REGIONAL LOCAL NRV HOUSING STUDY

Detailed Report

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Prepared by

the Virginia Center for Housing Research at Virginia Tech Housing Forward Virginia the New River Valley Regional Commission

prepared for

the New River Valley Region

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1. Executive Summary

The New River Valley (NRV) is a desirable place to live and work. The region's population is growing, creating more jobs and amenities, and it offers diverse settings as well as relative affordability and superior amenities that appeal to a variety of households and support our economic competitiveness. However, relatively low median days on market and steep price increases are evidence of a potential housing shortage. Whereas steady increases in demand (and thereby prices) are important for protecting the investments of current residents, a market with too little housing inventory makes housing upgrades or changes to more appropriate housing difficult (or impossible) for current residents and may stagnate growth. The NRV is facing various housing affordability and availability issues that are starting to affect the region's quality of life and ability to grow.

Housing plays a critical role in economic opportunity for individual workers and their families, affecting current and future workers, employers, communities, and regional markets. Housing unaffordability is often why individuals and families experience instability in housing, accept substandard housing, or sacrifice other critical needs like child educational enrichment, medical attention, or food. In addition, deferring maintenance and living in overcrowded conditions may help households reduce burdensome housing costs but have their own consequences for the household and its neighbors.

Availability and affordability of housing have distinct effects on businesses and markets. Although high housing prices often reflect local amenities and economic opportunities in an area (Ratcliffe 2015), research suggests that high housing prices and few affordable options may constrain economic growth. A job–housing imbalance may impede economic development by making it difficult for businesses to recruit and retain employees (Morrison & Monk 2006).

Housing Need

The NRV needs at least 5,500 income-restricted units to stabilize current residents with low- and moderate-income who spend more than 50 percent of their income on housing and have been unable to afford housing without sacrificing other elements of their basic wellbeing. In addition, 9,000 other households in the region pay more than 30 percent of their income for housing and may struggle to afford housing along with other necessities such as transportation, healthcare, or education.

Some households critical to the region's growth (including both low-wage service workers and top talent for leading-edge industries) can benefit from living in the region, being closer to their jobs, buying a home for investment, or upgrading; however, the tight housing market in the NRV makes it difficult for these workers to find a suitable and affordable live/work arrangement, which may limit the region's growth.

Homebuyer Market

Potential homebuyers face a tight market in the NRV, with homes being listed for a median of only 9 days in 2019. Highly competitive markets favor experienced buyers that can make cash offers or afford prices

above appraised value, and potential buyers who are less willing or able to make offers quickly are likely to be excluded from the market and may give up the search altogether.

Over the June 2018–May 2019 period, 1,650 homes were sold in the NRV, with the midrange price of homes (i.e., the 25th to 75th percentile range) between \$132,000 and \$275,000 and 13.5 median days on market. The NRV needs more homes in and slightly above this price range to relieve intense demand pressure on prices and market availability.

Rental Market

Median rents increased 38.5 percent from 2007–2017, which indicates strong demand in many communities (including the NRV's large university-student population). The rental vacancy rate in the NRV is below 2.4%, and units throughout the region are likely to be rented nearly continuously. Employers, economic development professionals, service providers, and residents have expressed frustration with the tightness of the rental market. Employers explained that new employees have difficulty finding appropriate, high-quality rental housing when they accept jobs in the region. Many new residents prefer to rent, and those seeking to purchase homes often rent while they familiarize themselves with the area and endure a long home-search or build a new home. Furthermore, prospective residents may decline a job in the region and move to another locality if they are unable to find a suitable apartment or house.

Addressing Housing Need

Housing challenges will intensify without concerted leadership from local governments and support from current residents. Local governments must raise and dedicate funds to support low-income households, encourage the development of a variety of housing choices and innovative approaches to density, and work *regionally* to establish *market-wide* housing goals, policies, and programs. Local governments have tools available to help address housing, such as land use and zoning regulations and incentives, tax abatement, resource dedications, influence, development decision-making, and support. However, each of these tools requires resources to develop and use appropriately. Incentivizing and removing barriers to developing suitable housing types for residents of all income levels is necessary to creating an inclusive, prosperous, happy, stable, and growing community.

Local governments cannot resolve housing challenges alone. Policies and programs require community commitment to inclusivity and support from philanthropists, businesses, and taxpayers. Tension exists between existing residents and new development because ample supply slows housing price increases and changes the landscapes that attracted current residents. However, real estate prices can stagnate without growth as places lose relevance and desirability. The value of continued development and redevelopment is realized over the long term, so stakeholders such as realtors, developers, and employers must speak up for prospective residents. Furthermore, residents must respond to the needs of workers and neighbors who struggle to get by. Finally, every stakeholder must understand that growing environmental awareness and increasing prices of land, labor, and materials imply that density and innovation are required to offer affordable, appropriate housing to our growing and changing population.

The Report

This report offers an in-depth documentation and analysis of the NRV market and submarkets as well as strategy recommendations at both the regional and local levels responsive to both quantitative evidence and expert input developed in coordination with local and regional leadership. The authors suggest reading the regional sections ("The Region", "Housing the Community" and "Market Challenges and Opportunities") in addition to any of "Local Profiles" since regional findings contextualize and have important implications for local findings.

Strategy recommendations are included in separate documents. Regional strategies address region-wide issues such as housing education and involve partnerships among jurisdictions and institutions. Local strategies have common themes that allow growth to respond to the history and character of our region, including creative density focused on towns and villages, re-investment in the existing housing stock, and tools to incentivize and preserve housing for low-income households and first-time homebuyers. Local strategies also include specific recommendations tailored to the opportunities and challenges of that jurisdiction within the overall regional market.

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2. About the Study

The Virginia Center for Housing Research (VHCR) at Virginia Tech, HousingForward Virginia, and the New River Valley Regional Commission (NRVRC) designed this study and collaborated to complete regional and local housing market analyses and housing needs assessment for the NRV and localities therein. This study benefitted from subject matter expertise in housing markets, affordable housing, workforce housing, housing policy, and planning as well as local expertise in housing, planning, economic development, community services (e.g., education, social, housing), and community development. Collaboration allowed for a two-way knowledge transfer: VCHR provided in-depth training on housing data and analysis to local stakeholders; in turn, local stakeholders oriented the research team to help them understand the NRV market, critical goals, and challenges. HousingForward Virginia collaborated with VCHR, NRVRC, local government staff, and stakeholders to provide detailed information about strategies to address local and regional housing challenges and opportunities.

The team had three primary objectives:

- Understand market-wide housing dynamics and the market role(s) played by each locality.
- Assess housing needs regionally and locally.
- Provide information and example strategies to help local governments and communities address housing challenges and opportunities.

This report discusses the study team's analysis and findings. In addition, it describes the importance of these findings for individuals, businesses, communities, and the region to emphasize the interconnectedness of housing issues and their implications.

2.1 About NRVRC, VCHR, and HousingForward Virginia

The NRVRC is an organization comprised of 13 local governments and 3 higher-education institutions formed to encourage collaboration to address regionally significant issues and opportunities. For over 50 years, the NRVRC has served Floyd, Giles, Montgomery, and Pulaski counties as well as the City of Radford to build relationships and capacity across the region, convene community leaders around regional topics, and serve as a liaison between local, state, and federal governments. Jennifer Wilsie, Senior Planner, was the project lead for the Regional Commission and has been involved in housing and community development projects within the region since 2007.

The Virginia General Assembly and Virginia Tech created VCHR in 1989 to respond to the housing research needs of Virginia and the nation. In its 25-year performance record, VCHR has established an unparalleled reputation for high-quality research on affordable housing that integrates policy, building technology, and the housing industry. Mel Jones, Research Scientist and Associate Director, led the project team on this report. As a faculty member at VCHR, Mel has conducted housing studies for communities and regions throughout Virginia and beyond. Mel has developed a unique expertise in assessing housing data and applying it to help communities tackle housing affordability, community development, and economic development goals.

HousingForward Virginia is the Commonwealth's trusted resource for affordable housing data and actionable insights. Advocates, planners, developers, and mission-aligned organizations rely on HousingForward to help them build connections and advance their work. With their support, these local and state leaders can better identify needs, influence decision makers, and ultimately increase access to affordable housing for all. HousingForward Virginia is a 501(c)3 nonprofit organization based in Richmond, Virginia. For more information, visit housingforwardva.org

2.2 Data and Methodological Notes

The study team analyzed market-wide housing data to understand supply and demand dynamics in the region as well as submarkets to understand the role(s) played by each locality in the region.

Study Geography

The team used the Blacksburg–Christiansburg–Radford metropolitan statistical area (MSA) to approximate the NRV housing market. MSAs are a good approximation of housing markets because they are defined based on the strength of commuting patterns. Households generally choose a home within an acceptable commuting distance from their job or look for a job within an acceptable commuting distance of their home. In addition to the MSA, the team examined data for each of the counties (and equivalent) and towns therein.

Figure 1: NRV Resident Commute Destinations

U.S. Census Bureau, Center for Economic Studies, LEHD



Data Analysis

The study team used data from four main sources: American Community Survey (ACS) published tables, ACS Public Use Microdata Sample (PUMS) files, the Department of Housing and Urban Development's (HUD) Comprehensive Housing Affordability Strategy (CHAS) data, and the New River Valley Association of REALTORS[®] multiple listing service (MLS) data. The study team supplemented these resources with economic and transportation data described later. VCHR used locality assessment data where it was appropriate and reliable. NRVRC collected anecdotal survey data to complement quantitative data and expert qualitative data provided by focus group participants.

The reliability of ACS estimates was calculated, and only reliable estimates were used for the analysis. Although reliable 1-year ACS estimates are available for the MSA and some localities within the study area, they are not available for all localities; therefore, the study team used 5-year estimates when comparing localities and the general MSA. The latest ACS estimates available during the initial data collection by VCHR are from 2017. The latest estimates available from the PUMS files are from 2013–2017, and those for CHAS data are from 2012–2016.

To evaluate whether workers can afford prevailing market rents, the team used 2019 US Bureau of Labor Statistics (BLS) earnings by occupation data, Jobs EQ 2020Q1 employment by occupation data, and 2017 OnTheMap data from the US Census Bureau Center for Economic Studies. The team used OnTheMap to further assess interjurisdictional commuting. Finally, 2012–2016 Location Affordability Index (LAI) data, which are the latest available, were used to demonstrate location efficiencies of living close to employment centers and places with multimodal transportation networks.

Focus Groups

The study team conducted 10 focus groups to better understand the market. Stakeholders including realtors, lenders, developers, builders, housing providers, local government staff, elected officials, K–12 educators, industry groups, faith-based service providers, and healthcare providers offered detailed insights that helped the team understand the complexities of the market. Focus group data complemented quantitative data and helped test its validity. Insights from focus groups are included throughout this report, providing real-life examples that improve the concreteness and comprehensibility of the data conclusions.

Public Survey

NRVRC offered an online public survey between October 2018 and June 2019, receiving 1,158 responses from residents across the region. Respondents were asked to share information regarding both their current housing situation and any experiences searching for new housing. More than half of the respondents (54 percent) live in Montgomery County. Furthermore, 27 percent are from Pulaski County, 8 percent from Radford City, 6 percent from Floyd County, and 5 percent from Giles County. Nearly 72 percent of respondents were homeowners and 22 percent were renters. Of those actively searching for new housing (32 percent), over half (55 percent) indicated that they were searching within their existing locality, whereas 45 percent were looking to move to another county or out of the region.

Radford Housing Conditions Field Survey

VCHR, NRVRC, and Virginia Tech students and faculty volunteers evaluated 3,191 residential exteriors, (single- and multifamily units) on a five-point scale to determine the approximate condition of homes throughout Radford. Property condition scores reflect the level of investment in major areas of each home, including the porch, roof, siding, landscaping, and entryway of the surveyed property. The City of Radford can use survey results to target funding for rehabilitation and reinvestment in neighborhoods.

3. Important Terms and References

Tenure – The method by which a household possesses their home: renting, fully owned with no home loan, or owned with a mortgage or other home loan.

Cost-burdened Households – HUD established the term *cost-burdened* to describe households that need more affordable housing. HUD defines cost-burdened households as "families who pay more than 30 percent of their income for housing... and may have difficulty affording necessities such as food, clothing, transportation, and medical care." Severely cost-burdened households pay 50 percent or more of their income for housing and are likely to be making tough choices between housing and other necessities.

Percent of Area Median Income (AMI) – HUD sets income limits by household size that determine eligibility for assisted-housing programs. HUD develops these income limits based on median family income estimates and fair market rent area definitions for each metropolitan area, parts of some metropolitan areas, and each non-metropolitan county. These income limits are useful tools for housing needs assessments because they are a common standard for categorizing households based on income considering household size. HUD publishes only median family incomes for families of four and income limits at 30, 50, and 80 percent of the median for households of up to eight people; however, the department offers documented formulas for calculating limits at other income levels as percentages of the median and for larger household sizes. VCHR follows this methodology for calculating limits at other, unpublished levels such as 100 and 120 percent of AMI.

Blacksburg-Christiansburg-Radford, VA HUD Metro FMR Area Median Family Income: \$87,800							
Income Level	1-person	2-person	3-person	4-person			
<30% AMI	\$17,400	\$19,850	\$22,350	\$26,200			
(extremely low income)	Ş17,400	\$19,850	ŞZZ,330	\$26,200			
30-50% of AMI	\$28,950	\$22,100	\$27.250	\$41,350			
(very low income)	Ş28,930	\$33,100	\$33,100 \$37,250				
50-80% of AMI	\$46,350	\$52,950	\$59,550	\$66,150			
(low income)	Ş40,330	JJ2,9J0	000,500	\$00,150			
80-100% of AMI*							
(moderate income)	\$57,900	\$66,200	\$74,450	\$82,700			
100-120% of AMI*							
(moderately high income)	\$73,750	\$84,300	\$94,850	\$105,350			
*VCHR tabulation extending	*VCHR tabulation extending HUD formulas						

Table 1: 2020 Montgomery County & City of Radford HUD Income Limits

Table 2: 2020 Floyd HUD Income Limits

Floyd County, VA HUD Metro FMR Area Median Family Income: \$61,600							
Income Level	1-person	2-person	3-person	4-person			
<30% AMI	\$12,950	\$17,240	\$21,720	¢26,200			
(extremely low income)	\$12,950	\$17,240	\$21,720	\$26,200			
30-50% of AMI	\$21,600	\$24,650	\$27,750	\$30,800			
(very low income)	\$21,000	\$24,050	\$27,750	\$50,800			
50-80% of AMI	\$34,550	\$39,450	\$44,400	\$49,300			
(low income)	\$54,550	\$59,450	\$44,400	\$49,500			
80-100% of AMI*							
(moderate income)	\$43,150	\$49,300	\$55,450	\$61,600			
100-120% of AMI*							
(moderately high income)	\$51,750	\$59,150	\$66,550	\$73,900			
* VCHR tabulation extending	* VCHR tabulation extending HUD formulas						

Table 3: 2020 Giles HUD Income Limits

Giles County, VA HUD Metro FMR Area Median Family Income: \$61,000							
Income Level	1-person	1-person 2-person 3-person		4-person			
<30% AMI	\$12,850	\$17,240	\$21,720	\$26,200			
(extremely low income) 30-50% of AMI							
(very low income)	\$21,350	\$24,400	\$27,450	\$30,500			
50-80% of AMI	\$34,200	\$39,050	\$43,950	\$48,800			
(low income)	<i>\$</i> 01,200	<i>ç</i> 00,000	÷ 10,000	÷ 10,000			
80-100% of AMI*							
(moderate income)	\$42,700	\$48,800	\$54,900	\$61,000			
100-120% of AMI*							
(moderately high income)	\$51,250	\$58 <i>,</i> 600	\$65,900	\$73,200			
* VCHR tabulation extending	* VCHR tabulation extending HUD formulas						

Table 4: 2020 Pulaski HUD Income Limits

Pulaski County, VA HUD Metro FMR Area Median Family Income: \$60,500							
Income Level	1-person	2-person	3-person	4-person			
<30% AMI	12,760	17 240	21 720	26,200			
(extremely low income)	12,760	17,240	17,240 21,720				
30-50% of AMI	21,200	24,200	27,250	30,250			
(very low income)	21,200	24,200	27,230	50,230			
50-80% of AMI	33,900	38,750	43,600	48,400			
(low income)	55,900	38,730	45,000	48,400			
80-100% of AMI							
(moderate income)	\$42,350	\$48,400	\$54 <i>,</i> 450	\$60,500			
100-120% of AMI							
(moderately high income)	\$51,250	\$58,600	\$65 <i>,</i> 900	\$73,200			

* VCHR tabulation extending HUD formulas

Housing Affordability – *Housing affordability* is a broad term used to discuss the degree to which housing units in a market or submarket meet the income-based needs of households in that market. Researchers and practitioners generally consider housing affordability for income groups that may face challenges related to affording housing, including the following:

- extremely low-income households that do not make enough money to obtain decent housing
- young professionals who wish to become homeowners but cannot find a starter home with associated costs within their budget
- established owners who cannot find an appropriate home to "upgrade" to as their families grow and they enter their professional prime
- aging adults who cannot afford home modifications and maintenance or to move to a more appropriate home

Housing affordability is not typically a concern for higher-income households that can obtain their desired housing without sacrificing other household needs such as safety, transportation, medical care, food, education, and childcare. However, a shortage of housing for households at any income level may affect businesses expanding in the market or economic development efforts for attracting new businesses.

Householder – This report refers to *householder* when the available data pertains to the householder as defined by the US Census. The Census subject definitions states that "the householder refers to the person (or one of the people) in whose name the housing unit is owned or rented (maintained) or, if there is no such person, any adult member, excluding roomers, boarders, or paid employees. If the house is owned or rented jointly by a married couple, the householder may be either the husband or the wife. The person designated as the householder is the 'reference person' to whom the relationship of all other household members, if any, is recordedⁱ."

Community development is the collective investment in elements that make a place desirable to live and work, such as infrastructure, multi-modal transportation connectivity, business vibrancy, and recreation.

4. The Importance of Housing

Housing plays a critical role in economic opportunity for individual workers and their families, affecting current and future workers, employers, communities, and regional markets. Benefits of appropriate, affordable housing and consequences when such housing is unavailable are most concrete at the individual and neighborhood level. However, as demand for housing increases and housing becomes more expensive to produce, its availability and affordability have distinct effects on businesses and markets. This overview of the importance of housing illuminates some of the connections between housing, individual economic opportunity, workforce, and economic development that have been explored by researchers. Nonetheless, the effects of homes—for example, size, quality, location, and cost—extend beyond the examples given here.

Individuals and families that select a home choose a host of related features, resources, amenities, and opportunities. For instance, they choose access to specific schools, proximity to grocers and other shopping, proximity to family and other important social networks, and opportunities for recreation and exercise. Households choose the best housing they can afford and gravitate toward markets that offer better housing "packages" at the best prices. Housing costs are among the top five factors affecting where households choose to live and workⁱⁱ.

A community that lacks affordable housing often lacks housing for the community's essential, low-income workers. To provide a high quality of life for all households, the region and its jurisdictions must enable developers and builders to produce housing that is appropriate and affordable for households at every income level. For those with the lowest incomes, local governments must pair their land-use tools and resources with state and federal resources to provide affordable, appropriate housing and ensure that low-income workers can prosper in the community.

Although high housing prices often reflect local amenities and economic opportunities in the areaⁱⁱⁱ, research suggests that high housing prices and few affordable options may constrain economic growth. Saks (2008) argues that when the supply of affordable housing is restricted (often by land-use controls), labor migration patterns change, resulting in lower employment growth^{iv}. Slowed, stalled, or negative employment growth can hurt businesses and communities. Jonas, While, and Gibbs (2010) suggest that workforce housing and other major infrastructure are common problems for regions that are growth "hotspots^v." Workforce housing¹ supports successful economic development, as businesses may have trouble attracting or retaining workers without nearby affordable housing options and/or convenient and affordable transportation. This job–housing imbalance may impede economic development by making it difficult for businesses to recruit and retain employees^{vi}.

Housing affordability, stability, quality, tenure, and location have been shown to impact child development and opportunities for individuals and households. Housing is the foundation for family wellbeing^{vii}, and housing unaffordability is often why individuals and families experience instability in

¹ Workforce housing is generally described as the housing that is affordable to households earning less than 120 percent of AMI (Cohen & Wardrip, 2011)

housing, accept substandard housing, or sacrifice other critical needs like child educational enrichment, medical attention, or food. Strained finances and substandard or unstable housing may lead to negative economic consequences for both individuals and households.

Many aspects of substandard housing affect the health of residents. Poor housing quality often induces stress and inhibits the home from providing a peaceful or restorative space. Jones-Rounds et al. (2014) found that psychological wellbeing correlated with housing quality; that is, people in high-quality housing were less depressed and more energetic and peaceful than those living in low-quality housing^{viii}. Substandard housing represents a potential psychological detriment by causing low self-esteem and hindering family self-sufficiency^{ix}. For example, residents of low-quality housing worry about the integrity of the home's structural components. Housing-related stress or anxiety has been shown to lead to depression and stress-related mental illness^x. Children in low-income families that receive housing subsidies are more likely to be classified as having "good" or "excellent" health than those in low-income families to the waiting list for assistance are^{xi}. Furthermore, adults who are housing cost-burdened are less likely to fill a prescription, follow healthcare treatments, or purchase health insurance because of the costs.

Health problems, when persistent, present significant employment and productivity problems. Businesses impacted by poor employee health may experience high rates of turnover that manifest unfilled positions, lower productivity, and lost profits. Employee turnover generates costs related to finding replacement workers, temporarily covering vacancies, training replacements, and loss of knowledge and skills. In total, the costs of turnover can be upwards of 30 percent of annual salary for lower-level employees and up to 250 percent of annual salary for highly skilled ones^{xii}. Health conditions also pose a barrier for those who are currently unemployed and can lead to both temporary and permanent medically induced unemployment (i.e., the inability to work owing to a medical condition)^{xiii}.

Cohen and Wardrip (2011) found that low-income families occupying substandard homes moved more often than middle- and high-income families did, owing to problems associated with high housing costs and changes in income^{xiv}. In addition, households experiencing forced displacement (e.g., eviction, foreclosure, or building condemnation) often must move to substandard and/or temporary housing, resulting in subsequent moves^{xv}. Children in families with housing instability or substandard housing experience health, behavioral, and developmental educational consequences.

Unaffordable housing contributes to children's poor school attendance and performance^{xvi}. Gagne and Ferrer (2006) find that major home repair requirements and short length of residence negatively affect children's math scores^{xvii}. Newman and Holupka (2013) find that families who are not cost-burdened are more likely to spend a portion of their income on child enrichment, affecting their children's cognitive achievement^{xviii}. These developmental and educational consequences associated with student mobility and inadequate housing may have economic implications for individuals and the community workforce. Many studies have shown that educational attainment—the number of school years completed—closely correlates with both individual earnings and economic growth rates^{xix}. Level of education is typically positively associated with higher individual earnings. Studies within and across nations have found that 1

additional year of schooling translates into an approximately 10 percent increase in annual individual earnings^{xx}.

Beyond this individual benefit, evidence exists that additional years of schooling provide social benefits in the form of improved health, higher levels of civic participation, lower crime rates, and greater economic growth^{xxi}. Educational attainment increases human capital, resulting in the enhanced productivity of a nation's workforce, an increase in the rate of technological innovation, and the diffusion and adoption of new production processes and technologies, all of which help boost economic growth^{xxii}. Each additional year of schooling within a population is also associated with greater long-run economic growth^{xxiii}. Schools and neighborhoods are so closely interconnected; therefore, providing equitable and affordable housing opportunities across a jurisdiction can provide more equitable educational opportunities^{xxiv}, leading to greater and more sustainable economic growth^{xxv}. Increasing skills for low-income individuals improves economic growth more than it does for those with high incomes as measured by GDP and tax revenue growth, suggesting that educational opportunities should be improved for low-income individuals^{xxvi}. Furthermore, closing educational-achievement gaps may reduce income inequality by increasing the lifetime earnings of the poorest 75 percent of children more than those of the richest 25 percent. Lynch (2015) concluded that improving the education of all future workers "accelerates economic growth and can promote more equal opportunity over the long run resulting in stronger, more broadly shared economic growth, which in turn raises national income and increases government revenue, providing the means by which to invest in improving our economic future^{xxvii}."

Finally, the location, tenure, and type of housing can affect a household's economic opportunities. Kleit (2002) found evidence that households living in areas with more income diversity have more diverse jobsearch networks^{xxviii}. White and Saegert (1997) showed that co-op ownership of low-income housing is associated with increased skills and self-confidence as well as wider job networks among tenants. Studies have shown that homeownership provides considerable access to opportunity^{xxix}. The simplest connection between homeownership and opportunity is the ability to build wealth and use home equity. Homeowners can elect to borrow against the equity they have built on their home through a home equity line of credit (HELOC). HELOCs may act as a financial buffer against unexpected expenses, smooth consumption over time, or allow households to invest in education, job training, or a small business^{xxx}.

5. The Region

The NRV region includes four counties, Floyd, Giles, Montgomery, and Pulaski, as well as the City of Radford and 10 towns. The NRV population is 181,860 and comprises 69,180 households², each including two to three people on average. Just over half (51 percent) of households reside in Montgomery County and 21 percent live in Pulaski County. Fewer households live in Floyd (9 percent), Giles (10 percent), and Radford (8 percent). The Town of Blacksburg and the Town of Christiansburg are densely populated and include 65 percent of Montgomery County's 35,580 households.



The NRV jurisdictions comprise the Blacksburg–Christiansburg–Radford MSA. The MSA designation³ is based on the strength of intra-regional commuting patterns, which can be used to approximate a housing market. This is because households generally seek to buy or rent a home within a reasonable commute of their job just as households generally seek employment within a reasonable commute of their home. In total, 70 percent of workers living in the NRV also work in the region⁴.

² US Census subject definition for "household": A household consists of all the people who occupy a housing unit. A house, an apartment or other group of rooms, or a single room is regarded as a housing unit when it is occupied or intended for occupancy as separate living quarters; that is, when the occupants do not live with any other persons in the structure and there is direct access from the outside or through a common hall. A household includes the related family members and all the unrelated people, if any, such as lodgers, foster children, wards, or employees who share the housing unit. A person living alone in a housing unit, or a group of unrelated people sharing a housing unit such as partners or roomers, is also counted as a household. The count of households excludes group quarters. ³ The United States Office of Management and Budget (OMB) delineates MSAs and micropolitan statistical areas according to published standards that are applied to Census Bureau data.

⁴ 2017 On the Map, All Primary Jobs

Employment in the NRV is concentrated in the college towns, retail areas, and manufacturing facilities in the region, with the largest concentration of jobs in Blacksburg, Christiansburg, and Radford. Virginia Tech is the region's largest employer, with approximately 7,000 employees at the Blacksburg campus. More than 200 companies located at the Virginia Tech Corporate Research Center employ an additional 3,300 in the region. Many of the town's retail, hospitality, and service businesses are supported by the student population (30,000+) and visitors to the university or events. Many workers with jobs in Blacksburg live in Christiansburg and other nearby commuter towns such as those in Giles County and Radford.

Figure 3: NRV Job Density

U.S. Census Bureau, Center for Economic Studies, 2017



A cluster of technology companies related to innovations at Virginia Tech has developed in Blacksburg, especially in the Corporate Research Center office park and downtown Blacksburg. In employer focus groups conducted for this study, companies described their efforts to attract talented workers to the region while competing with technology companies in more established clusters in large cities and metro areas. Potential new hires that cannot find suitable apartments or houses may decline to move to the region and instead accept a job in another place with more housing options. Several employers noted that

a shortage of available housing for these new employees was a major impediment to their successful growth in the region.

Large manufacturing plants in the NRV represent an important destination for the region's commuters, with several large firms at locations outside of towns near interstates or railroads, often in rural areas outside of towns. These well-paying entry level jobs are typically not located near residential areas or transit systems, which is a major housing issue for those in poverty or struggling with homelessness. Several focus group participants noted the importance of stable transportation, day care, and other support services near jobs that are available for lower-income residents. Often, these jobs are in locations far from affordable apartment units or other housing that lower-income residents can afford, making reliable transportation essential to their ability to keep stable employment.

Many residents struggle to afford housing near their jobs in the region's towns and cities as well. Many jobs do not pay wages that allow workers to afford rents or mortgages in the towns where these jobs are available, especially Blacksburg. Housing affordability by occupation is discussed in more detail in "Workers" section, 6.3.2.

Location efficiency is an important concept in understanding submarkets within the region. Transportation is usually the second-highest household expense after housing^{xxxi}. Location-efficient housing is typically close to good transit and public services, and it has features that reduce automobile dependency such as good walking and cycling conditions. Location efficiency tends to improve households' economic resilience; that is, households are better able to respond to unexpected financial burdens such as fuel price increases, vehicle failures, or income losses.

Walking and cycling conditions along with public transit make commuting without a car possible for some places in the NRV. Other location-efficient places have lower-cost housing options within short commutes of jobs, shopping, and services. Map 2 measures relative location efficiency in the NRV by showing housing and transportation costs as percentage of household income for a median-income family. The most location-efficient places are the towns of Blacksburg and Christiansburg in Montgomery County, the City of Radford, and the towns of Dublin and Pulaski in Pulaski County. Maps showing housing plus transportation costs for other household types are included in Appendix 1.

Figure 4: Housing and Transportation as a Percentage of Income for a Median-income Family by Census Tract



VCHR tabulation of HUD 2012-2016 Location Affordability Index data

Location efficiency of housing is more critical for lower-income households, as high transportation costs may negate savings from living far from the workplace. Very low-income individuals and families struggle with living costs even in the most location-efficient places. More information regarding housing affordability for low- and moderate-income workers is presented in the "Housing the Community" section.

The NRV offers housing options in urban, suburban, exurban, and rural settings with a well-connected road network. The NRV is relatively affordable compared to other Virginia metro areas, with the third-lowest median housing costs. However, relatively low housing costs cannot attract growth or offer the region a competitive advantage, because relatively few new homes are being built and market vacancies are low. Furthermore, high housing demand throughout the region drives up housing costs, especially in

the two largest towns, Blacksburg and Christiansburg, which are both employment and amenity centers in the region.

Demand for housing in the NRV is increasing, as evidenced by decreasing days on market, low market vacancies, and increasing sale prices and rents. The median days on market (i.e., the number of days a home is listed on the MLS before it sells) has decreased steadily from 83 in 2010 to 9 in 2019, an 89 percent decrease over 9 years. Median days on market have decreased 83 percent since its pre-recessionary low in 2007.



Table 5: 2019 Median Days on Market by Jurisdiction

VCHR tabulation of New River Valley Association of REALTORS® 2019 MLS data

Town of	Montgomery	Floyd	Radford	Town of	Town of	Giles	Pulaski
Blacksburg*	County	County	City	Christiansburg*	Pulaski*	County	County
3	18	36	13	7	13	15	12

*in town limits

Concurrently, sale prices and rents have increased. Sales prices increased 56 percent from 2002 to 2019 and 16 percent from their pre-recession peak in 2007, indicating a complete recovery from the housing crash and the Great Recession. Median price has increased in each jurisdiction, with the most substantial increase in the Town of Blacksburg.

	Giles	Giles Pulaski Town of		f Montgomery Floyd		Radford	Town of
	County	County	Blacksburg*	County	County	City	Christiansburg*
Median Price	\$133,000	\$153,440	\$268,751	\$250,000	\$187,750	\$160,000	\$205,000
Percent Change	26%	23%	28%	4%	25%	19%	18%

 Table 6: 2019 Median Sale Price and 2007–2019 Percent Change in Median Sale Price

 VCHR tabulation of New River Valley Association of REALTORS® 2019 MLS data

*in town limits

Gross rent, including both rent and utilities, increased nearly 40 percent between 2007 and 2017. Vacancy among for-rent units is also low. Less than 2 percent of NRV-wide rental units are vacant, indicating that the rental market is nearly as tight as the homeownership one is. Furthermore, most rental units are located near the region's universities and serve the student population that rents units on a July–June lease cycle. The domination of the rental market by university students makes finding an available unit outside of this cycle challenging. Focus group participants consistently mentioned that non-students moving to the region for jobs have difficulty finding rental and high-quality units that are not in student-dominated developments.

Each jurisdiction plays a role in the NRV economy and housing market. The NRV's urban places surround both current and historic jobs centers. Blacksburg has become both the employment and amenities center of the NRV owing to the jobs provided by and large student population of Virginia Tech. Blacksburg's housing stock is the most location-efficient in the region because of its proximity to jobs and a relatively comprehensive public transit system that includes road networks, buses, trails, and sidewalks. Given these characteristics, Blacksburg is ideal for low-wage employees who work there, but it is both the highestpriced submarket of the NRV and subject to the greatest market pressures.

Blacksburg's housing is about 70 percent rental. With more than 25,000 students living in town and an average of 2–3 people per rental unit, the 9,500 rental units in town are targeted at and largely occupied by students. Demand for additional rental units add significant pressure to the ownership market because investors in such rentals compete with prospective owner-occupants. Owing to the intense demand, at the beginning of 2020, the Town of Blacksburg had projects under construction comprising nearly 1,500 net new multifamily bedrooms and 7 affordable townhomes. In addition, projects adding more than 5,000 multifamily bedrooms and 100 single-family lots have been approved for development, and ones adding more than 1,300 additional bedrooms are under review.

The neighboring town of Christiansburg is another employment and amenities center in the NRV and is very conveniently located for households that work in Blacksburg. Christiansburg is also an efficient location for households with a member commuting to Blacksburg while other members commuting to other places in the NRV or beyond. Christiansburg offers more accessible housing prices and newer stock than nearly any other jurisdiction, and it has both urban and suburban neighborhoods to suit a more diverse set of housing preferences. Christiansburg currently has the largest number of non-student

entitled developments in the region. In total, 906 units are slated for development, comprising 187 single-family detached units, 319 townhomes, and 400 apartments.

Montgomery County manages growth around the two largest towns. Large developments are entitled near the village of Prices' Fork, just outside Blacksburg, responding to demand for new housing close to the town. These developments are suburban in character in contrast to the exurban and rural settings in most of the county. Both Giles and Montgomery Counties have housing in a rural setting within a 15-minute drive to Blacksburg; therefore, both counties are working to respond to housing demands while preserving rural and bucolic settings and lifestyles.

Giles is one of the most-rural jurisdictions in the region. It has a history of town-centered development along the 460-corridor that the county continues to promote to maintain its rural, mountainous setting for residents and is the focus of the county's economic development strategy centered around outdoor recreation. Access to water and sewage helps direct the density of residential development and preserve rural and wilderness areas in the county. Housing demand and development interest growing in the Newport and Pembroke areas of Giles, stemming from growth in the region's largest employment centers in Blacksburg and Christiansburg.

The City of Radford is home to Radford University and is in the geographic heart of the NRV. Bordered by the New River on three sides, the city offers residents recreational opportunities and river access at the 57-acre Bisset Park. The city's housing stock is relatively affordable and more rental units are available, reducing pressure from investors in the for-sale market. Other characteristics of the city's housing stock include small homes on small lots that were built for industrial workers in the 1930s and 1940s that continue to serve moderate-income families today.

Pulaski County is the second-most populated county in the region. Pulaski has large-scale employers that attract households to live in the area. Pulaski County includes two towns, the historic Town of Pulaski and the Town of Dublin. Pulaski has among the most-affordable housing prices and rents in the region, but the percent of the stock available for rent or for sale is relatively low. Pulaski has entitled new housing and is working to address long-term vacancies along with community development improvements.

Floyd County is known for its rural, agrarian atmosphere and the artisans who have made the county their home. Amenities in the Town of Floyd as well as rural housing paired with high-speed, reliable internet infrastructure has made Floyd an ideal residence for millennial and boomer households that prefer rural lifestyles. Although Floyd's sale prices have increased 20 percent since 2007, homes have stayed on the market longer than any other jurisdiction, possibly signaling a mismatch between regional demand and location or type of housing.

The "Local Profiles" section provides more detail on housing in each jurisdiction, and local strategies complement or extend regional strategies. Local and regional perspectives are emphasized equally because submarkets are critical to the region-wide market dynamics. Moreover, municipal investments,

incentives, and regulations help define submarkets and are important components of both regional and local strategies.

6. Housing the Community

Households are economic agents that seek the best "housing package" based on their needs, preferences, and resources. Their choice is based on a host of needs and preferences ranging from house characteristics (e.g., size, utilities, number of bedrooms, number of bathrooms, number of levels, and finishings) to location characteristics (e.g., neighborhood, schools, commute to jobs, distance to shopping, and proximity to friends and family). Households consider tradeoffs among these needs and preferences in the context of financial accessibility or affordability. Because households are diverse in composition and income, housing needs and preferences also vary.

6.1 Housing Preferences

Location

Communities in high demand can be broadly characterized by accessibility to employment centers, shopping, and services. Whereas community preferences vary by income (which influences their purchase motivations), distance to employment is important across all income brackets^{xxxii}. Key characteristics of the communities that consumers pursue also depend on their age and household type. Younger people prefer communities that reflect their success and achievements, whereas older people prefer communities that offer healthy lifestyles and social opportunities^{xxxiii}. Many homebuyers prefer the suburbs, especially those with a mix of business and shopping. However, the proportion of potential homebuyers that prefers living in small towns and rural areas is not small. The National Association of Home Builder (NAHB) survey shows that 24 percent of respondents prefer rural places and 11 percent prefer the central city^{xxxiv}. Millennials are most likely to prefer buying a house in the city center (23 percent) compared to gen Xers (11 percent) and baby boomers (8 percent).

Туре

Detached single-family homes are the most-popular housing type nationwide, accounting for 82 percent of home purchases^{xxxv}. In response, 85 percent of new homes are single-family detached homes^{xxxvi}. However, 23 percent and 13 percent of young millennials would consider living in townhouses and condominiums, respectively. Consumers interested in more-affordable and more-accessible locations are willing to consider smaller options rather than the pricier and larger single-family detached homes^{xxxvii}.

Size

The average house purchased was built in 1991, spans 1,900 square feet, and has three bedrooms and two bathrooms. Buyers aged 39 to 53 tend to choose larger homes, at 2,100 square feet, reflecting needs

of more family members and purchasing power. In contrast, young adults and older people aged over 55 prefer smaller homes in the 1,500 to 1,900 square-foot range^{xxxviii}. Since 2016, there has been a trend toward smaller homes: according to U.S. Census Bureau, as of 2018, the average home size has declined and home builder supply has focused on units with less than four bedrooms and less than three bathrooms^{xxxix}.

Features

Heating and cooling costs are considered the most important environmental features when purchasing a home^{xi}. According to the NAHB survey, 86 percent of homebuyers prefer open-style or partially open-style kitchens and dining rooms^{xii}. They prefer stainless-steel appliances (67 percent) as well as top finishes and granite or natural-stone kitchen countertops (57 percent). Depending on the type of household (e.g., age and whether they have a family), other recent trends include farmhouse styles incorporating ample amounts of wood; engineered quartz countertops for color flexibility; vinyl and resilient flooring, especially for aging in place; wireless controls; and higher-end fixture installations in the bathroom such as wall-mounted sinks, faucets, and toilets.

Internet Access and Broadband

Single-family homes with access to a 25 Mbps broadband connection pay approximately 3 percent more for their homes than similar ones in neighborhoods with 1 Mbps connections^{xiii}. According to a study by the Strategic Networks Group (2019), 40 percent of those aged 18–34 said they would relocate for broadband, whereas more than one third of those over 65 would do so. A Pew Research Center survey (2015) finds that 40 percent of non-high-speed users say that lack of access to broadband is a major disadvantage for learning about or accessing government services; in addition, 37 percent say that lacking broadband at home is a major disadvantage for learning new things that might enrich their lives^{xiii}. Approximately 58 percent of rural residents lacking access to high-speed internet in their area believe that this is a problem^{xiiv}.

6.2 Housing Shortage and Needs at all Income Levels

Data regarding housing availability and that collected from housing expert focus groups suggest that households at all income levels are experiencing a housing shortage. Decreasing days on market and increasing sale prices indicate that demand for owned housing is outpacing supply, and increasing rents and low vacancy rates suggest that the supply of rental housing may also be inadequate to meet demand.

Homeownership Opportunities

Potential homebuyers face a tight market in the NRV, with 9 median days on market in 2018. Highly competitive markets favor experienced buyers that can make cash offers. Limited supply implies that potential buyers who are less willing or able to make offers quickly after a home is listed for financial or time considerations are likely to be excluded from the market. NRV buyers are fatigued in their home search owing to few median days on market, and some give up the search all together. Realtors report that homebuyers who need financing can no longer compete in the tightest submarkets, because bidding

wars often push offers above appraised value and thereby exclude buyers that need financing. Realtors have described the Town of Blacksburg as "closed" to moderate-income, first-time homebuyers unless they can purchase a condominium with cash. One survey respondent described their experience as exhausting and exasperating. The respondent felt that affordable homes were being purchased by parents of students or others in their position that were making cash offers that exceeded list prices.

Over the June 2018–May 2019 period, 1,650 homes were sold in the NRV. Homes in the 25th to 75th percentile range were priced between \$132,000 and \$275,000 during this period. Competition for these homes was highest, with 13.5 median days on market. Higher-priced homes were also in relatively high demand, with 20 median days on market. Home prices lower than \$132,000 were on the market the longest, at a median of 27 days. Homes priced lower than \$100,000 tended to stay on the market even longer, with 38 median days on market. This may mean that they did not readily meet the needs of most households in terms of location, size, or condition.

Rental Opportunities

Most of the region's rental stock (72 percent) is in Montgomery County and the City of Radford, much of which is intended to serve students attending the region's universities. Households headed by students occupy about 38 percent of the NRV's rental stock; therefore, much of the stock is on a July–June rental cycle. Long-term occupants who moved into their units in 2009 or earlier occupy another 20 percent of the rental housing stock. The remaining stock is occupied by non-student households who have moved in 2010 or later.

Although too few vacant rental units in the NRV exist to provide a precise value, we can reliably estimate that the rental vacancy rate is 1.5–2.4 percent. Except for the City of Radford, units throughout the region are likely to be rented nearly continuously. Rents have therefore trended upwards, with median rent increasing 38.5 percent over the 10-year period 2007–2017.



Employers, economic development professionals, service providers, and residents have expressed frustration with the tightness of the rental market. Employers explained that new employees have difficulty finding appropriate, high-quality rental housing when they accept jobs in the region. Economic developers and employers expressed that high-quality rental housing for professionals is imperative for employee quality of life. This is because many prefer to rent and those who would like to purchase a home must rent while they learn the market and either endure a long search process or build a new home.

Like the homebuying market, competition for rental units marginalize low- and moderate-income households, especially those who are new to the market. Although some income-restricted units exist in the NRV, they represent only 9 percent⁵ of the rental housing stock. Therefore, some households must accept rents that are higher than they can afford to obtain housing.

6.3 Vulnerable Populations

The housing shortage in the NRV creates economic, infrastructure, and health vulnerabilities throughout the community for residents, businesses, and workers, particularly affecting some residents and workers.

6.2.1 Households Requiring More Affordable Housing

At least 14,500 non-undergraduate households living in the NRV⁶, or 23 percent of non-student households, spend more than 30 percent of their income on housing and may need more affordable housing. Households spending more than 30 percent of their income on housing are considered cost-burdened. These households are included in the dark blue segments in Figures 8 and 9. Despite potentially improved affordability, finding a new place to live is difficult in the tight NRV housing market. Thus, residents likely continue to be cost-burdened, sacrificing other needs like medical care or home maintenance. This situation is compounded for those seeking units costing less than \$275,000 and for those with additional requirements that limit their search (e.g., remaining in the same school district, accessibility requirements for aging in place, and locating within a particular distance to a job or childcare provider). Examples were provided by survey respondents:

"We have been looking for over three years and have not found anything that meets our requirements or budget. We need a handicap-accessible home for my aging mother, and it all needs to be on one level with a two-car garage and on a level lot. The prices are completely unreasonable in the area. Only the rich can afford to live here anymore. Prices in Christiansburg are even higher than Blacksburg now and that has never been the case."

"I need a bigger house (four-bedroom unit) that is priced at no more than \$105,000, which is hard to find."

⁵ The National Housing Preservation Databased indicated that there are 2,205 units in the region with active subsidies. Subsidies generally have associated income restrictions.

⁶ Undergraduate households have been excluded from this analysis because of lack of data on housing income and expenses.

"I have a budget of \$50,000 and the only thing I can find for a family of five is run-down and needs a lot of work. I cannot afford to pay a mortgage and pay rent while I make a home livable for three small children."

Nearly half of all households spending more than 30 percent of their income on housing are severely costburdened, with a spend of more than 50 percent of their income on housing. Severely cost-burdened households are likely making choices between housing and necessities like food and clothing. Severely cost burdened households with incomes below the regional median are at risk for homelessness. **At least 5,500 income-restricted units are needed to relieve and stabilize community members that have been unable to access housing without sacrificing other elements of their basic well-being.**

Renters are more likely than owners to be housing cost-burdened because their housing costs are more variable and the mortgage financing process prevents owners from obtaining unaffordable housing. Nonetheless, 5,900 owner households need more affordable housing and likely became housing cost-burdened due to economic hardship (e.g., job loss, income stagnation, or major home repair).



Housing Gap Analysis

VCHR's gap analysis for low- and moderate-income households indicates a shortage of units affordable to renters with extremely low incomes of less than 30 percent of AMI. As shown in the two leftmost columns of Figure 8, more households exist with incomes less than or equal to 30 percent of AMI than rental units within this affordable range. Households with incomes greater than 30 percent of AMI occupy more than half of the units that are affordable to extremely low-income renters.

Households with higher incomes often compete better for housing units because they are more attractive to landlords and finance agencies. Households with higher incomes than they need to afford their unit occupy nearly 46 percent of rental units affordable to households with low incomes of 30–50 percent of AMI. Because lower-income households must compete with higher-income ones for affordable units, many accept a housing cost burden to obtain a home. For example, there exists sufficient stock to accommodate renters with very low (30–50 percent of AMI) and low incomes (50 to 80 percent of AMI), but households with higher incomes (shown in yellow) occupy much of that stock. Many households in these two low-income groups must therefore accept housing that they likely struggle to afford. Households with income less than needed to afford their unit (shown in orange) occupy 63 percent of units affordable to very low- and low-income households.

Although many low-income households may be student households for which we do not have reliable income data, nearly 7,690 non-student renter households are cost-burdened. Of these, more than 5,400 are extremely low-income and 1,700 are very low-income households. With less than 5,000 rental units affordable to extremely low-income households and 54 percent of those units occupied by households with incomes greater than 30 percent of AMI, a significant gap remains even when student households are removed from consideration.

There are 1,450 vacant units affordable to renters with incomes below 80 percent of AMI. Most of these units are affordable to households with incomes between 30 and 50 percent of AMI; however, more than 7,500 households with incomes below 80 percent of AMI could benefit from an affordable unit. These units may not be occupied because they do not match households' other criteria for appropriateness, such as size, location, or quality.



There are approximately 6,800 cost-burdened owners in the NRV. Although this number is not substantially impacted by students, undergraduateheaded households have been removed from the count. These households are represented in dark blue in Figure 8. In addition to the points noted earlier, homeowners benefit from relatively fixed housing costs and access to home equity that can smooth long-term consumption despite temporary economic hardship.

Most households living in owner-occupied units affordable to households with low and moderate incomes have incomes higher than needed to afford their unit comfortably. Figure 8 shows a clear preference among households for spending less than 30 percent of their income on housing. Owners with higher incomes than needed to afford their home occupy 70 percent of units affordable for households with incomes less than 100 percent of AMI. The owned stock that is affordable to households with low incomes (more than 24,923 units) far outnumbers units that are affordable to moderate-income households, that is, those with incomes of 80–100 percent of AMI (5,786 units). Despite preferences to consume housing that costs less than 30 percent of household income, some households currently occupying lower-priced units may want to "upgrade" if there were more moderately priced appropriate units available (most of which are occupied by households with higher incomes).



6.3.2 Workers

Over 70 percent of NRV household include at least one worker, and more than 80 percent of family households (which largely exclude undergraduate students) are working. We can characterize some households that struggle to find housing that is affordable anywhere in the region by examining wages by occupation. Workers in 124 occupations in the region cannot afford the median rent (\$865) or median owner costs with a mortgage (\$1,168) in the NRV as single earners earning the median for their occupation. Workers in 24 occupation. Moreover, workers in 9 of the top 10 occupations by employment cannot afford the median rent as single earners earning the median owner costs with another earner for those earning the median wage for 7 out of the top 10 occupations. As the region grows, low-wage service and retail jobs outpace high-paying jobs.





As the region grows, low-wage service and retail jobs outpace high-paying jobs. More income-restricted units that are affordable to low- and moderate-income households are required to sustain the desirability of our community with services such as healthcare and childcare as well as with amenities like restaurants, shopping, and entertainment.

Table 7: Housing Affordability for Mandatory Service Occupations		Maximum Affordable Monthly Housing Costs			
Occupation	Number of Employees	Single Earner at the Median	Single Earner at the 90 th Percentile	Dual Earner	
Elementary and Middle School Teachers	1,010	\$1,158	\$2,315	\$1,508	
Registered Nurses	1,104	\$1,533	\$3,065	\$2,198	
Secondary School Teachers	512	\$1,153	\$2,305	\$1,528	
Childcare Workers	400	\$493	\$985	\$680	
Preschool and Kindergarten Teachers	307	\$685	\$1,370	\$1,233	
Special Education Teachers	252	\$1,180	\$2,360	\$1,735	
Postal Service Workers	209	\$1,308	\$2,615	\$1,688	
Police Officers	350	\$1,223	\$2,445	\$1,635	
Home Health and Personal Care Aides	961	\$545	\$1,090	\$740	
Firefighters	140	\$1,083	\$2,165	\$1,788	
Librarians	128	\$2,020	\$3,048	\$4,039	
Emergency Medical Technicians and Paramedics	79	\$843	\$1,685	\$1,310	
Criteria for Affordability (Based on median gross rent and median gross owner costs with a mortgage, 2017, 1-year estimates, ACS) Cannot afford median rent; can afford only lower-quartile rent (affordable monthly housing cost <\$856)					
Can afford median rent (affordable monthly housing cost \$856-\$1,167) Can afford to rent and own (affordable monthly housing cost >\$1,167)					

6.3.3 Children

The consequences of housing unaffordability and instability challenges are arguably the most severe for children. Nearly 4,200 cost-burdened households in the region include children. K–12 educators, professionals and service providers described substandard housing and housing instability experienced among families and kids in the NVR. They explained that some families must accept housing that is overcrowded and/or in poor condition. They further described the stress that children face when parents struggle to provide childcare and work long and/or opposite shifts. One participant gave an example of parents who must wake their children each night to accommodate one parent's night shift commute while meeting the household's other transportation needs with their single vehicle.

Research also shows that family cost burden is related to child development and educational achievement. Several studies find that increases in a family's disposable income significantly improve children's test scores^{xiv}. Newman and Holupka (2014) find that families that are not cost-burdened are more likely to spend a portion of their income on child enrichment, which affects child cognitive achievement^{xivi}. Furthermore, level of cost burden is inversely related to the amount of money households are likely to spend on child enrichment.

According to the MIT Living Wage calculator, a household with one adult and one child must earn a fulltime wage of \$25.39 to cover typical expenses. In a household with two househ adults and one child, each adult must earn at least \$14.01 per hour, full time. For a single earner with one or more children, earning minimum wage in a full-time position means that the family lives below the poverty line.

Family Composition and Worke	ers	Living Wage	Poverty	Minimum	
			Wage	Wage	
1 Adult	0 Children	\$11.82	\$6.00	\$7.25	
(working)	1 Child	\$25.39	\$8.13	\$7.25	
	2 Children	\$30.01	\$10.25	\$7.25	
	3 Children	\$37.01	\$12.38	\$7.25	
2 Adults	0 Children	\$18.82	\$8.13	\$7.25	
(1 working)	1 Child	\$23.12	\$10.25	\$7.25	
	2 Children	\$25.59	\$12.38	\$7.25	
	3 Children	\$29.27	\$14.5	\$7.25	
2 Adults	0 Children	\$9.26	\$4.06	\$7.25	
(both working)	1 Child	\$14.01	\$5.13	\$7.25	
	2 Children	\$16.3	\$6.19	7.25	
	3 Children	\$19.19	\$7.25	7.25	

Source: 2020 Dr. Amy K. Glasmeier and the Massachusetts Institute of Technology

⁷ More detail and typical expenses provided at https://livingwage.mit.edu/

Parents that are forced to work multiple stressful jobs to afford their housing costs may not be able to be as involved in and supportive of their children as parents that can comfortably afford their homes^{xlvii}. Yeung, Linver, and Brooks-Gunn (2002) reviewed an array of empirical studies and concluded that "economic hardship diminishes parental abilities to provide warm, responsive parenting^{xlviii}."

6.3.4 Students

Substandard, inappropriate or unaffordable housing can affect students' academic performance no matter if they are adults or children. Negative impacts on academic performance impact students' wellbeing and future opportunities. Furthermore, diminished academic and labor-market accomplishments can diminish community-wide economic opportunity.

K-12

Limited research has found that unaffordable housing contributes directly to children's poor attendance and performance in school^{xlix}. Gagne and Ferrer (2006) find that major home repair requirements and short length of residence negatively affect children's math scores¹. Low-income children who live in more affordable areas tend to have better health and educational outcomes, and effects are stronger on adolescents than on school-aged children. For children of all ages, grade retention increases as housing affordability decreases¹¹.

Parents constrained by residential instability may not be able to prioritize helping children with their homework or be involved in school activities^{lii}. Family and child stress may directly impact a student's education and future career success. Stress during early childhood years (e.g., that caused by parental unemployment or their demanding jobs), may diminish subsequent academic and labor-market accomplishments of the children^{liii}.

College

Housing challenges among college students are hard to document using publicly available data as they often live with roommates and all sources of financial support are not readily documented. However, research on housing challenges nationwide has shown that many college students experience housing insecurity. The concept of housing insecurity includes not only homelessness, which is an extreme form of insecurity, but also unaffordability, which is represented by difficulty in paying rent or utilities or in moving frequently. Major causes of housing insecurity for students include shortage of affordable housing, high college costs, and insufficient financial aid. Limited expansion of financial aid has created significant financial stress on individuals and their families^{liv}. If the total cost of attendance is overlooked, students may have limited access to the amount of financial aid they need to pay for college^{lv}. This, in turn, may reduce food and housing support receive it^{lvii}. Non-tuition college costs, which account for more than 60 percent of the costs of attending college, are missing from the Section 8 income eligibility formula. Furthermore, students working to earn living expenses may be disqualified by exceeding the Section 8 voucher income limits. A HUD Office of Policy Development and Research (PD&R) article titled "Barriers to Success: Housing Insecurity for U.S. College Students" notes that both college tuition and

housing costs are rising while real incomes remain stagnant or even decrease, making it harder and harder for students to afford both tuition and necessities like housing, food, and medical care^{lviii}.

In a survey of 4,000 students in 10 community colleges, the Wisconsin HOPE Lab found that nearly half of respondents struggle with food or housing insecurity⁸. The article explains that many students struggle to find adequate affordable housing and that at least 56,000 college students experience homelessness. A survey of 390 undergraduate students at the University of Massachusetts Boston shows that about 5 percent of students are homeless^{lix}. Broton and Goldrick-Rab (2018) explore the housing insecurity of college students using four surveys conducted by the Wisconsin HOPE Lab research team and affiliates. They find that approximately two thirds of two-year students are housing insecure, over 14 percent of them are homeless; furthermore, 11–19 percent of four-year students are housing-insecure^{lx}.

Students who pursue degrees without consistent access to affordable housing are more likely to leave college without degrees^[xi]. Students experiencing housing insecurity, including homelessness, are often disconnected from their peers and face challenges. The Chronicle of Higher Education (2015)^[xii] explains that college student homelessness is not well documented and that "homeless college students remain a largely invisible population — often indistinguishable from their peers and overlooked in policy debates. They get less attention than former foster youth and are often excluded from programs and policies benefiting such students. Many hide their homelessness from professors and peers out of shame or fear of being pitied. Many college administrators aren't even aware that homeless students are present on their campuses." The experience of homelessness creates a tendency for such students to isolate themselves from others on campus. Students experiencing housing insecurity rarely come to an instructor or advisor for guidance on their personal situation^[xiii]. They tend to avoid contacting their peers and experts for support and cannot obtain information that solves mental and physical problems^[kiv]. Their health and academic achievements are worse than their peers. Students who experience housing insecurity at the University of Massachusetts are 13 times more likely to fail class than their stably housed peers^[xv].

6.3.5 Seniors Aging in Place

The future living arrangements of aging adults continue to gain relevance with all boomers reaching age 65 by 2029 and elevating the portion of the senior population to one fifth of the entire nation. NRV households are aging, and the Weldon Cooper Center projects that about one in six citizens in the region will be 65 or older by 2030. By 2040, projections suggest the region will be home to nearly 35,000 residents 65 or older.

Many aging adults want to stay in their current home if possible, and most want to remain in their community. Such sentiment reflects a desire to age in place, which the Center for Disease Control (2013) defines as the "ability to live in one's own home and community safely, independently, and comfortably, regardless of age, income, or ability level."^{Ixvi} Kwon et al. (2015) note that "baby boomers showed a strong

⁸ HUD PD&R guidebook "Addressing Housing Insecurity and Living Costs in Higher Education" (2016).
desire to age in place if they indicated higher residential satisfaction."^{Ixvii} The choice to age in place offers immense practical and familial value^{Ixviii}. Most boomers attribute distance to friends/family, places they want to go, and church/social organizations as important reasons for their desire to age in place^{Ixix}.

Conventional assumptions of aging in place suggest that although individuals may age in their present home, seniors increasingly shift their housing tenure or downsize with age. Life-changing events rarely lead a homeowner to immediately begin renting. However, the loss of a spouse, retirement, and onset of a disability exert a statistically significant influence upon an eventual shift in tenure^{lxx}. Residing in a more fitting home within the same community provides a more flexible or practical form of aging in place^{lxxi}. However, tightness in the housing market and availability of appropriate and affordable housing may making moving difficult for many aging NRV residents.

Classic building designs often lack elements of universal accessibility, such as a master suite on the main level and a no-step entrance. Although demand for such elements are increasing as the number of older Americans with both ambulatory limitations and a desire to age in place grows, the U.S. housing stock is not well-equipped to accommodate people with disabilities. According to the 2011 American Housing Survey (AHS), most U.S. homes are not fully accessible. Bo'sher et al. (2015) created an accessibility index to measure the availability of accessible features in housing for persons with serious difficulties walking or climbing stairs or who use a mobility device for a condition that is not a temporary injury^{loxii}. Although approximately one third of units have essential accessibility features and may be modifiable, fewer than five percent have the features needed to accommodate a person with moderate mobility difficulties. Moreover, less than one percent of all units are equipped with features that would allow a wheelchair user to live independently.

More than 3,600 households headed by seniors spend more than 30 percent of their income on housing and may struggle to pay for other necessities or make home modification. Such households are often on fixed budgets. Owing to increasing costs, ongoing housing maintenance and repairs may be deferred, creating an unsafe environment over time. Furthermore, many aging-related house modifications represent out-of-pocket expenses that are not affordable for all homeowners. Even for senior households with financial means, tightness in the housing market and a scarcity of contractors may make it difficult to either find a more-appropriate unit than their current one or modify their current home.

6.3.6 Marginalized Populations

Other households exist that may be marginalized because of their disabilities, health, socioeconomic status, criminal background, poverty, and/or housing background. More than 35,650 of our neighbors, coworkers, classmates lived in poverty in 2017 and approximately 6,770 households lived on extremely low incomes and with severe cost burden, paying more than 50 percent of their income for housing. Extremely low-income households earn less than \$26,200 for a family of four. Those that spend more than 50 percent of that income annually on housing are at risk for homelessness.

There were only 73 homeless individuals (24 under the age of 18) listed in the 2019 regional point-in-time count; however, many more individuals have experienced homelessness and housing insecurity. Public schools in the region identified 383 students that experienced homelessness over the 2018–2019 school year. Focus group participants and region experts explained that homeless individuals may be living with other households temporarily. Furthermore, an accurate count may be difficult to achieve because others may have to leave the region once becoming homeless owing to lack of shelters and other resources in the region.

Focus group participants emphasized that appropriate housing is an important part of stabilizing marginalized households and explained that few landlords accept tenants with housing vouchers or other kinds of housing support, making it difficult for individuals with disabilities or other hardships to find housing even when they do have the supportive services they need. Not only is it difficult to find housing with vouchers, but voucher holders are less likely to meet the requirements for moving into a mixed-income development^{bxiii}. Voucher holders and people who need supportive services can be "hard-to-house" because they are more likely to have substance abuse, criminal records, family problems, mental and physical health problems, as well as poor education and work records^{lxxiv} which allow landlords to exclude them. Furthermore, appropriate housing that supports accessibility and safety within their home and needed proximity to care providers or other support services may be scarce.

Service providers also explained that transportation costs, connectivity, and reliability are imperative for helping households maintain a job and thereby afford housing. Homeless individuals often struggle to find housing that allows them reliable access to their employment. Safe, stable housing for individuals in recovery from drug abuse is also critical. Service providers in the focus group explained that although individuals receiving supportive services are not likely to be a threat to landlords, their recovery may be slowed or threatened if they are unable to obtain housing in a safe and stable environment.

Housing assistance can promote sustained sobriety, self-sufficiency, and a sense of security for adults coping with recovery from substance addiction^{bxxv}. In particular, supportive housing helps individuals learn effective coping skills while dealing with external issues that hinder the management of an individual's health-related condition^{bxxv}. Treatment programs and housing assistance help them recover their normal lives, but after graduating programs, their lives often go back. Graduates participating in substance-abuse interventions and residing in supportive housing programs remained abstinent from substances at a rate of 90% while 55% of graduates residing in other types of housing remained abstinent^{bxxvii}.

Likewise, discrimination based on criminal background can leave residents homeless or forced to accept substandard housing. This means that regardless of their economic ability, it can be difficult to enter the private housing market. Ex-offenders can take a variety of housing options, including residing with family members, community-based correctional housing, non-correctional transitional housing, homeless and special needs shelters, subsidized housing, and private housing, but due to a number of factors, it is likely that private housing is the only option^{lxxviii}. They are also discriminated against on the basis of criminal records in private housing markets. 67% of property managers check criminal records in the application process^{lxxix}. People with a criminal record are likely to be discriminated against during the application

process, which depends on the degree of crime^{1xxx}. Their applications are denied because of the negative perception of people with criminal records and a desire to protect the community. 43% of people with criminal records were denied applications^{1xxxi}. 66% of people will not rent to people with a criminal record, but the decision depends on whether the crime is a felony or a misdemeanor^{1xxxii}.

7. Housing Market Challenges & Opportunities

The NRV grapples with housing market challenges as the region's communities work to create a housing mix that allows existing residents and newcomers to find appropriate and affordable homes. Challenges can be roughly divided into demand-side and supply-side challenges that relate to and affect each other. Furthermore, these specific challenges are exacerbated by the overall housing shortages described in the previous sections.

Challenges related to the NRV's growth and changes in housing preferences are included in the demandside section. The quality, quantity and appropriateness of the housing stock is discussed in the supply-side sections. Some challenges are associated with opportunities to improve the region and communities, whereas others must be overcome using strategies to provide housing types not readily addressed by the market.

7.1 Demand-side Challenges

Demand-side challenges stem from household characteristics or level of housing demand. Challenges related to increased demand for housing owing to school, work, or amenities are presented in this section. The challenge whereby existing stock cannot respond to changes in housing preferences is also presented.

Burgeoning Demand

The NRV is becoming more desirable for more households thanks to job growth, Virginia Tech expansion, increasing amenities, and preservation of natural resources. As evidenced by increasing prices, demand has outpaced housing supply.



Sustained demand is important to a housing market because it ensures a return on housing investments and allows for worker and resident mobility. However, when intense demand outstrips supply, low- and moderate-income households may be "crowded out," threatening their stability and ability to afford housing and the success of the community. Comments from focus group participants and low days on market indicate intense competition for housing. As a result, some submarkets become inaccessible to households with low and moderate incomes and may require them to "settle" for substandard housing or pay more than higher-income households do for appropriate housing.

Blacksburg-centric Demand

The Town of Blacksburg has become one of the NRV's primary jobs and amenities centers, and the Blacksburg-strand schools are reputably the best in the region. As Blacksburg is the most location-efficient place in the NRV, the area's housing demand has centered on the Town of Blacksburg and nearby parts of Montgomery County. Housing prices in town have thus risen faster than any other part of the NRV, and the market has become extremely tight. The fast-paced market for homes has effectively excluded some buyers, favoring those who can make cash deals.

Student Population

The NRV has two universities and therefore a large student population. Most student-headed households rent, accounting for approximately 23 percent of the rental stock. Many rental units therefore rent on a July–June cycle. Some rental complexes and neighborhoods are dominated by undergraduate students and become less desirable to non-student households. In addition, because students may be supported by their family, some student households can afford higher rents than typical two-earner households. With higher spending power and guaranteed demand, Blacksburg housing has become attractive for investors who add additional competition to the homebuying market.

Short-term Rentals

Focus group participants discussed the considerable impact of short-term vacation-rental properties on the NRV market. There are more than 2,250 properties held for seasonal or recreational use around the region. Although recreation and tourism are important economic development drivers for the region, accommodations compete with residential needs in a tight housing market. Home sharing and short-term rentals may be critical secondary income for struggling families; however, visitors can be disruptive to neighbors and change the character of a neighborhood.

Preference Shifts

Economic shifts and changing housing preferences have also caused challenges. Economic shifts have made some homes less relevant and manifests as long-term vacancies. Floyd County and Pulaski County have the highest levels of long-term vacancy in the region.

Table 9: Long-term vacant units as a percentage of all units

VCHR tabulation of 2017 ACS 5-year estimates

Floyd	Giles	Pulaski	Montgomery	Radford
8.6%	7%	8.4%	3.5%	4%

In contrast, converging preferences among millennials and baby boomers have sharply increased demand elsewhere. A large generation of aging adults (specifically, baby boomers) combined with new millennial homebuyer preferences have increased demand for small, convenient housing. Boomers exiting their long-term home often transition to central cities and active communities, which corresponds with preferences of millennials. Rappapart (2016) indicated that adults aged 50–69 occupied nearly 2.5 million additional multifamily units over the period 2000–2013, which accounts for most of the increase in overall multifamily occupancy. Part of this trend stems from the rise in households of those aged 55+ occupying condos within central cities, a location also desirable to recent college graduates. Millennials are driving the trend of increased construction in multifamily developments, but this growth will be sustained by the baby boomer generation over the long run (Rappaport, 2015). Demand from these two groups along with limited supply can rapidly inflate rents and house prices (Keates, 2013).

Residential developers have found that entry level homes marketed to young families are being acquired by boomers (Lawrence, 2016). These homes include features such as a single story and smaller footprints that appeal to both generations. Community features including open spaces and exercise paths that compel select boomers to depart from their conventional suburban or rural home in pursuit of a more active, socially connected lifestyle (Bernstein et al., 2011; Lawrence, 2016). Empty-nest boomers raised millennial children. Lawrence (2016) suggests that "they want to live side by side with their kids, the millennials, in physically and socially active neighborhoods." Proximity to children ultimately betters the promise of aging in place and can avoid an eventual transition to a nursing facility (Desjardins, 2013; Painter & Lee, 2009).

In addition to overwhelming demand for smaller, more centrally located housing, the market still grapples with effects of pent-up demand from the Great Recession. Those jurisdictions with the lowest median days on market, Blacksburg and Christiansburg, meet the largest number of preferences for the most people. Although these towns have experienced the highest demand, every jurisdiction in the region has relatively low days on market compared to the statewide averages. Finally, new demand for rural and small-town living generated from the COVID-19 pandemic may put additional pressure on amenity-rich rural places.

7.2 Demand-side Opportunities

Burgeoning Demand

Growing demand in the NRV offers many opportunities for housing and amenity development. The region can focus on the development of high-quality, market-rate housing; the preservation of existing affordable housing; and community development in well-located places. Each jurisdiction has multiple roles to play in meeting demand and opportunities to capitalize on growth.

Owing to high Blacksburg-centric demand and its associated challenges, many buyers and renters must look elsewhere. This presents an opportunity to introduce prospective residents to the various communities and lifestyles available in the NRV. Communities that have a close connection to Blacksburg, such as Christiansburg, Montgomery County, and Giles, already experience demand from households working in Blacksburg but offer lifestyles and settings that are not readily available there. Job growth throughout the NRV and "spillover" demand from Blacksburg may benefit communities that focus on community development and respond to demand for varied housing types and settings. High demand indicates that communities must direct development in ways that emphasize a variety of housing needs as well as the importance of the natural environment, rural settings, and small, close-knit communities. Successful strategies will be tailored to local conditions, seek to build a stronger sense of place, and integrate new residents with long-term ones^{laxxiii}.

Focus-group participants urged localities throughout the NRV to respond to demand for walkable, convenient places. They emphasized that among workers, demand is Blacksburg-centric because the town has options for alternative modes of transportation (e.g., bus, biking, and walking) and community amenities. Participants explained that many would want to live in other places if similar amenities and desirable housing were available.

Growing demand also offers opportunities to create and preserve affordable housing. As demand grows, housing becomes more expensive throughout the NRV. Places with amenities such as services, retail, entertainment, recreation, and beautiful settings are particularly desirable. Increasing housing prices are desirable to a point: sharp increases in prices restrict mobility (upgrades and downsizing) for residents, and recruitment and turnover become burdensome for employers. A healthy housing market is important for both economic and community development.

Places with high demand can leverage this demand to encourage varied development and incorporation of income-restricted housing through policy, incentives, and guidance for developers. In places with steadily growing demand (i.e., steadily increasing prices and decreasing days on market), plans to preserve affordable housing and overall market affordability should begin before communities are unattainable to portions of the population and workforce. Steadily adding housing of various sizes and types to "meet" demand, encouraging reinvestment in existing housing, and finding ways to proactively reserve housing for essential, low-income workers and their families are all important components of market health.

Adequate housing supply and access to homeownership for households of all income levels creates opportunities for wealth building and encourages workers to stay in the region.

7.3 Supply-side Challenges

Inventory & Production

The residential construction industry consolidated in the wake of the Great Recession^{boxiv}. Nationwide, building construction has not reached prerecession levels despite growing demand. The region lost nearly 60 establishments and 200 workers in the building construction industry sector since its pre-2008 peak, with the largest decreases seen in new single-family home construction and residential remodelers. Although employment has recently grown, the NRV average annual decrease for these sectors of 4–5 percent per year over the past decade is significantly worse than the national average. Similarly, specialty trades (e.g., plumbers, electricians, masonry) lost nearly 100 establishments and 700 jobs. As a result, many NRV projects must seek contractors from surrounding areas or states, increasing project costs and contributing to a further erosion of local skilled trades workers and firms. The shortages are likely to worsen without a significant increase in the pipeline of new skilled workers to replace the large cohort of existing workers nearing retirement age.

The constricted industry combined with increasing labor, material, and regulation-related costs make building enough housing at the right prices challenging. Focus-group participants discussed challenges related to inflexible regulation, few subcontractors, shortages of general labor and those related to changes in immigration regulations, and increasing material prices. Although local builders are encouraging entrepreneurship and finding ways to negotiate obstacles, the pace and scope of building is limited by the challenges. Overcoming these challenges requires strategic increases in density, building and development innovations, creative financing, and subsidies. Strategies outlined in this report recommend ways for the region and individual localities to continue and extend existing efforts to realize housing goals.

The market is largely producing for-sale housing priced higher than \$230,000. The median price of existing units is \$195,000; however, inventory is limited and intense competition leaves little opportunity for lowor moderate- income households that need financing to buy a home near or less than the median price. Building new housing affordable to low-income households requires innovative approaches and/or subsidies. Owing to federal devolution, state and local governments are largely responsible for subsidies, strategies, and the promotion of innovations that create more affordable housing.

With a regional rental vacancy rate of 1.5–2.4 percent, rental housing is also scarce in the region; moreover, new development has been dominated by student units. Regional economic development leaders suggest that high-quality, 1-to-2-year rental units are required to house employees who move to the region and who may eventually buy or build a home. Businesses in the region also suggested that many of their existing employees prefer to rent and have not been happy with housing options available in the region.

The tightness in the housing market affects regional economic development. Businesses cannot recruit and retain the employees they need to grow if they do not have housing, and the region struggles to attract additional businesses that can employ underemployed residents because the pool of workers is too small. Jonas, While, and Gibbs (2010) suggest that workforce housing along with other major infrastructure are common problems for rapidly growing cities^{1xxxv}. Workforce housing⁹ supports successful economic development because businesses may have trouble attracting or retaining workers without nearby affordable housing options or convenient and affordable transportation. This job–housing imbalance impedes economic development by making it difficult for businesses to recruit and retain employees^{1xxxvi}. Saks (2008) argues that when the supply of affordable housing is restricted, often by land use controls, the pattern of labor migration changes and results in lower employment growth^{1xxxvii}.

Affordability

Market tightness affects housing affordability, particularly for households with low and moderate incomes, because they face intense competition for homes in their price range and there are very few income-restricted units. Approximately 25,900 units in the region are affordable to households with extremely low or very low incomes, and more than 19,860 households need such units. However, 60 percent of units affordable to extremely low and very low-income households are occupied by households with incomes higher than needed to afford their unit. A lack of income-restricted units implies that many households must accept housing cost burdens or overcrowded or otherwise substandard housing.

In the long run, the lack of affordable housing excludes low- and moderate-income households from the communities and diminish regional diversity and economic vibrancy. Such households struggling to live in our community include childcare workers, preschool and kindergarten teachers, cashiers, food service workers, and home health and personal care aids.

Housing Reinvestment & Replacement

Realtors and builders described most moderately priced homes as needing significant repairs and upgrades. Furthermore, potential homebuyers have reported frustrations with the quality of moderately priced homes. Because households have long struggled with housing costs rising faster than real incomes, deferred maintenance and little investment in upgrades have become prominent features in the U.S. existing housing stock. Homes require regular maintenance and generally need upgrades every 20–30 years. Housing characteristics such as number of bedrooms and bathrooms, types of heating and cooling, and additional features vary by the decade in which the house was built. Generally, construction quality has increased over decades, and "the quality of the housing stock, measured in such terms as completeness of plumbing facilities, age of structures, structural quality, and equipment and furnishings available, improved in every major respect during the decade of the 1970s^{lxxxviii}." Adams (1987) explains that the energy crisis of the 1970s forced a lot of industry changes that conserved energy and improved

⁹ Workforce housing is generally described as the housing that is affordable to households earning less than 120 percent of area median income (Cohen & Wardrip, 2011).

construction quality^{Ixxxix}. However, some building practices that encouraged heavy insulation and tight building envelopes caused condensation and subsequent wood rotting. Advances in building science have resolved these issues in newer homes. Construction quality may have decreased in the early 1980s^{xc}. This is because builders responded to demands for more affordable units as consumers were facing high mortgage interest rates and the effects of two back-to-back recessionary periods.

Mobile Homes

Our region's housing stock includes nearly 2,000 pre-1976 mobile homes, about 75 percent of which are occupied. The Manufactured Home Construction and Safety Standards Program (HUD Code) established national design, performance, and installation standards for manufactured homes built after June 15, 1976 ("Manufactured Home Construction and Safety Standards," 2015). Mobile homes built prior to 1976 are considered the "worst housing stock" in America by affordable housing advocates and industry representatives^{xci}. These homes suffer from leaking roofs, dangerous or inefficient heating sources, lack of insulation, and deteriorating foundations^{xcii}. Homes built post 1976 also have shown problems due to poor construction and placement standards. Early manufactured housing units are prone to formaldehyde exposure problems owing to materials used

of these

mobile homes is often recommended over retrofitting because energy efficient construction practices and materials are more cost-effective than weatherizing existing homes.

Mobile homes built before the HUD Code was established are generally far less energy efficient than manufactured homes built after its adoption. Pre-HUD Code mobile homes consume approximately 53 percent more energy than every other kind of home and are concentrated primarily in the South^{xciv}. For some low-income individuals, energy bills can consume more than half their income on a regular basis^{xcv}.



*The estimate of mobile and manufactured homes in Radford is not reliable, so the margin of error is applied to show the reliable range: 175-457.

Accessibility

Much of the existing housing stock would need modifications to meet the accessibility needs of the population. According to the 2011 AHS, most U.S. homes are not fully accessible. Bo'sher et al. (2015) estimates that approximately one third of units in the US have essential accessibility features and are potentially modifiable; fewer than five percent of units have the features needed to accommodate a person with moderate mobility difficulties; and less than one percent of all units are equipped with features that allow a wheelchair user to live independently^{xcvi}.

More than 10,000 households include at least one person with an ambulatory limitation. Fifty-seven percent of these households have incomes below 80 percent of AMI, and may struggle to afford modifications to their homes. Housing program leaders and experts on aging in our region have identified funding for home repair and modification as a major challenge for our region. Addressing this challenge requires community investment and advocacy at the state and federal levels.

Infrastructure

Strategic water and sewer system expansion can be used to effectively limit sprawl but may be a barrier to desirable developments. While using infrastructure to limit geographic expansion, localities must provide opportunities for growth by emphasizing creative density with policy and clear goals and guidance for developers. The region has varying degrees of water and sewer system availability. Some localities have identified restrictions as challenges for both new and existing housing; for example, Floyd has a small water supply and sewer system for housing in and near the Town of Floyd, but residents in the rural areas of the County rely on well water and septic systems. The water supply is also restricted by Floyd's geography and the limited watershed of the Little River. Some leadership and focus group participants identified septic services for mobile and manufactured home communities as a barrier to housing reinvestment and affordable housing preservation.

A community that lacks sufficient affordable housing often has insufficient housing for its essential, lowincome workers. These workers either accept substandard housing or commute from longer distances, which result in increased congestion. Sturtevant and Chapman (2013) conclude that "without an adequate supply of housing [for workers], there will be untenable strains on the region's transportation and transit networks, and an erosion of the region's economic base^{xcvii}."

Local governments across the country rely heavily on developers and builders to provide safe, sustainable, and properly resourced neighborhoods and to contribute to infrastructure and community improvements that offset the public costs of development. Regardless of funding sources, costs of developing housing to meet higher public and private standards are increasing. Participants in developer and builder focus groups emphasized that local governments should be flexible (where possible) to reduce costs. Some participants suggested greater flexibility in project phasing and more individual consideration for practical implementation of project proposals. One participant gave an example of sidewalks needing reinstallation at developer expense in the last phase of development so they are not damaged by construction vehicles.

Strict regulation, standards, and precedents are critical to managing government capacity; therefore, flexibility requirements may indicate a need for additional public support for planning and development.

In-home technology and communication are becoming increasingly important for household needs such as work and education. Nearly 3,000 people in our community work from home, many of whom need access to internet infrastructure to be productive and/or conduct business. In addition, both physical and digital communities are becoming more highly valued, especially among maturing millennials.^{xcviii} Researchers foresee that "advances in digital technology will make the home a more intensely multifunctional place for living, socializing, entertaining, learning, and working. The benefits from integrating these advances into housing units may change the cost-benefit ratio of owning or renting for many households^{xcix}." To meet growing demand for and better access to the internet, our communities must continue to expand infrastructure to more than 12,600 households that do not have internet access and to another 12,500 that do not have high-speed broadband access.



* ACS includes DSL in its definition of Broadband, which does not always meet the speed thresholds of 25Mbs/down 3Mbs/up. Also note, data does not reflect broadband expansion project in Floyd which began in 2017.

7.4 Opportunity to address Supply-side Challenges

Local Government Leadership

Housing challenges in the region will intensify without concerted leadership from local governments to raise and dedicate funds for housing, encourage the development of a variety of housing choices, promote innovative approaches to density, and work regionally to establish market-wide housing goals, policies, and programs. Local governments have tools available to help address housing (e.g., land use and zoning regulations and incentives, tax abatement, resource dedications, influence, development decision making and supports); however, each of these tools requires resources to develop and wield responsibly. Acting

to incentivize and remove barriers to the development of housing types that serve individuals and families of all income levels is fundamental to creating an inclusive, prosperous, happy, stable, and growing community.

Local governments can be active stewards of the housing stock and community development. In addition to owner financial interests, communities, and thereby local governments, must realize their stake in the maintenance and regular investment in housing throughout the community. A deteriorating housing stock can lead to decreased real property values and, later, blight. Deteriorating housing stock may also affect economic development as a shortage of turn-key housing and negative impacts on property values deter prospective residents. This, in turn, may reduce the draw of new employees to companies in the region. Tools and incentives available to local governments for this purpose include code development and enforcement, tax incentives for value-increasing investments, and low-interest financing for improvements or maintenance.

Community development and housing are linked and depend on each other in many ways. Residents support community development initiatives as participants and patrons, whereas community amenities attract and anchor residents. Communities should thus embark on housing and community development initiatives in tandem and plan with combined efforts in mind. Local governments are well-positioned to lead these efforts by connecting plans, programs, funding sources, and partners.

Regional Collaborations

Local government cannot and should not address housing challenges alone. A responsible housing plan must have regional consideration and include a variety of partners. Housing markets are not defined by jurisdiction and rather by consumer preferences. Markets can be roughly defined by prevailing commute patterns. Submarkets are defined by considerations including preferences for schools, amenities, housing type, and social networks. The NRV market is closely aligned with the region while steadily increasing connections with Roanoke. Many submarkets are defined within our region based on varying preferences such as living within the Blacksburg School District or along the 460 Corridor, having large lots with privacy and views or high-speed internet, or being in or out of town. Locales throughout our region and in each jurisdiction offer land and housing matching households with diverse preferences. Employers, institutions, and the public must collaborate with local governments and developers to maintaining the variety of home settings (urban, suburban, exurban, rural) while responding to diversity of demand.

Employer Housing Benefits

Since the Great Recession, employers have become more involved in addressing housing challenges beyond raising wages, such as making philanthropic donations to address homelessness, providing benefits to employees including down-payment assistance and second mortgages, and building housing. Such collaborations between companies, builders, and local governments help alleviate shortages and address issues directly.

Early steps employers can take are to understand and document their employees housing needs and preferences and communicate those to builders and elected officials. Employees that currently do not live in a jurisdiction but work there have little voice in local government proceedings; in contrast, employers located in a jurisdiction can represent employee housing needs. Employers can also provide housing benefits directly or by negotiating with local banks and non-profits. Finally, large institutions can provide innovative solutions (e.g., social impact bonds) and support strategies addressed at the partnership, local, and regional level.

Construction Industry Entrepreneurship and Innovation

Entrepreneurship and innovation in the industry are well-timed owing to rising costs of production and few available builders and contractors. Participants in the builder and developer focus group explained that few new subcontracting businesses have emerged, partially because of risk aversion lingering from the Great Recession and partially because of financial and capital barriers to licensure and starting a business. However, focus group participants noted that their associates who have become entrepreneurs and who have started new business have begun closing the gap in subcontractors and have been extremely successful. Local, regional, and state-level opportunities exist for mobilizing resources and supporting entrepreneurship in the trades.

Additional possibilities include integration of innovations in building and varying building types in the region. Innovation may reduce both immediate and long-term costs of building, including energy use, production waste, and durability. Innovation can initially be integrated into the structure, implemented through building monitoring and proactive maintenance, and achieved through creative financing that predicts that savings can be achieved through building performance.

Innovation in housing is a paradox: although the industry values innovation, it is inherently risky, and the housing industry is risk averse. Construction organizations depend on a trusted production path that has historically provided profits. Many innovations have failed. For example, exterior-insulation-finishing systems (EIFS) were widely litigated before becoming a successful synthetic stucco product in the market. Many in the housing industry have therefore chosen to wait, becoming second movers and allowing others to attempt and potentially fail before implementing innovations. Innovations in housing thus generally involve improvements in the cost and functionality of established products and processes. Of implemented innovations, few have succeeded in driving down production costs or making housing more affordable to consumers: gains benefit the builder and are not shared along the supply chain for general improvement. Radical housing innovations are less common and are frequently prompted by innovations and shocks outside of the housing sector.

Other endemic characteristics of the industry persist in resisting innovation. The industry is highly fragmented with many stakeholders along the path from raw material to end user who can either veto or endorse the product. Risk and uncertainty in residential construction are unique to the production of a home, and include low concentration, supply chain and path, subcontractor networks, market cycles, site-based complexities, and reduced productivity. Firms that produce housing are diverse, ranging from

affordable housing non-profits to speculative developers of multimillion-dollar luxury mansions; from producers of units with a small footprint to large commercial residential high-rises; and from sophisticated financial investments to small, independent offices. The industry must become more sophisticated, using innovation for better understanding of the market and responding to its demands and its risks.

8. Local Profiles

The following local profiles describe housing and households in each jurisdiction of the NRV as well as challenges and opportunities presented for each submarket using the overarching regional dynamics or the internal conditions of the jurisdiction.

Montgomery County

Montgomery County plays a critical housing role in the region. The county is home to the region's two largest towns which are the focus of the most intense housing demand in the region. The Town of Blacksburg in Montgomery County is the largest jobs center of the NRV. Blacksburg has become both the employment and amenities center of the NRV owing to employee and student populations associated with Virginia Tech. Blacksburg's housing stock is the most location-efficient in the region because of its proximity to jobs and a relatively comprehensive public transit system that includes road networks, bus routes, trails, and sidewalks. Given these characteristics, Blacksburg is the highest-price submarket of the NRV and is subject to the greatest market pressures. Concurrently, Blacksburg is the most location-efficient place for low-wage employees who work in the town.

The neighboring town of Christiansburg is another employment and amenities center in the NRV, and it is conveniently located for households that work in Blacksburg. Christiansburg is an efficient location for households with a member commuting to Blacksburg while others commute to other places in the NRV or beyond. Christiansburg offers more accessible housing prices and newer stock than nearly any other jurisdiction, and it has both urban and suburban neighborhoods to suit a more diverse set of housing preferences.

Montgomery County identifies growth in areas around both towns and in their six Village areas (Belview, Prices Fork, Shawsville, Elliston/Lafayette, Plum Creek, and Riner) where infrastructure is available to support it. Two large residential projects that respond to demand for new housing close to Blacksburg recently received zoning approval with a variety of housing types in the Prices Fork Village. These Planned Unit Developments (PUD) offer densities and housing types unique to this area and not widely seen in the more rural portions of the county. Montgomery County's growth management strategies identify the Villages and Urban Development Areas for projects such as these in order to preserve the rural nature of the remainder of the county, known for agriculture, forestry, and low-density housing.

Household Profile

Montgomery County comprises 35,577 households, 65 percent of which live in Blacksburg and Christiansburg. The countywide median household income is \$56,462. Because 30 percent of the county population is students who generally report low incomes, reporting median family income is also useful. Family households are households comprising two or more related individuals, largely excluding student

households. The median family income of \$83,630 better indicates the relatively high incomes of Montgomery County residents compared to the rest of the region.

Fifty-five percent of households living in Montgomery County—35,577—own their home. A disproportionately large share of owners live outside of the Town of Blacksburg: 30 percent of owners live in the Town of Christiansburg and another 48 percent live in the unincorporated areas of the county. Although 49 percent of county households live in Blacksburg, just 22 percent of owners live there.

More than 16,000 households rent in Montgomery County, 60 percent of whom are in Blacksburg. Because 88 percent of students living in Montgomery County live in Blacksburg and nearly all student-headed households are renters, most renters living in Blacksburg are students. In addition, 2,940 households rent in the unincorporated areas of Montgomery County and nearly 3,570 rent in Christiansburg.



*Unincorporated areas

By age, Montgomery County is the youngest county in the NRV, owing primarily to the young student population of the Town of Blacksburg. An individual younger than 24 heads about 38 percent of Blacksburg's households. The unincorporated parts of Montgomery County are only slightly younger than the full population of householders in Floyd, Pulaski, and Giles Counties. Individuals younger than 55 head about 50 percent of the households in the unincorporated area of Montgomery County. Furthermore, 2,070 households are headed by someone 65 or older (more on senior households in the housing needs section). Lastly, Christiansburg has the highest proportion of households headed by those aged 35–54.



Housing Stock Profile

A jurisdiction's housing "stock" is comprised of all housing units in the jurisdiction and can be described by age, size, accessibility, and price among other characteristics. Montgomery County's stock, including those units in Blacksburg and Christiansburg is about half single-family detached units and half singlefamily attached or multifamily units. Most units were built in the four decades from 1970 to 2009.

Housing Unit Types

Approximately half of the county's housing stock is stick-built, single-family detached housing. Nearly 11 percent of homes are mobile or manufactured homes¹⁰. One quarter of housing units are in multifamily buildings with three or more units. Most (93 percent) multifamily housing is in Blacksburg (79 percent) or Christiansburg (14 percent), and approximately 14 percent of units are attached units of either townhomes or duplexes.

¹⁰ Manufactured housing is an affordable practical, and viable housing option for many residents, but pre-1976 mobile homes are substandard stock and should be replaced to provide safe, healthy housing for residents. There are nearly 2,000 pre-1976 mobile homes throughout the region.



Blacksburg's housing stock is 50 percent multifamily and 50 percent single-family units. The single-family stock is mostly detached (68 percent), whereas approximately 23 percent of single-family units are attached, townhome-style units and nearly 10 percent of are duplexes. Christiansburg's housing stock is 14 percent multifamily and 86 percent single family, including at least 485 mobile or manufactured housing units. Of these, 55 percent are stick-built, single-family detached units and 18 percent are townhomes. Christiansburg's stock also includes at least 370 duplexes.

Age of Housing

The median build year of all units in Montgomery County (including Blacksburg and Christiansburg) is 1985¹¹, and 70 percent of Montgomery County's housing units were built over four decades (1970–2009). Christiansburg has the youngest stock of single-family homes, with more than one quarter of single-family homes (27 percent) built during 2000–2009. Single-family development in Blacksburg was concentrated in the 1970s and 1980s, when 40 percent of existing homes in the town were built. The unincorporated portion of the county has the largest proportion of units built before 1950.

The median build year of all Blacksburg units is 1984, whereas that of single-family residential units is 1982¹². In total, 67 percent of single-family units were built between 1960 and 2000. Blacksburg's multifamily stock was built largely during 1960–1999, with more than 37 percent in the 1980s and 1990s and 26 percent in the 1960s and 1970s.

The median build year of all Christiansburg units is 1987, whereas that of single-family residential units is 1988. Nearly 30 percent of single-family stock in Christiansburg was built during 2000–2009 and an additional 30 percent was built in the 1980s and 1990s.

¹¹ Per the 2017 ACS. Median build year among single-family units included in the real estate assessment data is 1985. ¹² Source: Montgomery County real estate assessment data.



Homes built in the 1960s and 1970s should have had at least one or two renovations to date. However, focus group participants discussed that much of the for-sale stock of the NRV needs reinvestment and upgrades, suggesting that income constraints have led to minimal investments in upgrading properties. Survey respondents noted that they were discouraged that they were in the market for a new home but that few options exist for first-time home buyers within a reasonable price range. Furthermore, those that are within the appropriate price range required substantial repairs or were outdated and needed a large investment in renovation. Others indicated that they could not find housing within their family budget in Montgomery County. That is, affordable houses required significant investment and new homes were too expensive.

Housing Pipeline & Plans

The Town of Blacksburg had nearly 1,500 net new multifamily bedrooms and 7 affordable townhomes under construction at the beginning of 2020. In addition, more than 5,000 multifamily bedrooms and 100 single family lots have been approved for development. The town has emphasized the importance of redevelopment and increasing multifamily density to meet demand while preserving the character of existing neighborhoods and minimizing lifestyle conflicts between undergraduate students and other residents. At the time of writing this report, the town was reviewing plans for the development of more than 1,300 additional bedrooms in 539 units.

Two large developments have received zoning approval in the Prices Fork Village in Montgomery County, west of Blacksburg. One development proposed 416 units of single family attached and detached housing. The other has planned 341 units, including townhomes, duplexes, single family detached and multifamily units. A smaller development on Merrimac Road, between Blacksburg and Christiansburg has proposed 49 units including affordably-priced, income-restricted units.

In addition, continuing phases of large single family detached residential projects in Riner and adjacent to the eastern boundary of the Town of Christiansburg, as well as townhome projects along the boundaries of both Towns are anticipated to be delivered in the near future. Phase 2 of Cloverleaf, Clay Street townhomes, and the next two phases of Walnut Creek are imminent.

The Town of Christiansburg has approved nine residential developments, many of which have mixed housing types such as townhomes and apartments or single-family detached units and townhomes. In total, 906 units have received zoning approval, comprising 187 single-family detached units, 319 townhomes, and 400 apartments.

Housing Need

The NRV struggles with a housing shortage, and competition for housing is greatest in Montgomery County. Finding an appropriate home to buy has been a challenge among all income groups, and affordable rental units are scarce outside of student-oriented developments that rent on a July–June cycle. Intense competition for housing is excluding low- and moderate-income households from some submarkets and may be limiting economic development and business expansion that seeks to recruit national or international talent.

This section highlights the most prominent housing challenges and opportunities, but is not exhaustive. Many challenges discussed this local profile are not limited to Montgomery County, Blacksburg, and Christiansburg and influence communities throughout the region. As such, many of the opportunities and strategies are addressed by regional and partnership approaches. The Local, Partnership and Regional Strategies (separate document) detail opportunities and actions each jurisdiction can undertake to promote the health of our region's housing market and submarkets.

Challenges

Price increases from the pre-Great Recession peak (2007) to the most recent full year (2019) have been dramatic in both Blacksburg (28 percent) and Christiansburg (18 percent). Price increases are quantitative evidence of demand increasing faster than supply, whereas anecdotes and professional observations qualitatively illustrate the consequences. Realtors and lenders told stories of bidding wars for Blacksburg homes. Lenders described pre-approving multiple loans for the same address in a single day, and realtors explained that those buyers who need financing face disadvantages in a market with regular bidding wars as banks will not finance offers higher than appraised value. One realtor summed up the result of high prices and intense competition for homes, saying that moderate-income households and most first-time homebuyers are effectively shut out of Blacksburg; moreover, those who are hoping to buy in Christiansburg and Montgomery County face a grueling search. Moderate-income buyers must be prepared for a long search, losing out on many homes on which they make an offer.

Demand from students plays an important part in the demand for housing, particularly rental housing, in Montgomery County. Rental units are on a July–June rental cycle, making it hard to find a rental unit at any time other than late Spring (i.e., May or June). Even then, units are scarce, and rents have increased

by 29 percent over the 2010–2017 period. Demand for rental units to meet student need has dominated Blacksburg's new construction and impacts the sale of existing units because sellers receive competitive cash bids from investors who expect high rental rates. Focus groups participants explained that investor-held rental units in Blacksburg are rarely listed on the MLS and therefore rarely transfer back into owner occupancy. This trend also reduces the stock that may have been affordable to moderate-income and first-time homebuyers.

The prevalence of rental units among condo properties further excludes first-time homebuyers. In highpriced markets, condos often offer a more affordable ownership option for first-time homebuyers, but financing is only advantageous when a property is more than 50 percent owner-occupied. The availability of financing for properties that are dominated by rental units is low and terms are not desirable, making most condo properties in Blacksburg unappealing to first-time homebuyers.

High demand for rental units and a housing shortage also means that absentee landlords have less incentive to compete by maintaining the quality of units. Renters (both students and non-students) worry that if they do not accept an available unit, they may not be able to attain one at all. Low-income households may also accept substandard housing to obtain housing and then be stuck in the substandard unit as they are unable to find a higher-quality unit without accepting cost burden. Focus group participants report few quality housing units available for professionals or Housing Choice Voucher holders, effectively excluding many non-student households in the region.

Opportunities

Housing demand is defined by household needs, limits and preferences which do not fit neatly into any one housing submarket. As such, regional, inter-jurisdictional partnership and coordination, particularly among Montgomery County jurisdictions will be critical for realizing opportunities and addressing challenges throughout the region. Strategies to advance such partnerships are addressed in the Montgomery County-Blacksburg-Christiansburg Partnership Strategies, Regional Strategies, and individual jurisdiction strategies. Montgomery County plays a particularly important leadership role in the County's and Towns' Partnership Strategies.

Blacksburg and Christiansburg are employment and amenities centers and have begun developing multimodal transportation networks, an important component of location efficiency that can mitigate consequences of dense housing development. The two towns can thus increase density more than any other places in the NRV and reduce infrastructure and environmental impacts of commuting, especially when additional density is paired with decreased single-passenger car travel. Furthermore, increased density in Blacksburg and Christiansburg mitigates against sprawl that jeopardizes the diversity of setting available in Montgomery County and the region.

Blacksburg and Christiansburg can also provide income-restricted affordable housing where it is most likely to financially benefit occupants. Blacksburg and Christiansburg are among the most locationefficient places to live for very low-income households, and income-restricted housing is most needed there because of intense demand from all households. More than 14,500 non-undergraduate households¹³ in the NRV pay more than 30 percent of their income for housing. These households may have to make choices between housing and other needs like medical care, transportation, home maintenance and repair, food, or clothing.

Submarkets throughout Montgomery County, including Blacksburg and Christiansburg are connected by development pressures and the infrastructure, regulations and plans that allow the market to respond to demand. Planning for high density and more affordable housing in the two towns will enhance opportunities to develop diverse housing types that are accessible to households at all income levels throughout the suburban or exurban communities planned for Montgomery County's Villages and to preserve rural communities, and thereby the diversity of setting that is a strength of both the County and region.

¹³ VCHR removed undergraduate households from the analysis of households that are cost-burdened because reliable student income data is not available.

Floyd County

Household Profile

Floyd is a rural, mountainous county of 382 square miles with a network of roads spanning 600 miles, about half of which are unpaved. There are 6,434 households in Floyd County. The Town of Floyd is the only incorporated town within the county, which is one-half of a square mile and has 241 households. The median income in Floyd is \$48,396, which is slightly below the median income for the region. Nearly 60% of households earn less than \$60,000 per year, and over 1,800 households have incomes less than \$30,000 (see table 6, next page).

Floyd has the highest homeownership rate in the region, and 81 percent of units are owner-occupied. Floyd comprises 9 percent of the region's household population but 11 percent of owner-occupied households, indicating a disproportionately high number of homeowners. The Town of Floyd has a larger proportion of renters than that in the county, with one third of the units occupied by rental tenants. Median rent is also higher in the town than in the county at \$653 a month.

About 2,661 households (41%) are headed by individuals between 45 and 64, and 27% of households were headed by individuals age 44 or younger. An estimated 2,913 households are families with children under 18, and all parents in the household work in 2,009 of these (both parents or single parent). An estimated 2,100 households in Floyd County have a householder aged 65+, with about half of these senior residents in family households (1,043) and half representing seniors living alone (1,050 households, or 16% of total households in Floyd County).

Housing Stock Profile

Approximately 77% of housing units in Floyd County are stick-built, single-family detached units, with less than 4% in multifamily buildings. With most stock in single-family homes, 51% of all housing stock in Floyd County has three bedrooms (4,706 units), and about 27% of units have two bedrooms (2,165 units). Floyd has very few one bedroom or studio units (fewer than 650 units), and a lower proportion of units with 4 or more bedrooms than the regional average, which may be due in part to the larger array of rental and apartment options elsewhere in the region. Nonetheless, Floyd's very limited options for smaller units or shared apartments mean there are likely few low-cost housing options available for prospective residents.

Floyd County has the highest percentage of mobile homes in the region, with 18% of its stock comprised of manufactured or mobile homes (1,471 units), and the County allows them to be placed more freely than in other localities in the region. Manufactured housing is an affordable and practical housing option for many residents, however, pre-1976 mobile homes are substandard stock and should be replaced in order to provide safe, healthy housing for residents. (The County does not allow additional pre-1976 mobile homes to be placed in the County.) There are nearly 2,000 pre-1976 mobile homes throughout the

New River Valley, approximately 21% of all manufactured and mobile home units. If this proportion is similar in Floyd, approximately 316 pre-1976 mobile homes likely exist in Floyd County and will need replacement.

Floyd County has the lowest gross rent in the region at \$611, but also the fewest rental units with only 1,154 renter households in the County. Median rent is higher in the Town (\$748), above median rent in the Town of Pulaski (\$628) and Giles County (\$713), although there are estimated to be only 100 rental units in the Town. At least 160 units in the County have no cash rent, which typically indicates arrangements of service in exchange for housing (caretakers, pastors, etc.) or families allowing relatives to live in a unit at no cost.

The median estimated home value for Floyd County is \$170,000, and \$210,900 in the town limits of Floyd according to ACS estimates. In recent years, median sales prices reported in the MLS sales data have been consistently higher than the median (owner estimated) value reported in the American Community Survey, with a median sale price of \$179,500 in 2018 and \$187,750 for Floyd County in 2019. Median days on the market and sale price indicate higher demand for housing in the Town of Floyd compared to the county.

Floyd and Montgomery counties have the highest percentage of homes aged less than 30 years old, with 41 percent of units built since 1990 and a median year built of 1984. Floyd also has a relatively high percentage of homes built prior to 1939 compared to the rest of the region and 14 percent.



Overall market vacancy in Floyd County falls within the 'healthy' range of 2-7%, which usually means property owners and prospective residents can feel confident about successfully buying or selling a home in the county without the market moving too quickly or too slowly. Median days on market in 2019 was

36, which is also a healthy level similar to other areas of Virginia, although significantly higher than that for the extremely tight markets in other NRV localities.

Floyd County properties are highly varied from large tracts of mountain land with hunting cabins, to doublewides on remote 5-10 acres, to older brick ranches; these non-traditional properties can probably skew the Floyd County median days on market upward. Floyd County had the largest number of land sales of 25 or more acres in 2019, nearly double the transactions of the other localities in the NRV. According to the 2017 Census of Agriculture, there are 741 farms in Floyd County, made up of more than 110,000 acres. Forty-two percent of farms in the County are between 50-179 acres. These high-acreage land sales, made up in part by active farm land, require a particular type of buyer, and can therefore transact more slowly than typical single-family homes.

Floyd's public utilities play a critical role in housing development, as newly-created lots not served by public utilities must be at least two acres in size. Homebuyers seeking smaller lots or the proximity of Town amenities will have a smaller pool of options. Floyd's Public Utility Area (PUA) offers homes with smaller lot sizes, access to public utilities, and proximity to town amenities. The median sale price is 47% higher in areas served by public water than in the rest of the county. Median days on market is 36.5 for all properties served by public water, which includes all of town limits and a small portion outside the town.

Housing Pipeline & Plans

Recent building permit data (2018-20) indicate Floyd has added roughly 30-40 new stick-built housing units per year, and an additional 30-40 modular and manufactured homes per year (including replacements), a relatively consistent pace since the 2008 recession. Although no major subdivision or multi-family unit projects are currently planned, Floyd County is exploring several options for infill projects, housing rehab, and other initiatives to add a variety of housing options to the current stock of units.

Housing Need

This section highlights the most prominent housing challenges and opportunities, but is not exhaustive. The types of challenges discussed this local profile are not limited to Floyd and influence communities throughout the region. As such, many of the opportunities and strategies are addressed by regional and partnership approaches. The Local, Partnership and Regional Strategies (separate document) detail opportunities and actions each jurisdiction can undertake to promote the health of our region's housing market and submarkets.

Challenges

Floyd's economy is largely service based, with retail, hospitality, and food service comprising over 18 percent of jobs in the county. These jobs are historically low paying, with average annual pay under \$20,000. Workers in four of the top five job sectors within the county (Health Care and Social Assistance, Educational Services, Retail Trade, and Accommodation and Food Services) earn less than \$30,000

annually. Many workers in these industries are unable to afford the median rent or homeownership costs without becoming cost-burdened (i.e., spending more than 30% of income on housing, which limits ability spend on other necessities

Floyd County has a relatively low percentage of "cost-burdened" households (14%), nonetheless costburdened households represent demand from current households for appropriate, affordable housing. Households are considered cost burdened when they spend more than 30% of their income on housing. Cost-burdened households often have to make choices between housing and other needs, e.g. food, clothing, medical care, transportation. The County's low rate of cost burden is due in part to its high rate of homeownership. Inherently, homeownership has more regulatory safeguards that prevent homebuyers from becoming cost-burdened at the time of purchase. Homeowners also face less housing cost increase over time and increases are more predictable. As many as 28% of County renters are cost burdened, compared to 15% of owners. Low-income households with housing cost burdens will likely need income-restricted housing since they are often "crowded out" when they compete with higher income households for appropriate, affordable housing.

There are too few vacant rental units in Floyd to provide an exact vacancy rate; however, it is likely less than two percent, meaning that households seeking to rent struggle to find an appropriate, affordable unit. Floyd comprises 9% of the region's household population, but 11% of the owner-occupied households and 5% of renter households, which could indicate a shortage of rental units. Although student households 'inflate' the regional renter population, Floyd has a lower proportion of renters than localities without large student populations (Pulaski and Giles).

There are nearly 1,530 vacant units in Floyd. Most vacant units (77.5%) are either held for seasonal, recreational or occasional use, or are long-term vacancies, as opposed to vacant for-sale or for-rent properties. Floyd County may have as many as several hundred long-term vacant units, which can pose a challenge for the County since abandoned units can become a health and safety risk. Nonetheless, identification of these units may uncover an opportunity to improve them through CDBG Rehab funds as well as local tax incentives.

Opportunities

Locally based Citizens Telephone Cooperative started work on a county-wide gigabit fiber installation project in 2019. Citizens projects that by the end of 2021, nearly 97 percent of Floyd County homes will have fiber access. High-speed broadband will significantly impact the county's ability to attract businesses as well as residents who are able to work from home in a rural setting.

A recently passed Townhome Ordinance enables the development of up to 12 housing units per acre on land served by public utilities if 50 percent open space is maintained. Habitat for Humanity was the first to take advantage of this new ordinance and will be constructing seven new townhomes just outside of the Town of Floyd and slated for completion in 2021. The county can partner with other developers to identify other viable parcels in the PSA service area.

The county has reached out to developers, realtors, lenders, and property owners to share information about the need for more residential and commercial options in the county. Partnering with the town, the county held a Development Conversation in early 2019 to create an open dialogue for the county to share information and to hear from stakeholders about their needs, questions, and concerns. These types of conversations allow the county to stay connected to the players in the development field, listen to their needs, dispel misinformation, and collectively work towards the goal of serving Floyd citizens.

A housing rehabilitation grant was recently awarded to Floyd County through the Department of Housing and Community Development. Some vacant homes may be eligible for this program. The county can actively target areas with vacant and blighted homes, encouraging absentee owners to either sell the homes or make them usable by participating in the program. Pairing this with a tax abatement program may help incentivize the rehabilitation of these homes and provide needed housing for Floyd residents. In addition to repairing vacant homes, the county can engage in critical repair and modifications for homes occupied by low-income and aging residents.

The county is pursuing a planning grant through Virginia Housing to engage local economic developers, real estate and development professionals, businesses, and county officials to determine the relevant residential market geography for Floyd. From this input, a target demographic for new residents and housing products will be identified. The county has identified an existing 140-acre undeveloped parcel for the development of a mixed-use, mixed-income project while using the remainder for long-term community needs.

Giles County

Household Profile

More than 7,000 households reside in Giles County, almost 40 percent of which live in the county's towns of Pearisburg (1,050 households), Narrows (870), Pembroke (500), Rich Creek (280), and Glen Lyn (30 or more). Sixty-five percent of Giles households are families comprising two or more related individuals, and nearly 30 percent are individuals living alone. Of single-person households, 850 (43 percent) are individuals 65 or older who live alone. The median household income in Giles is \$49,734.

Three quarters of Giles households own their home. The population of renters is disproportionately large in towns compared to the rest of the county, though marginally so. Renter households are generally headed by younger individuals: 43 percent are headed by a person aged 25–44, whereas only 20 percent of owner-headed households are headed by an individual in this age range.



*The ACS estimate of renter households 65 and older is not reliable. At least 201 renter households are headed by someone 65 or older and as many as 395 may be.

The age distribution of heads of households in Giles is like that of Floyd and Pulaski. Although Giles, Floyd, and Pulaski each have an aging population, the percent increase during 2000–2010 was lowest in Giles.

Housing Stock Profile

Housing Unit Types

Eighty percent of housing units in Giles are stick-built, single-family detached units, and 14 percent are mobile or manufactured homes. The remaining six percent are primarily in small multifamily buildings with less than 20 units. Few houses in Giles are duplexes or townhome-style units.

Most of the stock is moderately sized, with about half having three bedrooms, just over a quarter having two bedrooms, and 15 percent having four bedrooms. Despite 30 percent of households being headed by individuals, only 7 percent of units are efficiency or one-bedroom units.

Age of Housing

Housing in Giles County is among the oldest in the region with approximately half built before 1970. Units are evenly distributed among the 1940s, 1950s and 1960s, 1970s and 1980s, 1990s and 2000s.



* The estimate of residential units built in Giles 2010 or later is not reliable, at least 87 and as many as 256 may have been built 2010-2017

Housing Need

This section highlights the most prominent housing challenges and opportunities, but is not exhaustive. Many challenges discussed this local profile are not limited to Giles County and influence communities throughout the region. As such, many of the opportunities and strategies are addressed by regional and partnership approaches. The Local, Partnership and Regional Strategies (separate document) detail opportunities and actions each jurisdiction can undertake to promote the health of our region's housing market and submarkets.

Challenges

Like most places in the NRV, Giles struggles to provide sufficient affordable housing. Approximately 21 percent of households (1,462) in Giles County are cost burdened, spending more than 30 percent of their income on housing (i.e., rent and utilities or mortgage, insurance taxes, and utilities) and may need more affordable housing. Giles' rate of cost burden is the highest among the jurisdictions in the region without large student populations.

Renters are disproportionately cost burdened, and comprise more than 28 percent of the population of cost-burdened households; however, there are nearly 900 cost-burdened owner-occupied households in Giles. With respect to age, cost burden in Giles is concentrated among seniors, with at least 336 cost-burdened households headed by someone 65 or older. In addition, at least 164 renters aged 35–64 are cost-burdened. Lastly, at least 360 of cost-burdened households are severely cost-burdened and spend more than 50 percent of their income on housing.

Focus group participants discussed the need for housing workers and young people who do not benefit from intergenerational wealth. Participants explained that many young people need to be educated about the homebuying process and may struggle to find an affordable home in good condition.

In addition, the participants expressed concerns that the aging population must relocate to downsize and that building homes in or near towns with amenities has been difficult. Housing conditions combined with the remote/difficult location of some homes makes modifying a home for aging in place less viable. Participants therefore suggested the creation of new housing to allow current residents to age in the community.

Opportunities

Giles has relatively affordable housing, with a 2019 median sale price at \$133,000 in Giles compared to \$195,000 in the region. Similarly, median gross rent (i.e., rent plus utilities) was \$683 per month in 2017 compared to \$836 in the region. Housing in a beautiful setting with relatively low prices within a close commute to job centers allows Giles to expand its communities and community development, thereby encouraging steady price appreciation of existing housing and increased local revenues.

There are 4,255 jobs in the county. The county has high location efficiency for the 47 percent of workers who live and work in Giles, meaning combined housing and transportation costs are relatively low due to proximity to job centers. For those who work in Giles, living close to work and paying relatively low housing costs, combined with increasing "spillover" demand may make homeownership a particularly good investment. However, Giles will need to focus and "keep up" with demand to avoid excess pressure that could price out some workers.

Giles has a rural heritage and scenic, mountainous terrain that have made Giles attractive to many new and long-time residents. A recent increase in the median price combined with decreasing median days on







To maintain its natural amenities, new development should be concentrated largely in areas with planned public services. These areas offer an opportunity to attract developments that provide a mix of units to serve a variety of needs. For example, Newport and Pembroke see growing demand from workers in Montgomery County. PUD development can therefore incorporate a variety of homes to serve both newcomers and current residents that wish to downsize or buy for the first time. However, the county must advocate for new, modest homes for middle income households as the market is less likely to provide these homes when the regional market for high-margin homes is not yet satisfied.

City of Radford

Household Profile

The City of Radford comprises 5,500 households, with a median income of \$36,082. Because 42 percent of the city's population is students who disproportionately report low incomes, reporting median family income is also useful. Family households comprise two or more related individuals, which largely excludes student households. Median family income is \$56,648. This is the lowest in the region, but it is similar to those in Pulaski (\$56,937), Giles (\$57,483), and Floyd (\$57,986).

Nearly half of the households living in Radford own their home (2,559 households), while 53 percent rent. Most renters (59 percent) are younger than 34, and of those younger than 34 many are younger than 24 and likely to be students at Radford University. Owner occupants are typically older than renters: 25 percent are younger than 44, 45 percent are aged 45–64, and 30 percent are 65 or older.

Housing Stock Profile

Radford's housing stock is 64 percent single-family units and 36 percent multifamily units. Most single-family units are single-family detached units (approximately 3,580). Moreover, between 160 and 360 units are attached units, either townhomes or duplexes. A small number of single-family units are also mobile or manufactured homes (between 175 and 475). There are very few condos in Radford; almost all multifamily units are rental units. A significant portion of single-family homes, more than 63 percent, are also rental units.

The market vacancy in Radford is six percent, and this rate is overwhelmingly attributed to an abundance of vacant rental properties and not homeownership units. The market vacancy rate among rental units is greater than seven percent, whereas that among for-sale units is less than four percent. Median days on market in Radford in 2019 was 13, indicating strong demand for for-sale units. However, high vacancy among rental units may present challenges discussed in more detail below.



Since January 2020, Radford has permitted 23 single family units and 1 duplex. As of the writing of this report, the city expects an additional 12 permits to be issued for single-family detached and 20 single-family attached units. These units are likely to be absorbed quickly based on regional demand for single-family ownership opportunities.

Like Giles, Radford has a relatively older existing housing stock with many units built during 1950–1969 and relatively few units built since 1990. Therefore, a large portion of the Radford stock should have been upgraded in the past 50 years. The city expressed concerns about housing conditions and sponsored a housing condition field survey to expand on this study. High-level findings are included here, and a detailed analysis will be provided in a forthcoming report.



*The estimate of homes built in Radford 2010 or later is not reliable. As few as 36 homes and as many as 202 may have been built 2010-2017

Condition Survey

VCHR, NRVRC, and Virginia Tech student and faculty volunteers evaluated 3,191 residential exteriors of single-family and multifamily units on a 5-point scale to determine the approximate condition of homes throughout Radford. Property condition scores reflect the level of investment in major areas of each home, including the porch, roof, siding, landscaping, and entryway of the surveyed property. Seventy-six percent of units received a score of 2 or 3, indicating that these homes were at average or above-average condition. Approximately 330 houses were in troubled condition, receiving scores of 4 or 5. High concentrations of troubled properties existed in a few neighborhoods, with the rest distributed in the residential areas of the city.

The study team observed 30 dilapidated single-family residential structures in the city, each requiring significant rehabilitation to stabilize and make habitable (though not necessarily marketable). Another 300 distressed homes are in poor but not uninhabitable conditions. These will trend toward complete distress, creating a large inventory of blight that will have negative consequences for the city. To prevent these properties from further degradation and to inoculate nearby properties against decline, strategically factoring in the location of these worsening, at-risk properties is critical.

In that context, VCHR will identify average quality single-family homes close to these distressed properties. Proximity to blight reduces property values and undermines the city's long-term fiscal strength; therefore, paying attention to these sites is strategically important. Curing distressed properties near healthy ones should be prioritized. Improving a 4-score property to a 3-score condition is easier than mitigating the distress once a property degrades to a 5. Intervention may also help preserve a sizable volume of affordable stock in a mixed-income market.





Housing Need

This section highlights the most prominent housing challenges and opportunities, but is not exhaustive. Many challenges discussed this local profile are not limited to Radford and influence communities throughout the region. As such, many of the opportunities and strategies are addressed by regional and partnership approaches. The Local, Partnership and Regional Strategies (separate document) detail opportunities and actions each jurisdiction can undertake to promote the health of our region's housing market and submarkets.

Challenges

Radford faces housing condition challenges related to deferred maintenance and upgrades. Stagnant or decreasing incomes combined with concerns about resale may have discouraged owners from investing in their property. However, the market has strengthened since the recession: prices have been increasing and days on market have been steadily decreasing. The market strength may encourage owners to invest in their property to achieve higher sales prices, and the city can support their investments by addressing troubled properties, continuing community development efforts, and offering incentives for further investment. The opportunity and strategy sections include more details.

Radford also has challenges related to multifamily rental housing. With a relatively high vacancy rate, renters have choices and gravitate to units and complexes that meet their needs. Competition in the market encourages owners and managers to invest in their properties; however, potentially high vacancies may make complexes less viable and begin to deteriorate. A potential decrease in student demand will drive the need for inspections, code enforcement, and incentives for reinvestment for new populations.

Opportunities

Although some properties across the city are in poor condition (and these are concentrated in some areas), most of Radford's housing is in good condition and is very well maintained. Many neighborhoods have homes that are in excellent condition and are extremely desirable. Incentives for improvements that increase value provide the city an opportunity to protect and increase the number of high-value, strongly demanded neighborhoods.

Radford is relatively walkable and densely populated relative to many other communities in the NRV. This context corresponds to shifting housing preference for conveniently located, close-knit, walkable communities near amenities such as retail and recreation. The city must continue to cultivate non-student focused community amenities to attract non-student households that can support multifamily development. More families and workers frequenting establishments downtown is imperative, so adding desirable housing (multi-family or single family) near downtown, and encouraging owner occupancy in nearby single-family neighborhoods and ensuring walkable connections between residences and amenities are opportunities that allow Radford to take advantage of overall demand for the region.
Radford can be a responsible steward of naturally occurring affordable housing. The city has many moderate and small-sized housing on small lots that are relatively affordable. As the region grows and demand for homes increases, preserving this stock in well-located places becomes an important component of preserving the variety of housing in the region, especially that affordable for moderate-income singles, couples, and small families.

Pulaski County

Household Profile

Pulaski County had an estimated population of 33,417 people in 2018 living in 14,525 households, which comprise approximately 20% of the NRV total. About one third of the county's households live in the two towns of Pulaski and Dublin. Pulaski is the larger of the two, with 4,730 households compared to 980 in Dublin.

Approximately 24,530 residents live in owner-occupied households (10,507 units), and 8,887 live in renter households (4,018 units), indicating a relatively high homeownership rate of 72.3%. The towns have disproportionately more rental units than the unincorporated county does, with 50% of all rental units located in towns. Approximately half of the households in Dublin rent their homes compared to nearly 40% of Pulaski ones.

The proportion of households with a householder over the age of 60 is nearly 40% (5,941 households). This is relatively high compared to the NRV overall but like Giles, Floyd, and localities without university populations. The median age is 46.3, well above the national average of 37.9. Weldon Cooper population projections suggest that the number of people 65 and older will continue to increase over the next 10 years.

Median household income in Pulaski County is \$52,638, approximately that of the NRV average. An estimated 4,446 or 13.4% of county residents live in households with incomes below the poverty level, although the rate for the Town of Pulaski is closer to 22%. As shown in Figure 20, nearly two thirds of households in Pulaski County have incomes of \$60,000 or lower.



More than 2,200 households in Pulaski pay more than 30 percent of their income for housing and therefore may need more affordable housing. Although renters have higher rates of cost burden, most cost-burdened households in the county are owners. Almost 30% of renter households pay more than 30% of their income on housing costs compared to only 16% of owner households.

Housing Stock Profile

Existing housing stock in Pulaski is located mainly in several small, urbanized areas north of Claytor Lake and the New River, including the Towns of Pulaski and Dublin as well as the county Fairlawn area across the New River from the City of Radford. In addition to having the best access to roads, utilities, and amenities such as shopping and public services, these areas are also near the county's employment hubs, including several large manufacturing firms near Interstate 81 as well as retail and professional services.

Several areas along rural roads and highways have significant residential development, including large mobile home developments along state highways, along the frontage of rural farm roads, and in small communities such as Draper and Parrott. The section of Pulaski County on the south shore of Claytor Lake and the New River is less developed and is geographically isolated from much of the county's infrastructure, requiring costly upgrades to expand water/sewer systems and broadband availability. Small communities on the south side of the lake include Allisonia, Hiwassee, and Snowville, and Claytor Lake itself has both campgrounds and housing developments along portions of the shore.

Each of the communities in Pulaski County has different development patterns and housing characteristics based on the history of industrial development and growth in the NRV region. Residential and industrial buildings in the Town of Pulaski reflect the strong growth of the town during the early and mid-20th century. Numerous historic buildings and large portions of the housing stock are at least 50 to 100 years old. Although some smaller farming communities may have been there before, rural areas have a very varied housing stock of old and new development and include many modular and manufactured homes. Housing in Dublin and Fairlawn reflect post-WWII development and the new industrial facilities along the interstate, with several older neighborhoods as well as newer subdivisions.

In recent years, Pulaski County has developed more "bedroom community" subdivisions, which allow workers to live in Pulaski County and travel to jobs at regional employment hubs in the universities and industrial parks as well as nearby shopping. The ongoing development of the subdivisions near the Pete Dye River Course in Fairlawn and a large, proposed subdivision community adjacent to the new Pulaski County Middle School between Dublin and Pulaski represent the largest areas of ongoing new development.

The age of the Pulaski County housing stock is like that in the rest of the NRV, with concentrations of older housing in the towns and village areas and newer developments in subdivisions around the county. About 26% of the 17,266 housing units in Pulaski County were built since 1990 (4,531 units). The remaining 74% are older: 8,084 units were built between 1960 and 1989, and 4,651 were built before 1960.



^{*}Although the sample of existing homes built since 2010 in Pulaski is too small to provide a reliable estimate, between 163 and 383 homes were built in this period.

Of the estimated 4,814 residential units in the Town of Pulaski, 48.5% were built before 1960. The town has many well-preserved historic houses from the early and mid-20th century that provide unique housing options at relatively low prices. Moreover, several investors are working to rehabilitate historic houses in the residential historic district. Other neighborhoods with older housing stock have units that have

significant maintenance, disinvestment, and blight issues, including some abandoned or uninhabitable units. Town code enforcement and tax sale efforts seek to remedy the worst conditions and rehabilitate or redevelop these older structures.

In total, 16 percent of Pulaski County housing units (2,712 units) are vacant, many of which are vacation/recreation homes or market vacancies (for-sale or for-rent). More than 1,000 units are long-term vacancies: abandoned, slated for demolition, or otherwise held and not occupied long term, more than 300 of which are in the Town of Pulaski. The sample of units that are vacant for-sale and vacant for-rent is too small to provide a reliable market vacancy rate. However, a drop in median days on the market and an increase in median sale price and median contract rent indicate increasing demand for housing units.



Pulaski's median sale price has risen 32 percent by 2019 since its pre-recessionary peak in 2008, and median days on the market fell to 11.5, which is an 82 percent decrease in the same period.

Median gross rent for rental units in Pulaski County is \$657, well below the regional average of \$857. As noted previously, few rental opportunities exist, especially in newer developments. Median monthly owner costs in Pulaski County are \$1,088 for units with a mortgage and \$373 for units without a mortgage, somewhat lower than the regional average.

Housing Need

This section highlights the most prominent housing challenges and opportunities, but is not exhaustive. Many challenges discussed this local profile are not limited to Pulaski County and its towns and influence communities throughout the region. As such, many of the opportunities and strategies are addressed by regional and partnership approaches. The Local, Partnership and Regional Strategies (separate document) detail opportunities and actions each jurisdiction can undertake to promote the health of our region's housing market and submarkets.

Challenges

Pulaski County has many older housing units that have maintenance or upgrade needs as well as many units in need of expensive repairs to remain or become habitable and compete with better housing options. Some neighborhoods require significant investment to preserve and upgrade aging housing stock or targeted redevelopment to add more modern housing options. The aging housing stock is located not only in the historic industrial towns but also in rural areas with aging mobile home parks and farmhouses.

The aging population in Pulaski County may require different housing features and community amenities from their current ones. Focus group participants mentioned issues such as a lack of newer single-level housing models and the need for more walkable communities with nearby amenities and shopping. These amenities are critical to housing demand among other groups, including families and young professionals. The town and county are working to facilitate development in areas with existing amenities to attract new residents from around the region to Pulaski communities.

Many residents in Pulaski County and the NRV, especially those at the lower end of the income scale, struggle to find affordable and appropriate housing options. As in other NRV localities, lower-income residents and especially renters struggle to find affordable, appropriate housing near jobs and amenities. Although Pulaski County has relatively few rental options, it is an affordable place to live for both renters and owners if housing is available.

Opportunities

Although the county's residential population has been shrinking slightly as the rest of the region grows, job growth presents an opportunity to attract workers to live there. Pulaski County is capitalizing on commuters to the region's well-paying jobs, with several high-end subdivision developments planned or

under development in Fairlawn and in the area near the new Pulaski County Middle School. Superior housing stock with relatively affordable prices and walkable surroundings along with community development efforts may spur new amenities and services; in addition, these increase with housing and the community and must be cultivated concurrently. Attention to ever-changing housing and community amenity preferences are critical to the success of new developments serving as more than a bedroom community.

The Town of Pulaski has a unique revitalization opportunity to use its historic assets to build a community of new and current residents. Successful revitalization efforts across Virginia and the nation are tailored to local conditions, seek to build a stronger sense of place, and seek to integrate new residents with long-term ones^c. Blight removal and renovations can revitalize neighborhoods, whereas new construction and renovation that brings new residents can support struggling businesses. Moreover, mixed-income, affordable housing can deconcentrate and alleviate poverty. Private investors have begun the process of purchasing and renovating several historic commercial and residential structures in the Town of Pulaski, creating dozens of downtown apartment units and stabilizing neighborhoods of historic mansions in northwest Pulaski. Town and county infrastructure can complement investor efforts by upgrading aging water and sewer systems. Regional partners are working to expand regional broadband capacity from trunk lines to serve more residential areas and broaden residential demand.

9. Conclusion

This study analyzed and documented housing challenges experienced across the region and specific challenges with which localities grapple. In particular, the region struggles with rapidly increasing demand and barriers to producing housing for households at all income levels. As discussed in the strategies (separate documents), local and regional governments will be central to addressing these challenges which will intensify without concerted leadership. Local governments must raise and dedicate funds to support low-income households, encourage innovative approaches to density and the development of a variety of housing choices, and work *regionally* to establish *market-wide* housing goals, policies, and programs.

However, local governments cannot resolve housing challenges alone. The strategies recommended in the following sections will require community commitment to inclusivity and support from philanthropists, businesses, and taxpayers. The value of continued development and redevelopment is realized over the long term, so stakeholders such as realtors, developers, and employers must advocate for prospective residents. Furthermore, residents must respond to the needs of workers and neighbors who struggle to get by. Finally, every stakeholder must understand that growing environmental awareness and increasing prices of land, labor, and materials imply that density and innovation are required to offer affordable, appropriate housing to our growing and changing population.

Detailed regional strategies address region-wide issues such as housing education and involve partnerships among jurisdictions and institutions. Local strategies have common themes that allow growth to respond to the history and character of our region, including creative density focused on towns and villages, re-investment in the existing housing stock, and tools to incentivize and preserve housing for low-income households and first-time homebuyers. Local strategies also include specific recommendations tailored to the opportunities and challenges of that jurisdiction within the overall regional market.

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