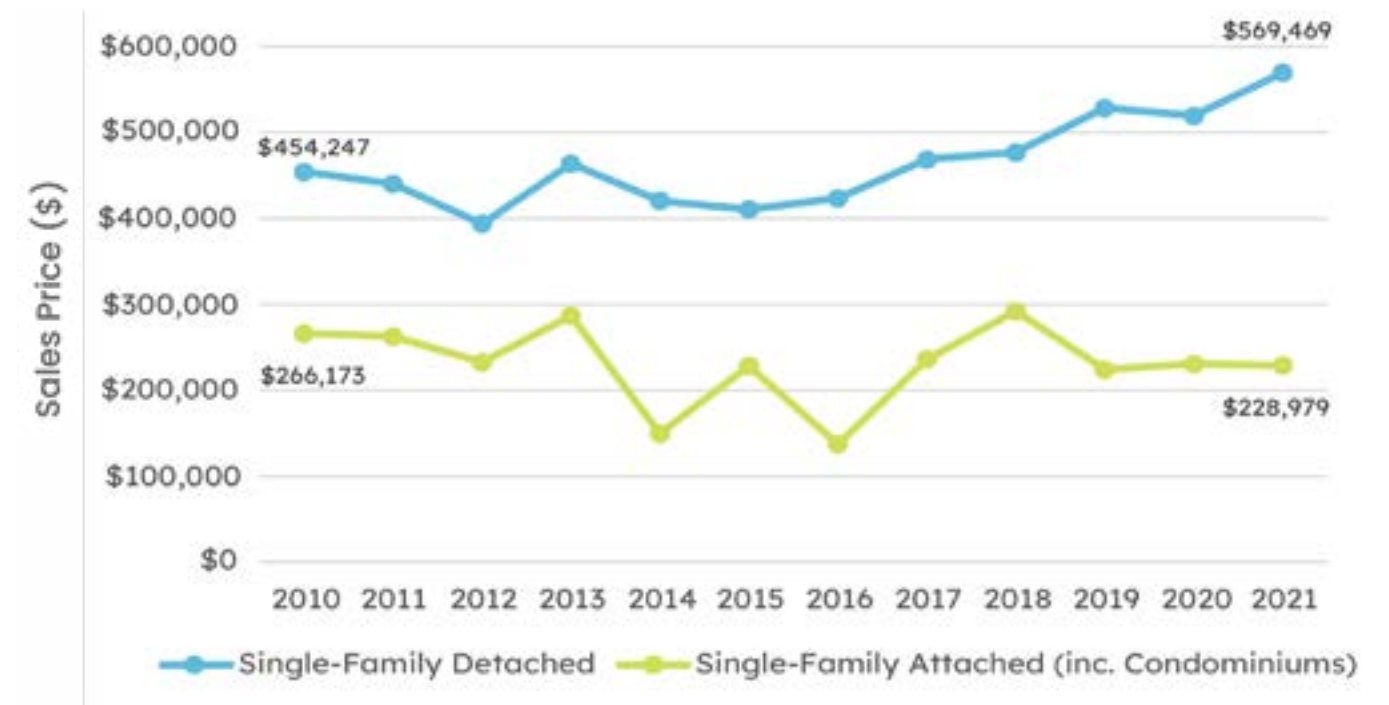


*Source: Albemarle County Tax Card Level Data (2022)*

Average monthly rents increased by 38.8% in Albemarle County, from $1,065 per month in 2010 to $1,487 per month in 2021. Annual increases were more modest between 2010 and 2014, ranging from 0.6% to 0.9% per year. Since 2014, the average annual increase in monthly rents in Albemarle County was nearly 4.0%.

**Multifamily Residential Average Monthly Market Rent, 2010–2021**
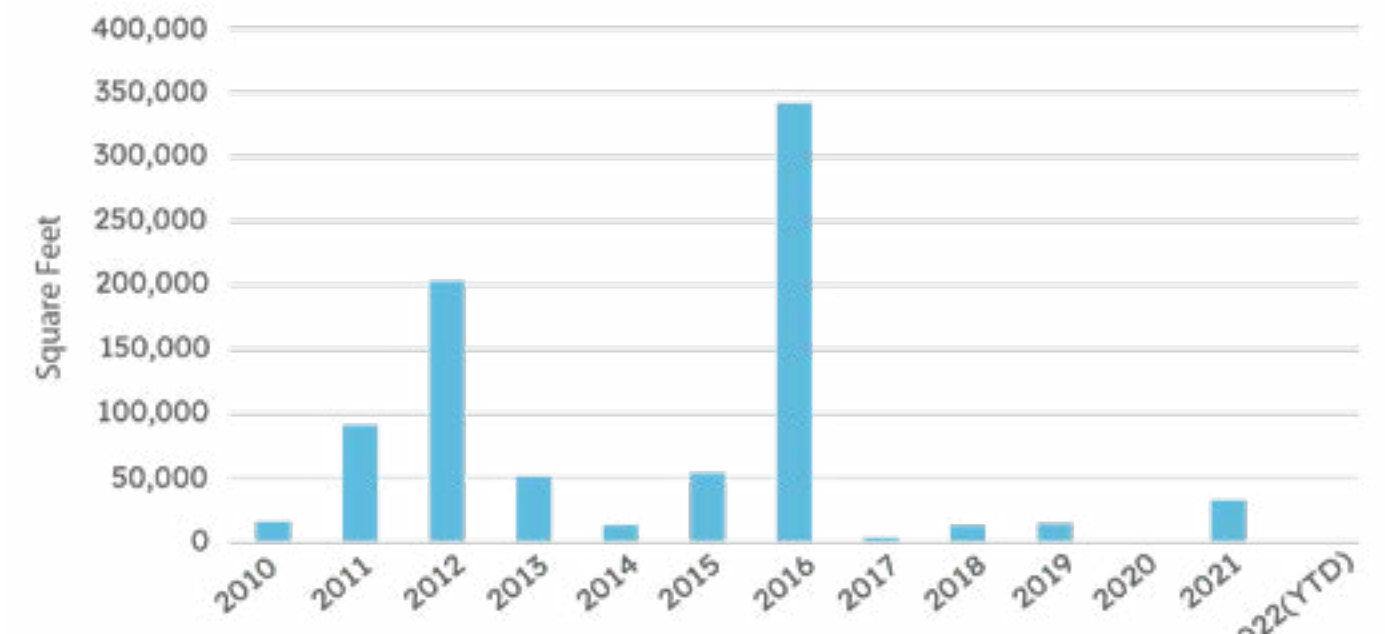


*Source: CoStar (2022)*

## Retail

Retail has been one of the most impacted industries during the COVID-19 pandemic. Many retail businesses and restaurants were required to close in many states across the country to support social distancing, and many also had to initially reopen with very limited capacity. Local, or independent, retailers have been hit particularly hard, with many having to permanently close as consumer spending and store traffic plummeted. It should be noted that some retailers, primarily grocery, pharmacy, and building supply stores that offer essential services, have fared well during this time.

COVID-19 amplified trends that were already impacting retail, particularly as it relates to the influence of online shopping. Online shopping has increased rapidly since the beginning of March 2020. As local economies reopen, brick and mortar sales experienced some rebound, demonstrated in retail national receipt indexes. However, online retailers have been positioning to sustain their increased market capture. Locations that offer experiential retail options in a mixed-use environment were well positioned to attract initial momentum during recovery from the COVID-19 pandemic.

The retail analysis incorporates a wide range of retail types, including automotive uses, general retail like convenience stores, shopping centers, and big-box retailers, supermarkets, and dining and restaurant establishments. The graph below demonstrates annual totals for new retail square footage in the last decade. Retail construction was strongest in the first half of the decade, with new projects dropping off significantly in the last five years. The strongest year of retail completions was in 2016 when the Wegman's grocery-anchored 5th Street Station shopping center was completed. Since 2010, annual retail completions in Albemarle County averaged approximately 70,000 square feet, ranging from almost no new space completed in 2020 to nearly 350,000 square feet of new space in 2016.

### Residential Unit Demand Forecast

Forecasted demand for residential units considers both the forecasted population increase in Albemarle County and the 10-year development trend for new residential units. Based on the population forecasts previously presented, Albemarle County could add between 25,800 and 30,300 new residents over the next 20 years. Based on an average household size of 2.42 people (US Census 5-Year ACS 2020 estimate) and an average housing vacancy rate of 8.3% the County could generate demand for 11,500 to 13,500 new housing units through 2040. A low- and high-range is provided for both ten-year and 20-year planning horizons.

**10- and 20-Year Albemarle County Residential Demand Forecasts**

| 2010–2021 Annual Residential Completions | 10-Year Demand Forecast (Units) | | 20-Year Demand Forecast (Units) | |
|---|---|---|---|---|
| | Low | High | Low | High |
| 646 | 6,000 | 7,500 | 11,500 | 13,500 |

**Albemarle County Retail Completion Trends, 2010–2022**



*Source: Albemarle County Tax Card Level Data (2022)*

## Retail Vacancy Rates

Retail vacancy rates in Albemarle County have traditionally ranged from 3.0% to 4.5%. This measure includes both multi-tenant shopping center space and free-standing retailers that are often owner occupied. Shopping centers in the County have a comparably higher historical vacancy rate, exceeding 10%. Retail vacancy in the County increased during the COVID-19 pandemic, a result of store closures. Vacancy has improved since the 2020-peak but is still elevated from typical historic trends.

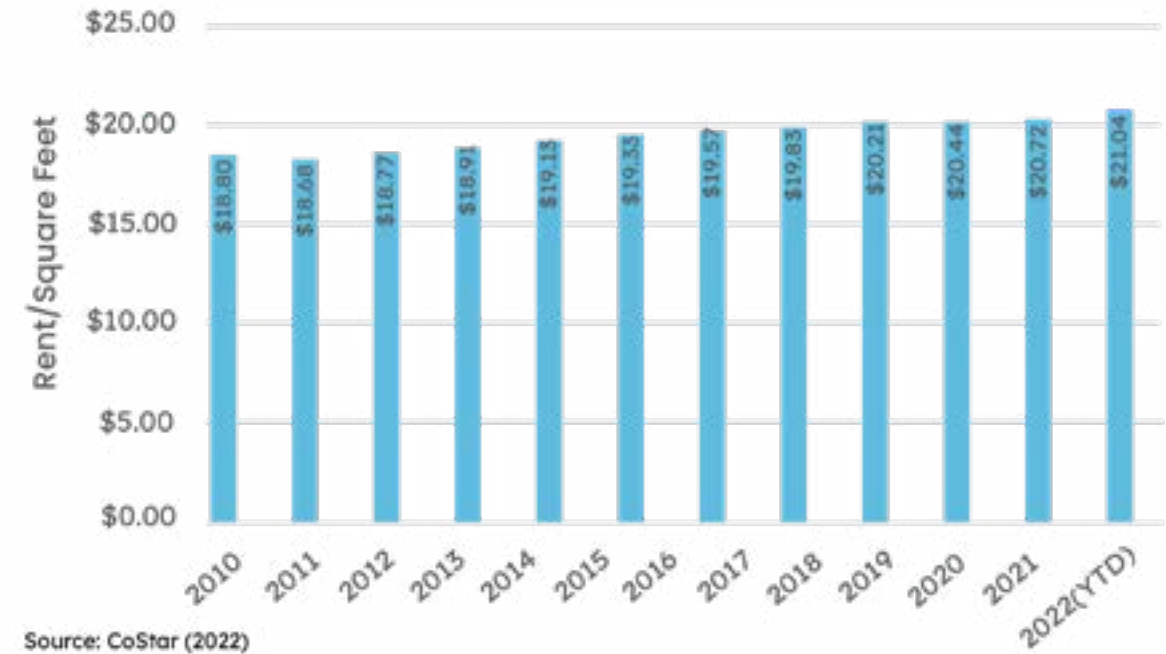**Albemarle County Retail Vacancy Rate Trends, 2010–2022**
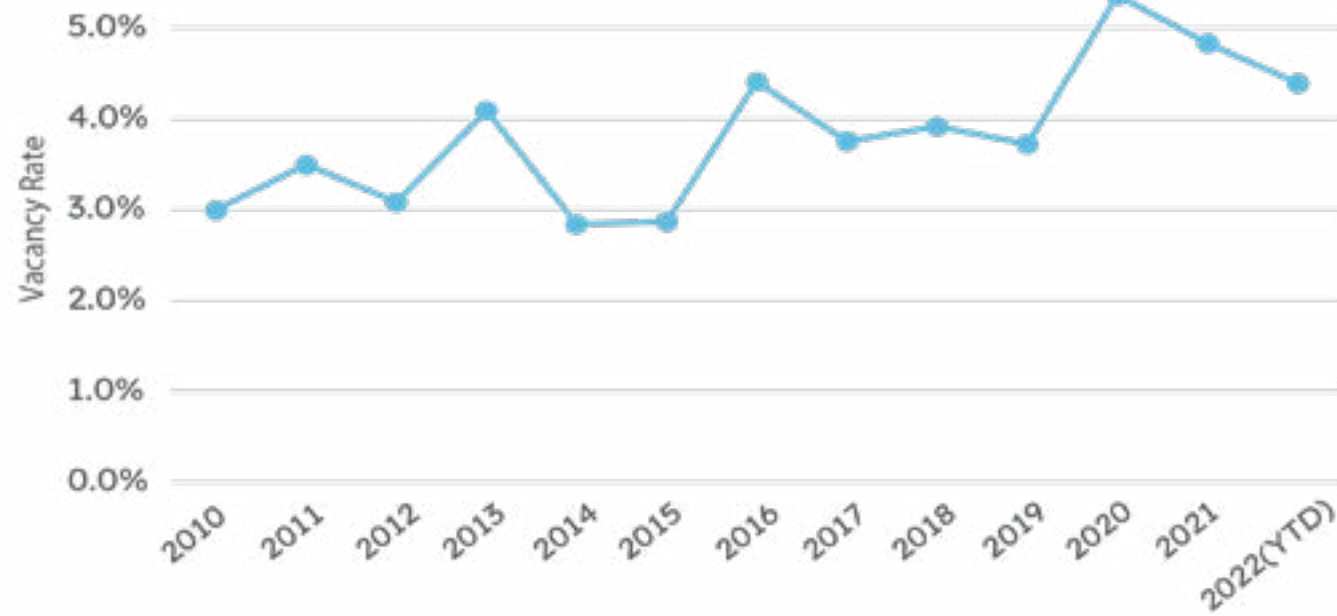


*Source: CoStar (2022)*

## Retail Lease Rates

The average retail in Albemarle County at year-end 2021 was $21.04 per square foot, a 11.9% increase from $18.80 per square foot in 2010. Since 2010 the average annual retail rent increase was 1.0%.

**Albemarle County Retail Rent Trends, 2010–2022**



*Source: CoStar (2022)*

*Source: CoStar (2022)*

## Retail Demand Forecast

The retail demand forecast for Albemarle County considers increases in population to estimate future spending potential through 2040. The methodology for determining future retail demand in the County is based on a combination of population growth and recent annual development that provides guidance for how much retail could be supported.

Ten-year retail demand is forecasted to be between 550,000 and 700,000 square feet, and 20-year demand could exceed 1.3 million. These totals consider the shift towards online shopping, but with an acknowledgment that there will be a continued place in the market for brick-and-mortar stores. It also considers the potential for redevelopment of under-performing retail centers that would reduce the overall inventory in Albemarle County and free up demand for newer, modern space. Retail completions have slowed by 5.0% to 8.0% in the last five years compared to previous totals. This decrease was considered, particularly in the short-term, for forecasting future demand.

**10- and 20-Year Albemarle County Retail Demand Forecasts**

| 2010–2021 Annual Retail Completions (Sq. Ft.) | 10-Year Demand Forecast (Sq. Ft.) | | 20-Year Demand Forecast (Sq. Ft.) | |
|---|---|---|---|---|
| | Low | High | Low | High |
| 69,444 | 550,000 | 700,000 | 1,000,000 | 1,300,000 |

## *Office*

The utilization of office space is currently experiencing a notable shift. As the COVID-19 pandemic began, many companies moved to remote work to mitigate the spread of the virus. For those companies that were able, allowing employees to work from home provided maximum flexibility to respond to the pandemic. According to an analysis by Pew Research Center (COVID-19 Pandemic Continues to Reshape Work in America, February 2022), remote work continues to influence office activity with approximately 59% of workers with jobs that can be done remotely electing to stay at home as of January 2022. It is possible that many companies will not stay fully remote in the long-term, however hybrid work options are likely to influence the amount and configuration of space that businesses need.

Since 2010, an average of 40,000 square feet of office space has been completed per year in Albemarle County. This ranges significantly from year to year, with some years having no new office space and some years with more than 100,000 square feet added. The additions in 2020 are related to two office buildings. The largest of the two is within UVA at North Fork (formerly known as the University of Virginia (UVA) Research Park).

### *Albemarle County Office Completion Trends, 2010–2022*
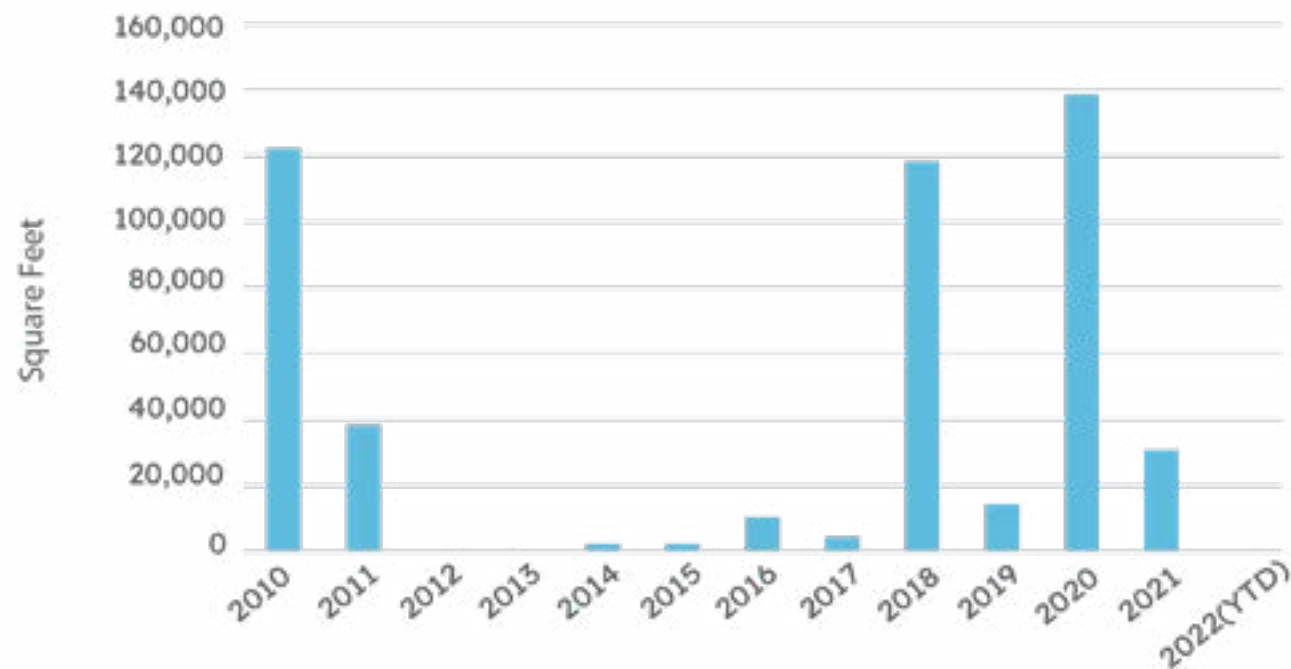


*Source: Albemarle County Tax Card Level Data (2022)*

## *Office Vacancy Rates*

Office vacancy in Albemarle County has fluctuated since 2010, impacted by several years that more space was vacated than leased, driving vacancy up. This trend was most notable between 2011 and 2012, when the vacancy rates increased to 9.8%. Limited new construction and modest, but positive, net absorption resulted in a steadily decline in vacancy until the onset of the COVID-19 pandemic. A large tenant moving out at the State Farm Regional Office has elevated the overall vacancy rate in the County to a peak of more than 12.0%.

### *Albemarle County Office Vacancy Rate Trends, 2010–2022*
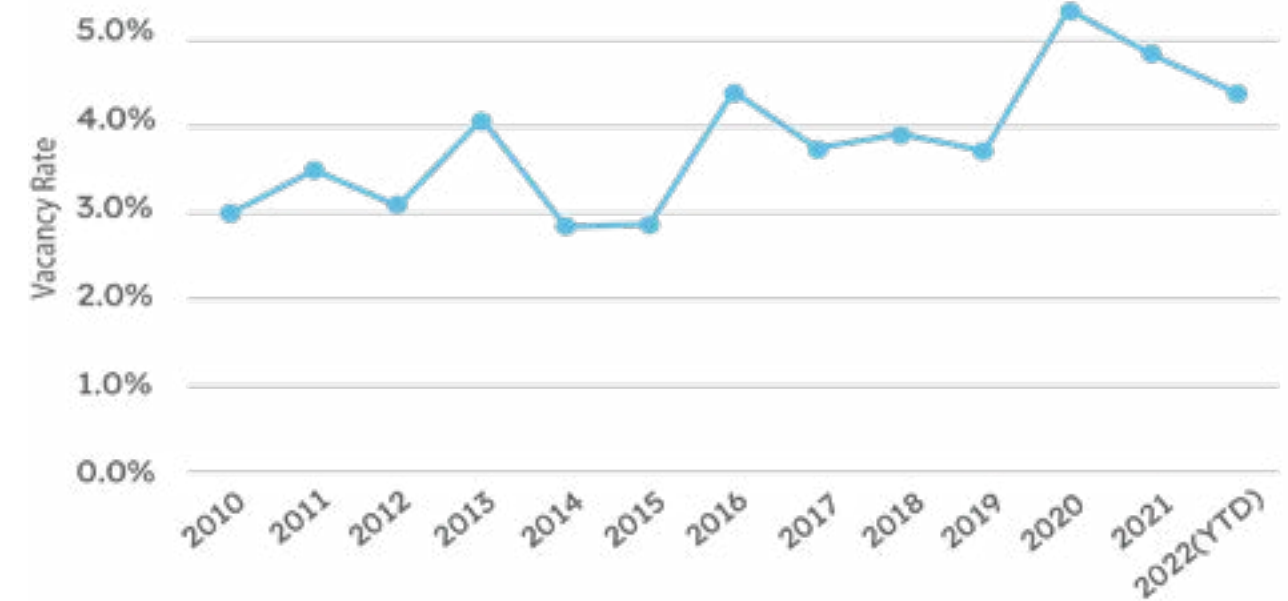


*Source: CoStar (2022)*

## *Office Rental Rates*

Office lease rates in Albemarle County increased from $22.02 per square foot in 2010 to nearly $25.00 per square foot at year-end 2021. Average annual increases were 1.1% for the County, but rent growth slowed in the last two years with an increase of only 0.3% per year.

**Albemarle County Office Rent Trends, 2010–2021**
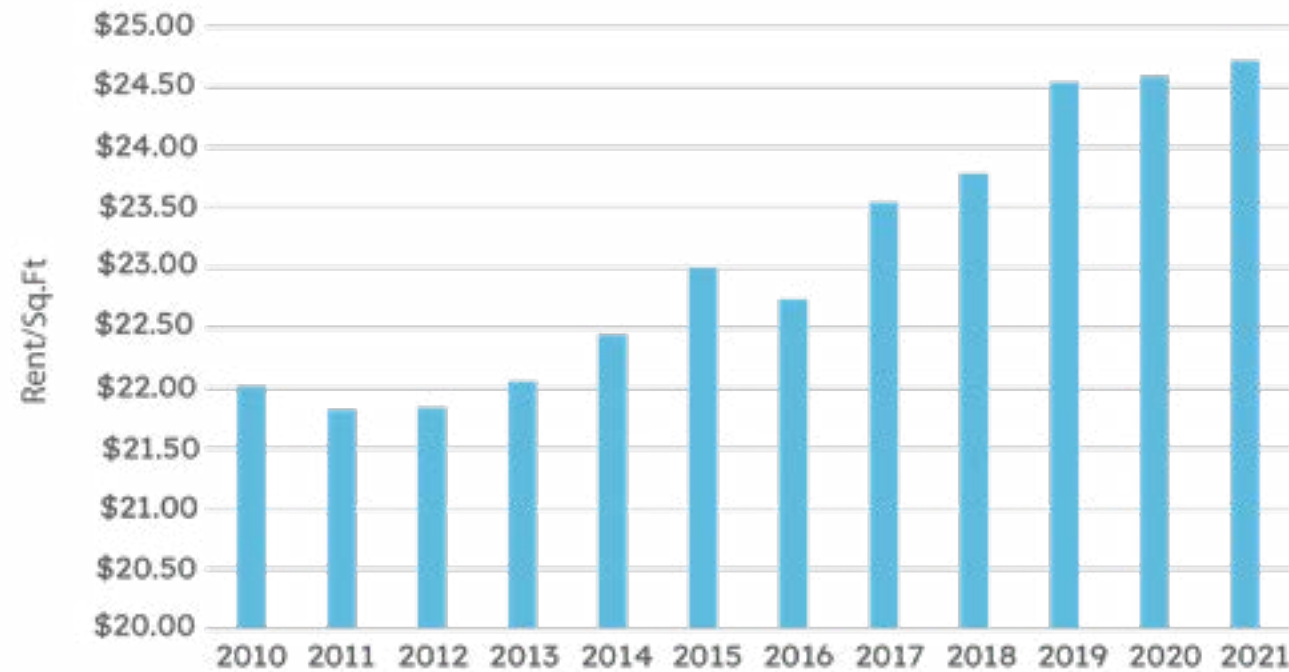


Source: CoStar (2022)

## Office Demand Forecast

Ten-year office demand is forecasted to be between 325,000 and 500,000 square feet. Ten-year demand focuses on the annual average of nearly 40,000 square feet added per year in the last decade. This more conservative measure considers the elevated current vacancy rate, modest increases in rental rates in the last two years, as well as shifting

office dynamics during and following the pandemic. The 20-year forecasted demand could range from 750,000 to 1.0 million square feet and assumes a stabilization of the office market in Albemarle County.

**10- and 20-Year Albemarle County Office Demand Forecasts**

| 2010–2021 Annual Office Completions (Sq. Ft.) | 10-Year Demand Forecast (Sq. Ft.) | | 20-Year Demand Forecast (Sq. Ft.) | |
|---|---|---|---|---|
| | Low | High | Low | High |
| 39,924 | 325,000 | 500,000 | 750,000 | 1,000,000 |

## Industrial

Nationally, industrial development, particularly warehouse and distribution space, has been bolstered by the COVID-19 pandemic, driven by the increase in online shopping as brick-and-mortar retailers closed and consumers were minimizing their time in public spaces. Pre-pandemic, the light industrial sector had already been experiencing strong

growth as companies competed to address last-mile distribution gaps to accelerate completion time.

For this study, industrial space includes three categories: manufacturing, warehouse, distribution, and storage, and research and development/flexible workspaces. Warehouse space, including mini-warehouse and storage facilities, comprises most of the space in Albemarle County. Since 2010, an average of 41,000 square feet of industrial space has been completed per year. This ranges significantly from year to year, with some years having no new supply and 200,000 new industrial square feet added in 2015. Consistent with recent trends, warehouse space, including mini-storage facilities, is the predominant product type completed in recent years.

**Albemarle County Industrial Completion Trends, 2010–2022**
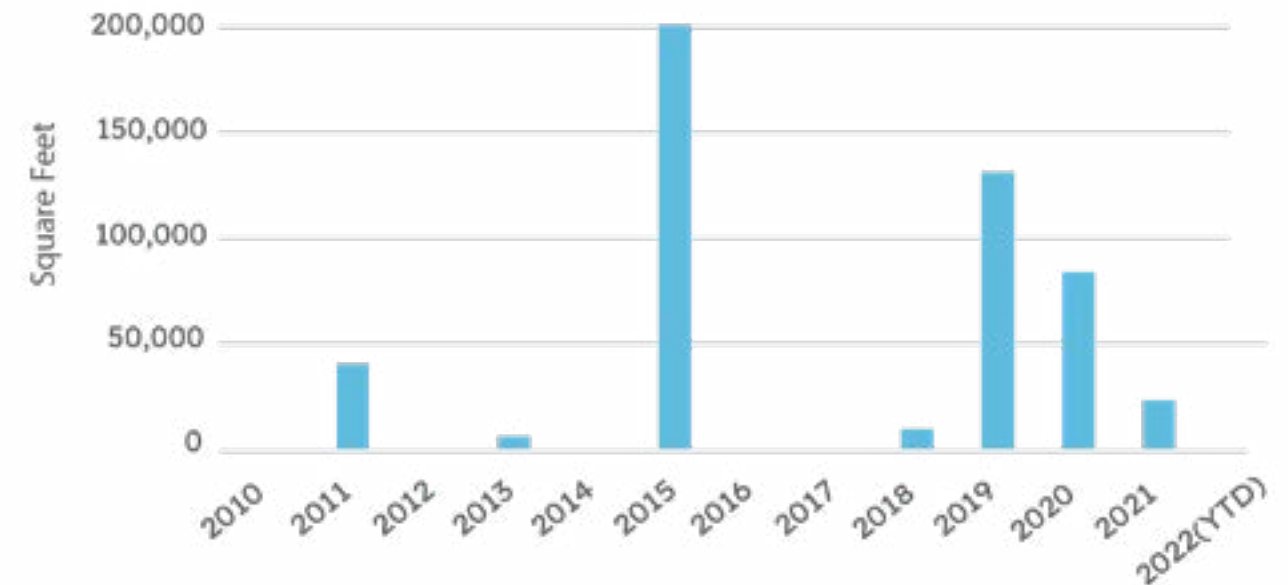


Source: Albemarle County Tax Card Level Data (2022)

Based on feedback from local real estate stakeholders, the decline in completion of new industrial space is likely influenced by higher land costs in Albemarle County, competition from nearby markets, and limited availability of properties that are prepared for development. As previously noted, the forecasts presented in this section are not constrained by the availability of land, the cost of land or development, site readiness factors, site location and access to infrastructure, or environmental constraints.

## Industrial Vacancy Rates

Consistent with national trends, industrial space vacancies have declined in recent years, following two strong years of space occupancy in 2017 and 2018 and limited new completions. The most recently reported vacancy rate for manufacturing, warehouse, and research and development industrial space in Albemarle County was approximately 1.4% in first-quarter 2022. As a point of comparison, current vacancy rates in other major Virginia markets are also well below historic averages, including 2.6% in Richmond, 4.5% in Roanoke, 1.3% in Harrisonburg, and 1.7% in Virginia Beach.

**Albemarle County Industrial Vacancy Rate Trends, 2010–2022**
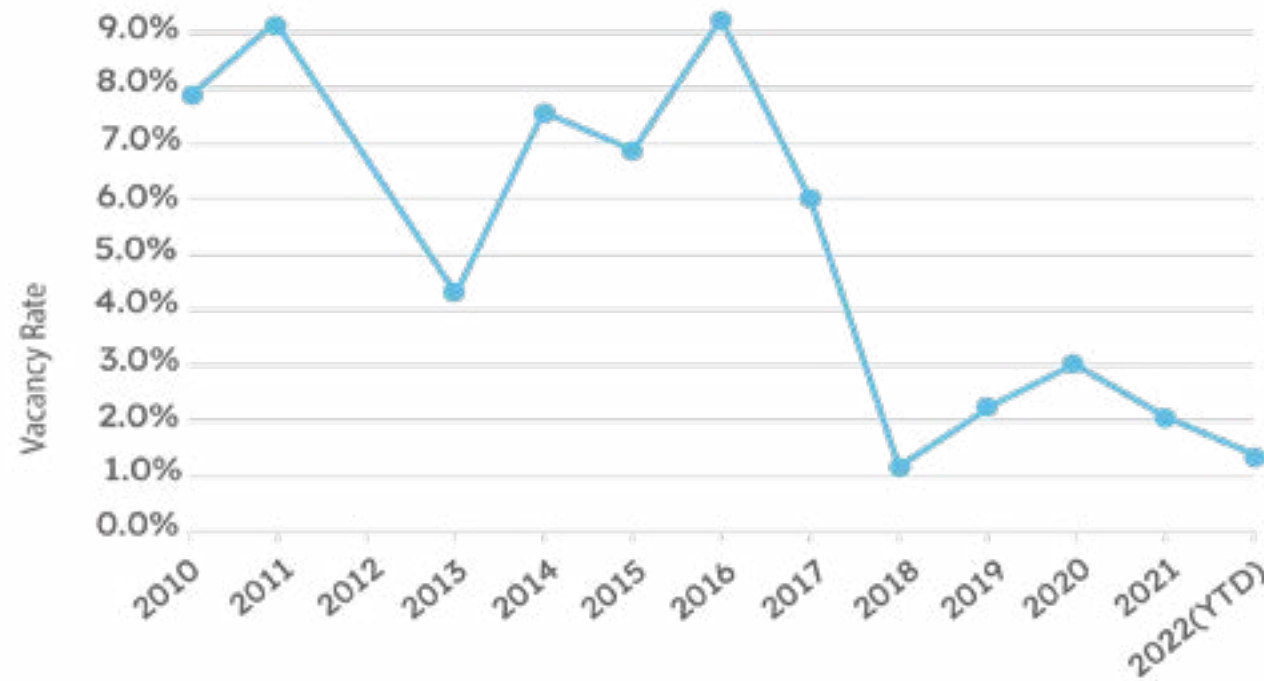


*Source: CoStar (2022)*

## Industrial Rental Rates

The average lease rates for industrial space in Albemarle County increased from $8.94 per square foot in 2010 to $12.00 per square foot at year-end 2021. This measure represents the combined average for all industrial types in Albemarle County. Average annual increases were 2.7% in the County, with the strongest growth rates experienced over the last five years. By type, flex/research and development had the highest average rent per square foot at year-end 2021 at $14.54, followed by warehouse/distribution space at $11.62 per square foot, and manufacturing space at $10.52 per square foot. Increases were demonstrated across all types of industrial space.

**Albemarle County Industrial Rate Trends, 2010–2021**
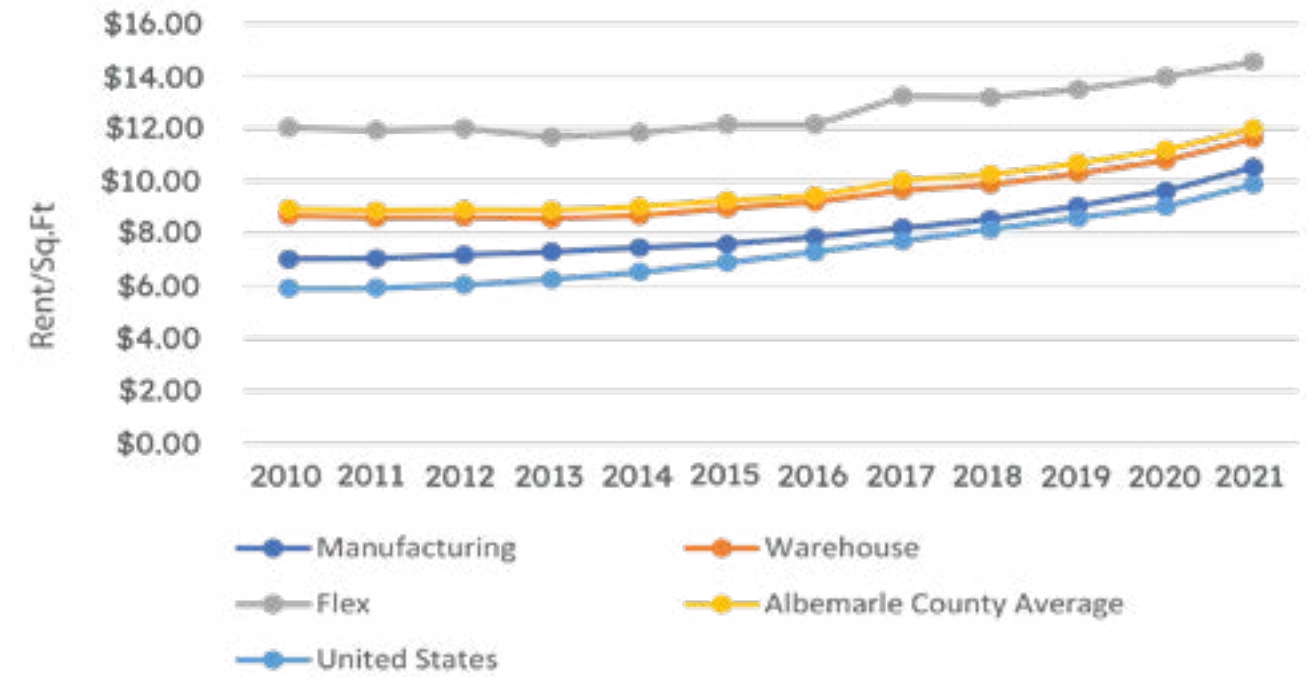


*Source: CoStar (2022)*

## Industrial Demand Forecast

There is nearly 4.3 million square feet of manufacturing, warehouse, distribution, flex, and research/development space in Albemarle County. With a current population of 112,395, that equates to an industrial average of 37 square feet per person. Based on an assumed 20-year population increase of 25,800 to 30,300 new residents, that could result in 955,000 to 1.1 million new square feet through 2040.

Ten-year industrial demand is forecasted to be between 450,000 and 600,000 square feet and considers the low vacancy rates of existing space. The 20-year forecasted demand could range from 950,000 to 1.1 million square feet. To the extent that improved sites (with existing utilities, appropriate zoning districts, and other site readiness factors) are not available in Albemarle County, demand would likely shift to surrounding counties with similar access to highway corridors and labor market.

### 10- and 20-Year Albemarle County Industrial Demand Forecasts

| 2010–2021 Annual Industrial Completions (Sq. Ft.) | 10-Year Demand Forecast (Sq. Ft.) | | 20-Year Demand Forecast (Sq. Ft.) | |
|---|---|---|---|---|
| | Low | High | Low | High |
| 41,288 | 450,000 | 600,000 | 950,000 | 1,100,000 |

## Hotel Rooms

Hospitality is one of the most impacted real estate sectors through the COVID-19 pandemic. National real estate research firms forecast that recovery for the hospitality industry could extend well into 2023 as travelers and businesses are slowly regaining confidence in safe movement around the country. Additionally, professional business travel may never fully recover to pre-pandemic levels as corporations have leveraged virtual meetings.

Prior to the COVID-19 pandemic, hotel occupancy in Albemarle County typically ranged from 70% to 73%, a range that is considered a sign of a healthy market. Consistent with national trends, occupancy declined rapidly at the onset of the pandemic. Initial recovery occurred in 2021, however the market has not fully reached pre-pandemic measures for occupancy. An estimated 365 new hotel rooms have been completed in Albemarle County since 2012, with the newest hotel built in first-quarter 2022, Holiday Inn Express on Pantops Corner Way.

### Albemarle County Hotel Occupancy Trends, 2012–2022
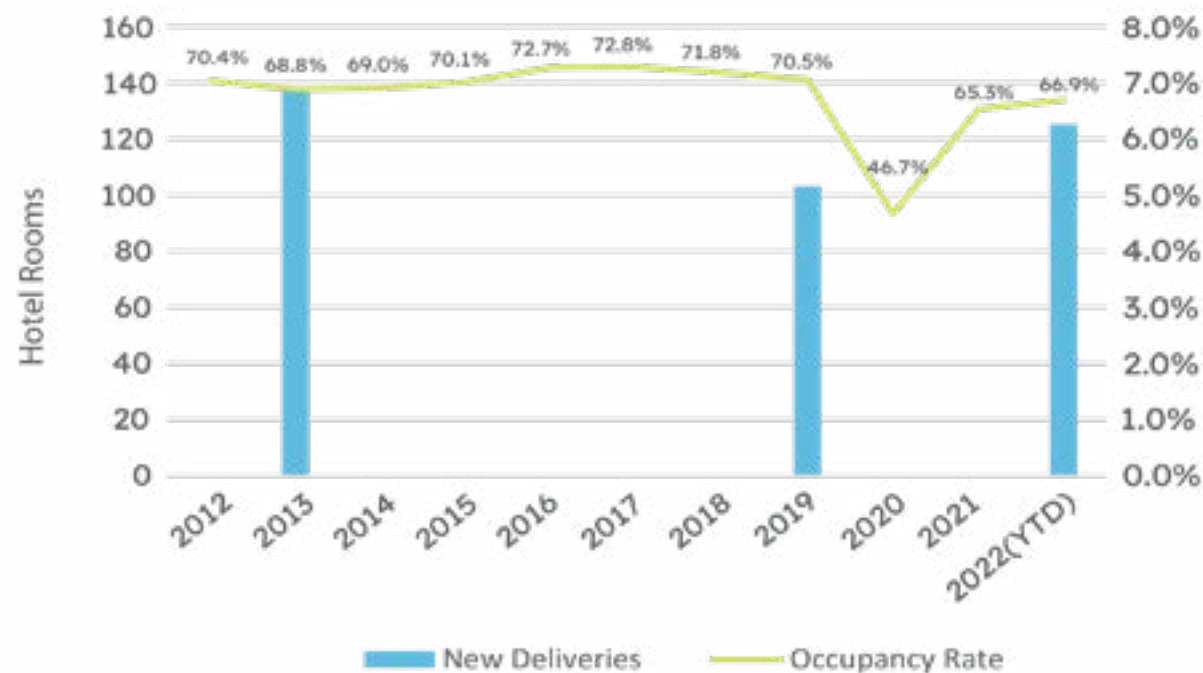


*Source: CoStar (2022)*

It should be noted that occupancy data provided in this analysis was based on information from February 2022. Since that time, the hotel industry in Albemarle County has demonstrated higher occupancy rates, falling in-line with measures that were commonly represented pre-pandemic.

Ten-year hotel demand is based on the 2010-2021 trend of annual average hotel completions, which totaled approximately 37 rooms per year. This analysis assumes that recovery from the pandemic will extend into 2023. The ten-year demand forecast is expected to be between 350 and 500 rooms and the 20-year forecasted demand could range from 750 to 900 rooms.

### 10- and 20-Year Albemarle County Hotel Demand Forecasts

| 2010–2021 Annual Hotel Completions (Rooms) | 10-Year Demand Forecast (Sq. Ft.) | | 20-Year Demand Forecast (Sq. Ft.) | |
|---|---|---|---|---|
| | Low | High | Low | High |
| 37 | 350 | 500 | 750 | 900 |

## Summary of Demand Forecasts by Land Use

The following table summarizes the ten- and 20-year demand forecasts by land use for Albemarle County.

### 10- and 20-Year Albemarle County Market Demand Forecasts

| Land Use Type | 2010–2021 Average Annual Completions | 10-Year Demand Forecast | | 20-Year Demand Forecast | |
|---|---|---|---|---|---|
| | | Low | High | Low | High |
| Residential (units) | 646 | 6,000 | 7,500 | 11,500 | 13,500 |
| Retail (sq. ft.) | 69,444 | 550,000 | 700,000 | 1,000,000 | 1,300,000 |
| Office (sq. ft.) | 39,924 | 325,000 | 500,000 | 750,000 | 1,000,000 |
| Industrial (sq. ft.) | 41,288 | 450,000 | 600,000 | 950,000 | 1,100,000 |
| Hotel (rooms) | 37 | 350 | 500 | 750 | 900 |

# Chapter 5: Development Areas Residential and Non-Residential Buildout

## Summary of Development Areas-wide Buildout

Albemarle County has 2,842 acres of available land in the Development Areas based on the methodology described for this analysis. Removing acreage that would be required to support necessary infrastructure and accommodate environmental constraints and open space needs, and removing parcels designated entirely greenspace and green systems, it was determined that Albemarle County has 1,634 acres of buildable land remaining. The County has a total land mass of 464,640 acres, or approximately 726 square miles. The total buildable acreage accounts for slightly more than 0.3% of the County's land mass.

### Summary of Buildout Acreages

| Geography | Total Acres | Available Acres | Buildable Acres | Buildable Acres Share of Total |
|---|---|---|---|---|
| Albemarle County | 464,640 | 2,842 | 1,634 | 0.35% |
| Development Areas | 23,800 | 2,842 | 1,634 | 6.9% |

Combined, the Development Areas contain approximately 23,800 acres, or 5.6% of the County-wide land mass. Based on the prescribed buildout methodology, the buildable acres comprise 6.9% of the Development Area total. Overall, the county exhibits pockets of developable land within each Development Area.

Based on the available and buildable acreage totals and incorporating the assumptions for buildout in Chapter 2 of this report, the County's Development Areas could potentially have capacity for a maximum of approximately 9,252 residential units, 1.9 million square feet of retail, 2.7 million square feet of office space, over 5.5 million square feet of industrial space, and 2,554 hotel rooms at full theoretical buildout. Appendix B demonstrates the buildout analysis totals for each future land use type across all Development Areas.

### Summary of Development Areas Theoretical Maximum Buildout

| Available Acres | Buildable Acres | Residential Units | Retail/ Commercial Sq.Ft. | Office/ Institutional Sq.Ft. | Hotel Rooms | Industrial Sq.Ft. |
|---|---|---|---|---|---|---|
| 2,842 | 1,634 | 9,252 | 1,959,849 | 2,725,883 | 2,554 | 5,565,023 |

## Summary of Development Areas Residential Buildout

Albemarle County closely tracks pipeline residential projects. Recall that these identified parcels were removed from the available acreage so that no double counting of units occurred. There are currently 9,377 approved units and 5,504 currently under review, for a total of 14,881 maximum housing units. It should be noted that it is a common occurrence for larger rezonings to not use all the original approved capacity, so the pipeline figures are likely overestimated based on what will get completed. It is difficult to estimate how many of the maximum approved or under review units will get built, so no adjustment has been made to these figures. In total, Albemarle County could potentially have capacity for an additional 24,133 residential units at full buildout. The maximum unbuilt approved units comprise 38.8% of the estimated buildout total.

### Summary of Development Area Residential Pipeline and Buildout Totals

| Maximum Remaining Unbuilt Approved Units | Maximum Units Under Review | Residential Theoretical Maximum Buildout Estimate | Total Theoretical Maximum Future Residential Buildout |
|---|---|---|---|
| 9,377 | 5,504 | 9,252 | 24,133 |

# Summary of Development Areas Non-Residential Buildout

The following table shows the estimated non-residential theoretical maximum buildout by Development Area. As noted in Chapter 3, this buildout estimate does not include the non-residential pipeline.

## Summary of Maximum Theoretical Buildout by Development Area

| Development Area | Retail (sq. ft.) | Office (sq. ft.) | Hotel (rooms) | Industrial (sq. ft.) |
|---|---|---|---|---|
| Neighborhood 1 | 305,828 | 370,936 | 581 | 59,178 |
| Neighborhood 2 | 178,177 | 342,955 | 374 | 0 |
| Neighborhood 3 | 174,803 | 103,742 | 133 | 112,690 |
| Neighborhood 4 | 117,547 | 494,001 | 191 | 455,434 |
| Neighborhood 5 | 55,289 | 98,971 | 20 | 521,406 |
| Neighborhood 6 | 14,702 | 0 | 0 | 0 |
| Neighborhood 7 | 16,198 | 12,148 | 0 | 0 |
| Hollymead | 594,229 | 839,065 | 358 | 3,629,083 |
| Piney Mountain | 135,719 | 98,989 | 198 | 237,574 |
| Crozet | 367,357 | 365,076 | 698 | 549,658 |
| Village of Rivanna | 0 | 0 | 0 | 0 |
| **Total** | **1,959,849** | **2,725,883** | **2,554** | **5,565,023** |

# Comparing Land Use Buildout with Future Demand

The Albemarle County theoretical maximum land use buildout estimates exceed the 20-year demand forecast. This suggests that residential growth and development could continue to occur at a similar historical pace and still be accommodated under the existing future land use designations over the next 20 years. However, it is important to note that the 20- year demand forecasts do not take into consideration potential growth limitations like the availability of land, the cost of development, or environmental constraints. Chapter 6 addresses the challenges associated with building out based on the theoretical maximum and presents adjustments to the residential buildout accordingly. Although it is acknowledged that some new population growth will occur in the Rural Areas, this analysis considers whether the Development Areas have sufficient land area and units in the pipeline to accommodate all the County's expected growth.

## Summary of Residential Findings

| Land Use Type | 20-Year Demand Forecast | | Theoretical Maximum Buildout Esimates | | | |
|---|---|---|---|---|---|---|
| | Low | High | Max. Approved | Max. Under Review | Max. Buildout Estimate | Total |
| Residential (units) | 11,500 | 13,500 | 9,377 | 5,504 | 9,252 | 24,133 |

Based on the 20-year demand forecasts presented in this report, non-residential development could continue to occur at a similar historical pace and still be accommodated under the existing future land use designations over the next 20 years. This is consistent across all four sectors analyzed: retail, office, industrial, and hospitality. However, consistent with the residential buildout, there are challenges that could impact the future development potential for non-residential land uses. These are described in Chapter 7.

## Summary of Non-Residential Findings

| Land Use Type | 20-Year Demand Forecast | | Maximum Buildout Estimate |
|---|---|---|---|
| | Low | High | |
| Retail (sq. ft.) | 1.0M | 1.3M | 1.9M |
| Office (sq. ft.) | 750,000 | 1.0M | 2.7M |
| Industrial (sq. ft.) | 950,000 | 1.1M | 5.5M |
| Hotel (rooms) | 750 | 900 | 2,554 |

On the following pages, two maps are included to compare land use buildout with future demand. The map of the residential results is shown first and includes the residential pipeline. It is followed by the non-residential results map, which does not include the non-residential pipeline.

## Map of Residential Results
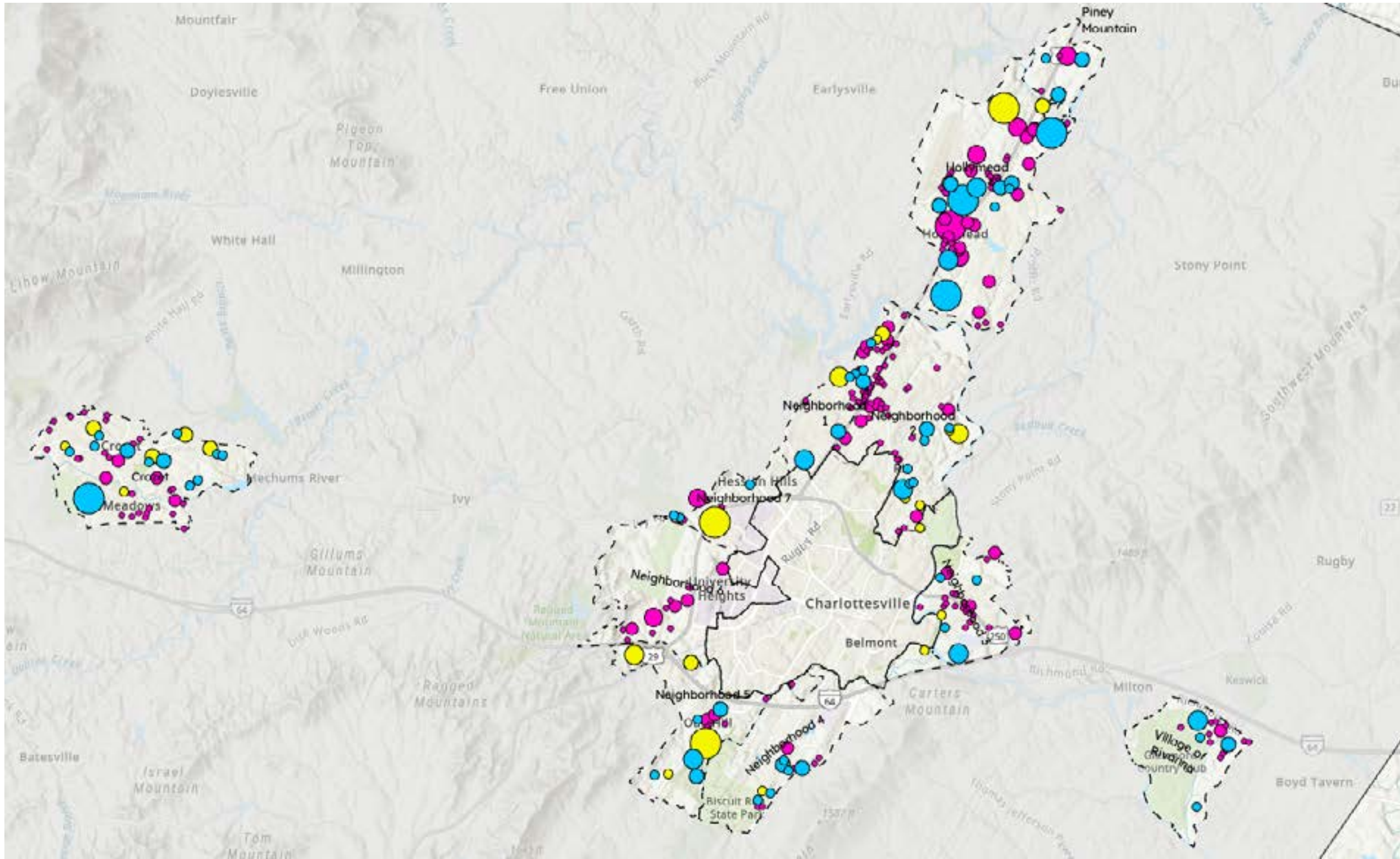
## Map of Non-Residential Results
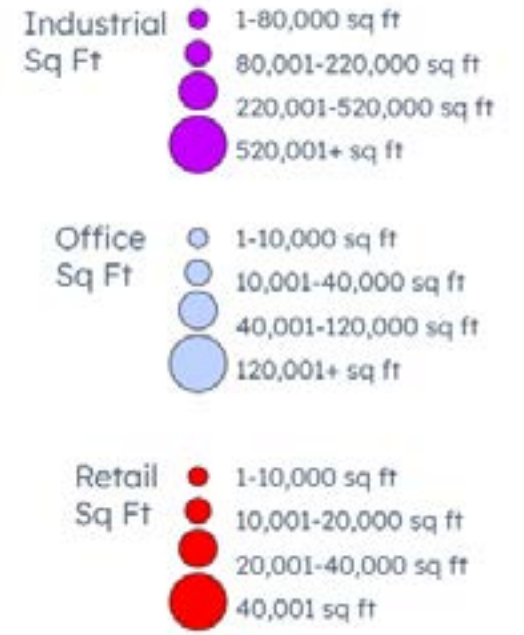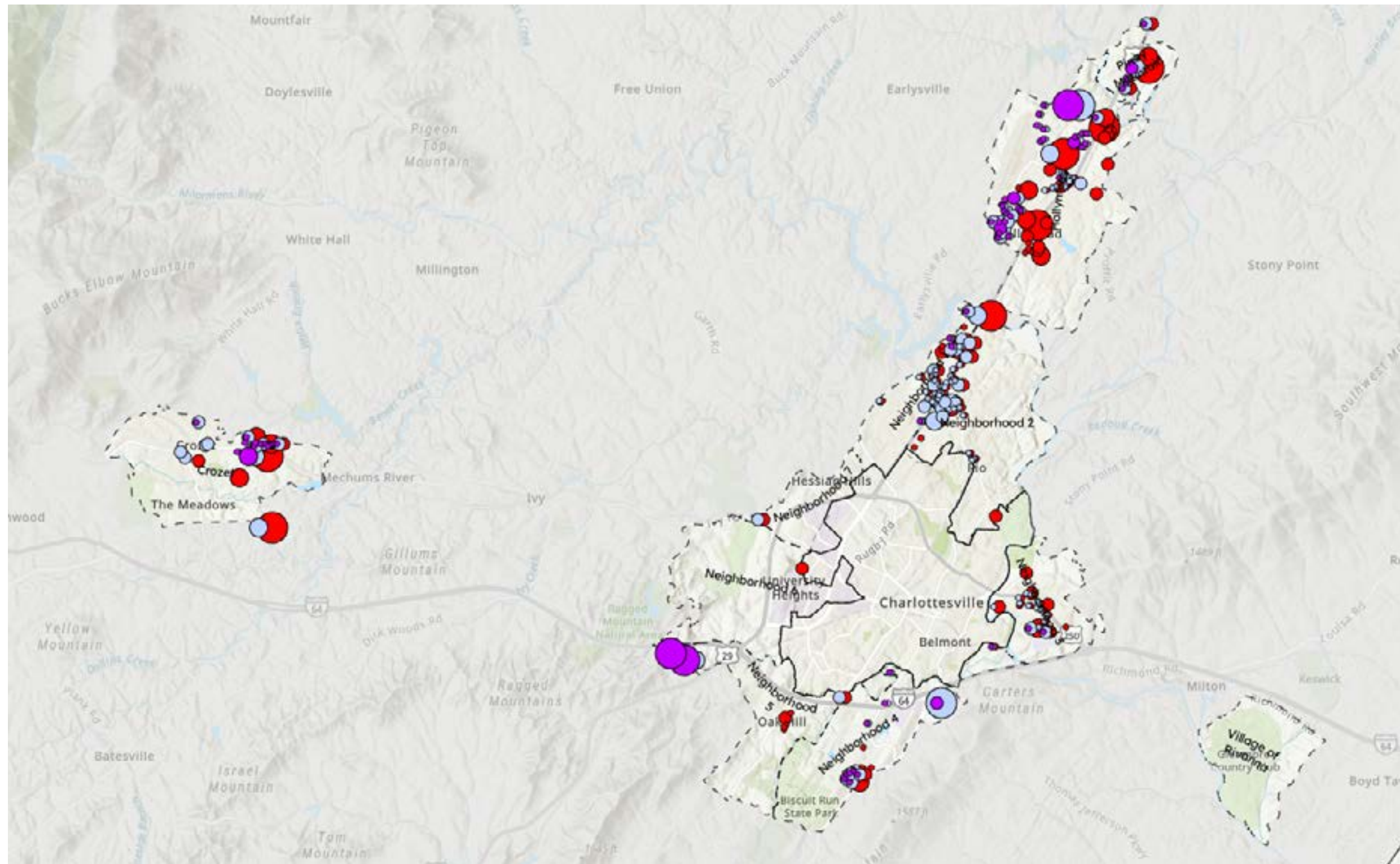
# Chapter 7: Non-Residential Buildout Analysis—Constraining Factors

Consistent with the Residential Buildout Analysis presented in Chapter 6, the 20-year demand forecasts for non-residential uses do not take into consideration potential growth limitations like the availability of land, the cost of development, or environmental constraints. They also do not consider site readiness, which is described further in t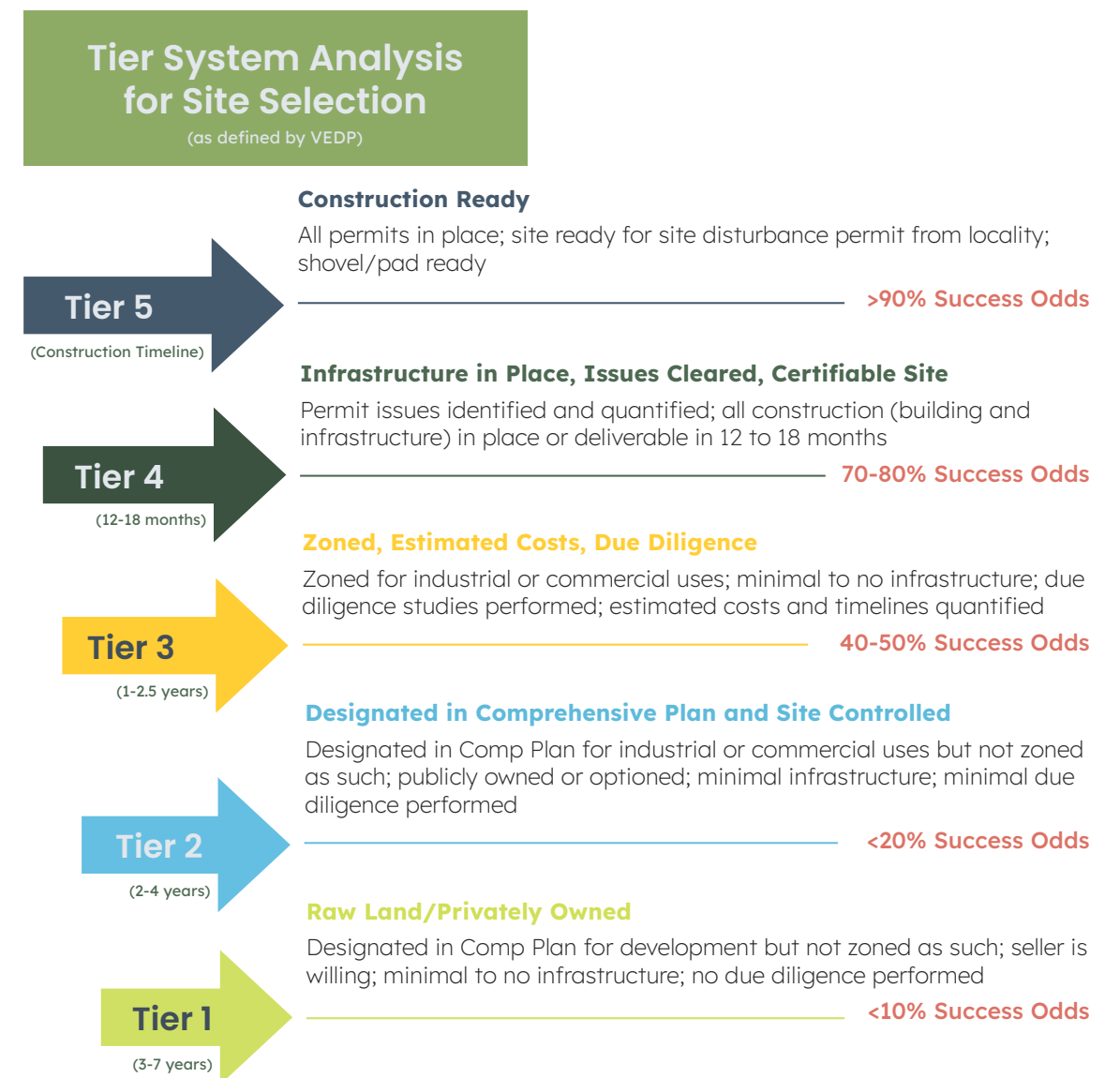his chapter. The factors described in Chapter 6 are highly relevant in the true availability of land for non-residential development, as well as the pace and quantity of growth.

**Cost of Land**

**Cost of Housing**

**Physical Site Constraints**

**Land and State Ordinance Requirements**

**Site Location and Infrastructure Access**

**Misalignment Between Existing Zoning and Future Land Use**

**Rezoning Process and Final Buildout Decisions**

## Development Area Tier Analysis and Additional Factors to Consider

This section provides a secondary analysis of the total Development Area buildable acreage presented previously in Chapter 5. Albemarle County has 2,842 acres of available land in the Development Areas based on the methodology described for this analysis. Removing acreage that would be required to support necessary infrastructure and accommodate environmental constraints and open space needs, and removing parcels designated entirely greenspace and green systems, it was determined that Albemarle County has approximately 1,634 acres of buildable land remaining.

A tier analysis of non-residential development adds important context to the potential feasibility of future buildout. Each "tier" represents a different level of readiness for site development. As shown in the graphic below, Tier 1 parcels are the least ready for development whereas Tier 5 parcels are prime for development. Tier 1 properties are typically raw land that is at least designated for commercial or industrial development and Tier 5 parcels have permits in place and are ready to receive development.

**Tier System Analysis for Site Selection**
(as defined by VEDP)

**Tier 5**
(Construction Timeline)

**Construction Ready**
All permits in place; site ready for site disturbance permit from locality; shovel/pad ready
**>90% Success Odds**

**Tier 4**
(12-18 months)

**Infrastructure in Place, Issues Cleared, Certifiable Site**
Permit issues identified and quantified; all construction (building and infrastructure) in place or deliverable in 12 to 18 months
**70-80% Success Odds**

**Tier 3**
(1-2.5 years)

**Zoned, Estimated Costs, Due Diligence**
Zoned for industrial or commercial uses; minimal to no infrastructure; due diligence studies performed; estimated costs and timelines quantified
**40-50% Success Odds**

**Tier 2**
(2-4 years)

**Designated in Comprehensive Plan and Site Controlled**
Designated in Comp Plan for industrial or commercial uses but not zoned as such; publicly owned or optioned; minimal infrastructure; minimal due diligence performed
**<20% Success Odds**

**Tier 1**
(3-7 years)

**Raw Land/Privately Owned**
Designated in Comp Plan for development but not zoned as such; seller is willing; minimal to no infrastructure; no due diligence performed
**<10% Success Odds**

With constant pursuit of development, Tier 1 sites may develop in 3-7 years. Tier 5 sites expect to be delivered in one year or less.

The tier classification is useful because it broadly communicates the risk and uncertainty associated with developing a specific site. The tier level generally indicates the overall risk to developing a site, including time, financial cost, opportunity cost, regulation, and other factors. Parcels that are considered "site ready" are classified as Tier 4 or Tier 5 and the market expectation is that a project could be delivered within 12 to 18 months. This timeline and relative certainty for successful development makes Tier 4 and Tier 5 properties highly desirable. Properties within Tiers 1-3 are riskier to bring to market and considered less attractive investment opportunities.

To further analyze the land capacity under the lens of properties that are ready to support non-residential development in the short-term, this analysis prepared a secondary tier analysis for available and buildable parcels within the Development Areas based on the following attributes:

- At least three (3) acres in size
- Currently vacant
- Already zoned or designated for non-residential uses, including Light Industrial, Heavy Industrial, Office/RD/Flex, Planned Development Industrial Park (PDIC), C1 Commercial, Highway Commercial, or Planned Development Mixed Commercial

Based on the site attributes described above, the Development Area tier analysis yielded only 39 parcels that met each of the defined criteria, totaling less than 890 acres. As a point of comparison, there are more than 22,900 total parcels within the County's Development Areas.

**22,900 Total Development Area Parcels**
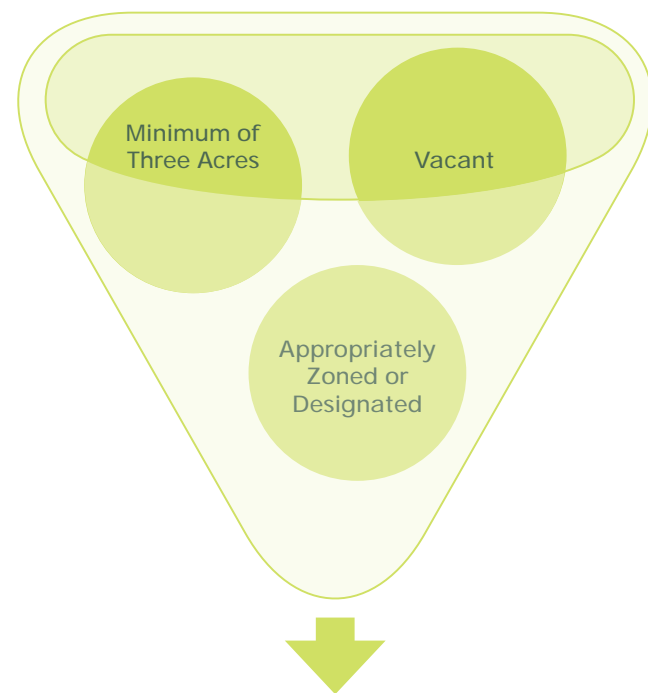


**39 Development Area Tier Qualified Parcels**

Albemarle County Economic Development staff reviewed each of the 39 parcels that met the tier criteria to estimate its level of site readiness. Only one property in the Development Areas met the description of a Tier 4 site where infrastructure is in place, site challenges have been addressed, and a project could be brought to market in 12-18 months. None of the properties met the definition of a Tier 5 site. Staff estimated that nine additional properties could also support development in the 12–18-month timeframe but may require some extension of infrastructure.

It should be noted that all but one of the sites identified as having the potential to support non-residential development in a 12–18-month timeframe are in the Hollymead Development Area. The future buildout capacity of the Hollymead Development Area could be constrained by current infrastructure capacity. Additionally, a concentration of most of the County's ready sites in a singular location undermines the goals of Project ENABLE, the current economic development strategic plan. One of the foremost goals of Project ENABLE is to retain existing businesses that are expanding in the County (Goals 1, 2, 3). A diversity of sites regarding both size and location is needed to be successful in supporting these goals.

**Project ENABLE Goals**

**Goal 1:** Strengthen Existing Business Retention and/or Expansion to Help Existing Businesses be Successful

**Goal 2:** Improve the Business Climate

**Goal 3:** Lead the County's Readiness to Accommodate Business

**Goal 4:** Seek Private Investment to Further the Public Good

**Goal 5:** Educate the Community and Enhance the Visibility of Economic Development

**Goal 6:** Lead External Efforts to Create Strategic Partnerships with Economic Development Institutions

**Goal 7:** Partner to Expand Efforts to Build the County's Tourism Sector

Albemarle County Economic Development seeks to have a robust portfolio of Tier 4 and Tier 5 sites that are diverse from geographic, acreage/amenity, land cost, and end user perspectives. A successful portfolio would include:

■ Sites that are ready and available within all the County's Development Areas. To date, the County has experienced the highest demand for spaces that are located north, south, and central to the urban ring of the County and the City of Charlottesville. Having spaces throughout all of the Development Areas will also provide greater diversity in property size and price point.

■ Sites that range in size to attract a wider variety of end users. To address future needs, ready sites of all sizes are needed, including those that range from five acres or less to ones that offer more than 100 contiguous developable acres.

■ Sites that range in price point that would be attractive to a wide variety of end users.

■ Sites that have existing infrastructure, including power, water, sewer, roads, and broadband.

■ Sites with a variety of locational attributes, including:

   ■ Proximity to the University of Virginia (within a 10-minute commute)

   ■ Proximity to the Charlottesville-Albemarle (CHO) airport (within a 20-minute commute)

   ■ Accessibility to I-64/Rt29

   ■ Accessibility to rail

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## *Conclusion*

Although the land use buildout analysis for non-residential uses suggests sufficient capacity to meet future demand, constraining factors result in less than maximum buildout and negatively impact the amount of developable land for non-residential uses, especially in the short-term. The tier analysis found only 39 parcels can support significant non-residential development within an 18-month timeframe that would be attractive to job-creating land uses. Additional coordination with the County's Economic Development Office and the Economic Development Authority would allow for the identification and preparation of critical properties to support future job creation. This type of effort would align with Project ENABLE's goal of strengthening existing businesses and accommodating a diverse inventory of new businesses.

Properties designated in the Comprehensive Plan to support non-residential development should be carefully reviewed to confirm that they align with the location and infrastructure needs of the County's targeted economic sectors. Efforts to reduce the negative impacts of the constraining factors will support non-residential growth that better aligns with the theoretical maximum buildout estimate.