

Equity Profile for Central Virginia

Centering Equity in Evaluating Well-Being & Quality of Life for the Residents of the City of Charlottesville, Fluvanna County, Greene County, Louisa County, and Nelson County

May 2022

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REPORT INTRODUCTION

The purpose of this Regional Equity Profile (“report”) is to expand upon the work completed in Albemarle County’s 2021 Equity Profile by developing similar equity profiles for other localities in the surrounding region, specifically those localities in the Thomas Jefferson Planning District Commission (TJPDC). The Albemarle Equity Profile (AEP) defines equity as “all community members having access to community conditions and opportunities needed to reach their full potential and to experience optimal well-being and quality of life.”¹ This report uses the same definition. The AEP sought to identify the environmental, social, and economic factors that affect quality of life and well-being generally. The AEP inextricably links well-being and quality of life to equity and sought to identify gaps in existing service delivery and to develop new policies and models of community engagement that improve the quality of life for all residents.

This Regional Equity Profile seeks to identify similar conditions and gaps in services that exist in the other 5 localities in the TJPDC so that the qualitative and quantitative data is publicly available for those who may use it to develop new policies and models of community engagement that seek to improve the quality of life for those who live in these communities. Rather than providing a synthesis of the region as a whole, the report seeks to develop an individual profile for each of the following localities: The City of Charlottesville, Fluvanna County, Greene County, Louisa County, and Nelson County. Included in each locality profile is data on the following:

- A Community Mapping Exercise
- Individual interviews and focus groups

¹ Siri Russell, Barbara Brown Wilson, Michele Claibourn, Alissa Ujie Diamond, Sam Powers, Michael Salgueiro, *Albemarle County Equity Profile: Centering Equity in Evaluating Well-Being & Quality of Life for Albemarle County Residents*, The Equity Center, A UVA Democracy Initiative for the Redress of Inequity through Community-Engaged Scholarship and the Albemarle County Office of Equity and Inclusion, 2021. <https://virginiaequitycenter.org/research/content/8306>.

- Demographics
 - Race
 - Income
 - Age
- Food Insecurity
- Employment
- Housing
- Education
- Digital Divide
- Land Use/Environment
- Mobility

Each of the above sections were identified as potential environmental, social, or economic factors that affect quality of life and well-being. Additionally, for each locality, active members of the community participated in individual interviews, as well as a larger focus group that also included a community mapping exercise. These individuals included municipal leaders, government employees, nonprofit workers, and community organizers, among others.

The hope is that this Regional Equity Profile will serve as a guiding document for those who seek to improve the well-being and quality of life for *all* members of their communities.

CHAPTER 1. CITY OF CHARLOTTESVILLE

Introduction

The City of Charlottesville is located in Central Virginia, along the Rivanna River and at the foothills of the Blue Ridge Mountains. As of 2019, the city was home to 47,096 people across 10.3 square miles of land. While Charlottesville is an independent city, the city is intricately connected to the greater region and is the economic center of the Charlottesville Metropolitan Area and the Thomas Jefferson Planning District, with the University of Virginia being the largest employer in the city.

The historic town, named after Queen Charlotte, was established in 1762 on land previously occupied by the Monacan people and has played a key role in many historic events. However, the city's history is also plagued with slavery, segregation, and discrimination that has contributed to persistent inequities. Charlottesville gained global attention with its controversy surrounding removing confederate statues and the "Unite the Right" white supremacist rally in 2017. Focus groups and interview stakeholders highlighted the rally as a pivotal moment in Charlottesville.

Charlottesville's vision statement states that the city is "committed to racial and cultural diversity, inclusion, racial reconciliation, economic justice, and equity. As a result, every citizen is respected. Interactions among city leaders, city employees, and the public are respectful, unbiased, and without prejudice."² To fully address the inequalities present, this profile analyzes various metrics and conditions across demographic groups and geographic areas that contribute to the quality of life and highlights which aspects should be prioritized.

² "Charlottesville City Council Vision - 2025," City of Charlottesville City Council, accessed April 22, 2022, <https://www.charlottesville.gov/684/Vision-Statement>.



Source: "VirginiaGreen"

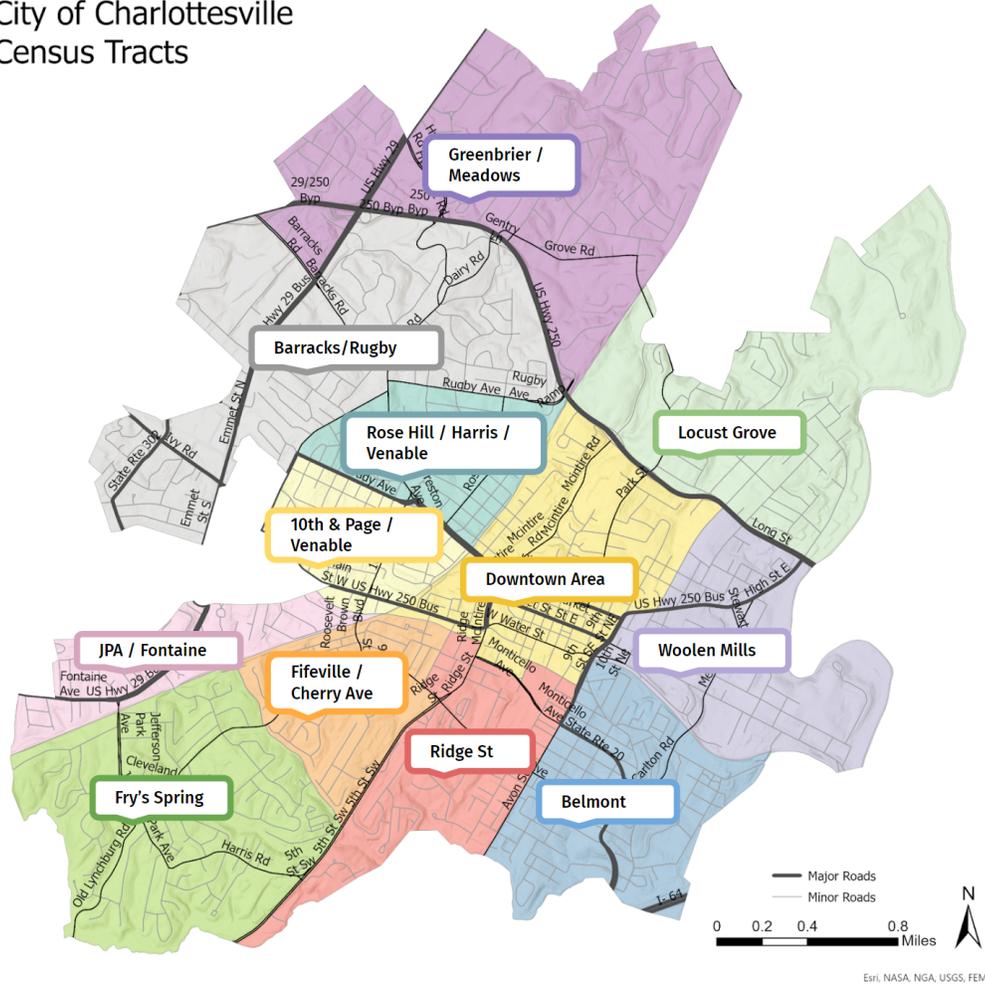


Source: Peter Frank Edwards/REDUX

Community Mapping Exercise

The 2020 Census recognizes twelve census tracts within Charlottesville's boundary. A portion of our focus group conversation was dedicated to establishing community-generated names for these tracts. The results are demonstrated in the map below. Though the data gathered for the equity report correspond to 2010 census tracts, there were no changes in census geography in the 2010-2020 period in Charlottesville.

City of Charlottesville Census Tracts



Focus Group Census Tract Naming Exercise

3.1 Demographics

3.1.a. Race

The majority of Charlottesville's population is white or African American (*Figures C.1 and C.2.A*). The racial composition of the Charlottesville population is disaggregated at the tract level and allows for a breakdown within each census tract of Charlottesville City. The Downtown, Barracks/Rugby, and Locust Grove neighborhoods are overwhelmingly white. As seen in *Figure C.2.A*, 88.2% of the Downtown Area is white,

with 2.5% of the population identifying as Black and the last one percent some other race. *Figure C.2.B* breaks down the population beyond the white and Black binary, showing races such as American Indian and Native Alaskan, Asian, Native Hawaiian, two or more races, some other races, and Hispanic. Within JPA/Fontaine there is a high population of Asian residents, comprising 24% of the neighborhood. In Greenbrier and Ridge Street the Hispanic population outweighs the two other races seen within these areas with Greenbrier having 15.4% Hispanic and Ridge Street having 9.6% Hispanic communities.

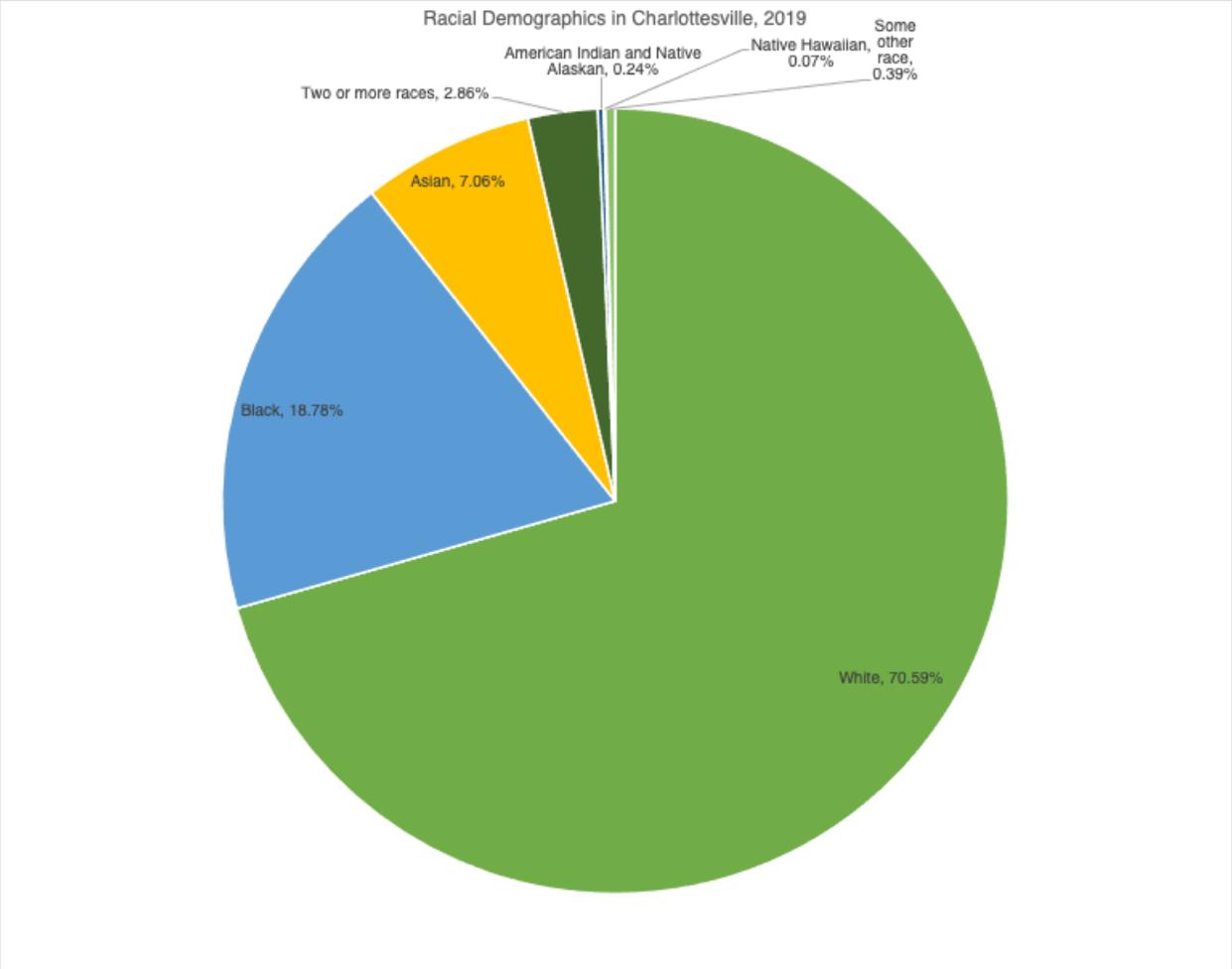


Figure C.1: Racial Demographics in Charlottesville, 2019. (Source: ACS)

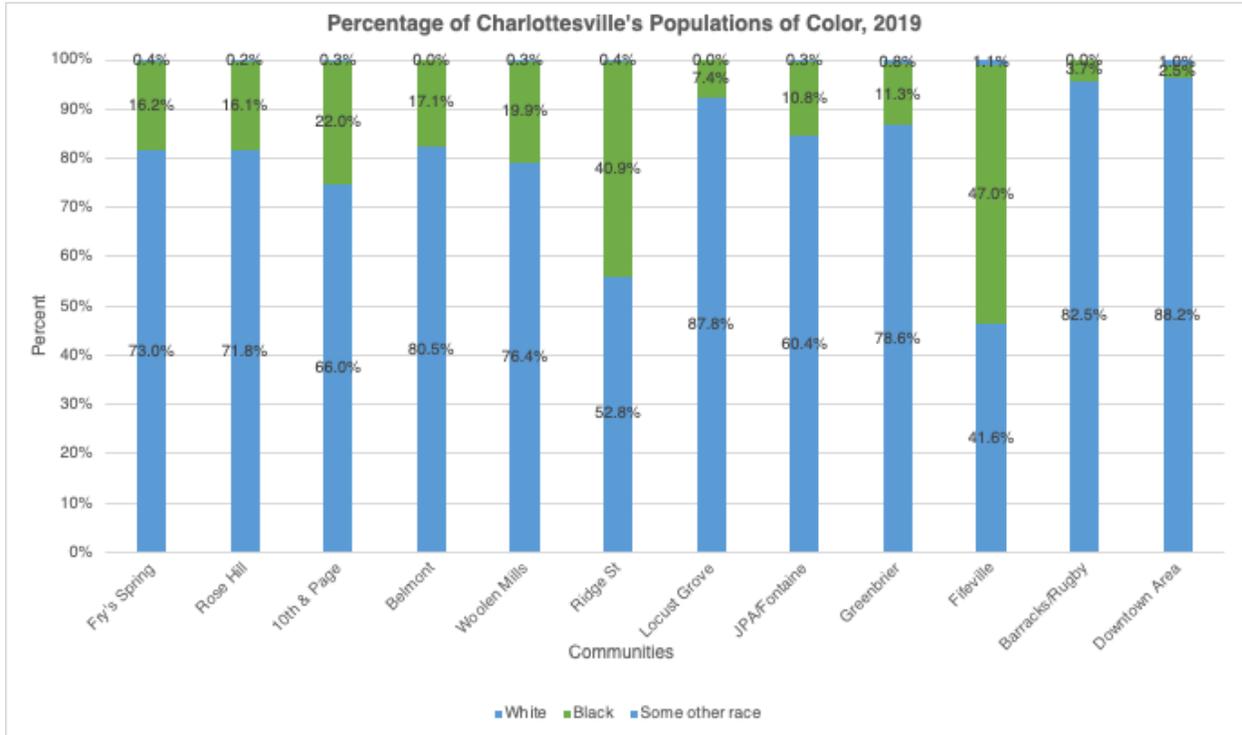


Figure C.2.A: Percentage of Charlottesville's Populations of Color, 2019. (Source: ACS)

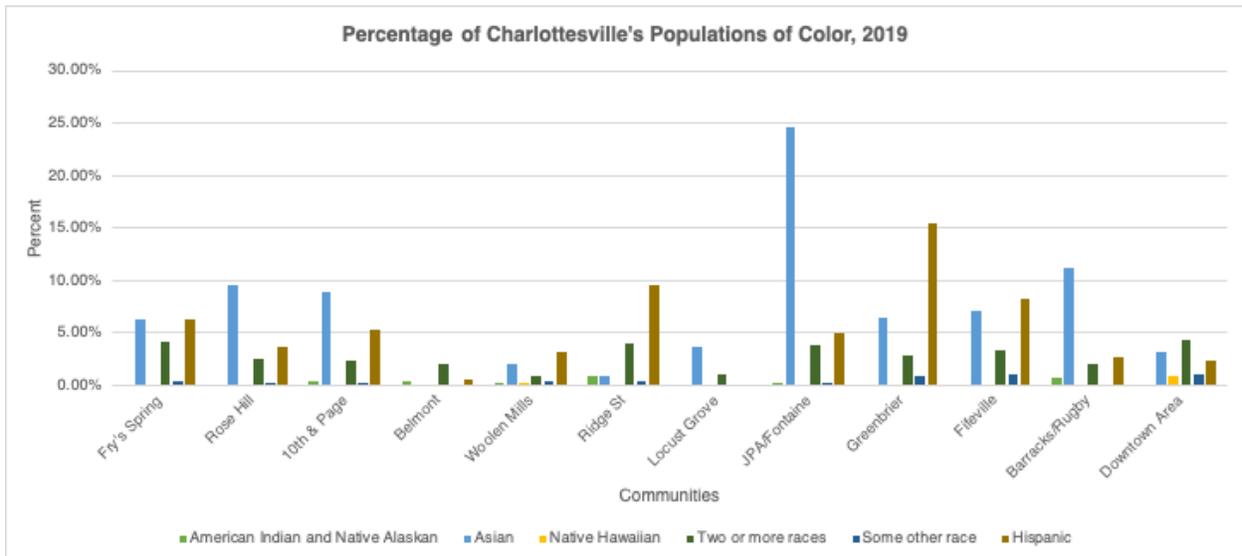


Figure C.2.B: Percentage of Charlottesville's Populations of Color, 2019. (Source: ACS)

Observations made during interviews and focus group conversations help us to better understand the quantitative data collected that often fails to reflect transient groups of individuals. A common theme discussed during these discussions was the impact the 1965 razing of Vinegar Hill had on generational wealth within Charlottesville. A participant explained that “a thriving community of Black folks with houses and businesses in the Vinegar Hill Neighborhood was razed under the auspice of urban renewal and so those residents were moved to the West Haven community. The housing development [is] where a lot of people have stayed. They have not been able to get out of that. So, therefore, while some parents can pass houses on, these parents had their houses destroyed and so, therefore, they can’t pass on that generational wealth.”³ Vinegar Hill’s razing left a great stain on the community as a whole, eradicating the social values of a thriving neighborhood, and replacing it with national businesses.

The City of Charlottesville introduced the deputy city manager for Racial Equity, Diversity, and Inclusion in 2020 to better address the needs of minority communities. A community leader said, “The role was a combination of what I like to refer to as traditional city management functions, adding in a focus on... Justice, Equity, Diversity, and Inclusion.” They added, “we know historically local governments have contributed to harming marginalized communities. Whether that's through how we think of the built environment, whether that's how we think of service provision, we caused harm. So, this role has the opportunity to ensure that anyone leaving this building has had some proper exposure to opportunities to learn how to not cause harm.”⁴

3.1.b. Income

The fluctuation of income patterns is a normal occurrence throughout a decade. In Charlottesville, households have experienced growth, loss, and static retention. The

³ Community health worker in interview with UVA graduate students, March 22, 2022.

⁴ City government employee in interview with UVA graduate students, March 21, 2022.

latest data is depicted by the graph in *Figure C.3* which shows the variation of median income in Charlottesville by census tracts from 2019.

Figure C.3 illustrates not only how fast, but how drastically the income levels have changed in Charlottesville. Across geographies, incomes have increased since 2010. Unsurprisingly, JPA/Fontaine and 10th & Page, areas with high concentrations of students, lag behind most other neighborhoods in median income. On the other end, Fry's Spring holds a sizable advantage in incomes relative to any other community area.

Figure C.4 compares geographical and racial breakdowns of income in Charlottesville. It is important to note that in this chart, a few of the census tracts: Woolen Mills, JPA/Fontaine, Barracks/Rugby, and the Downtown Area, the data was not strong enough to provide information regarding the median household income for Black residents due to lack of residents in these areas. It is evident in this graphic that, across Charlottesville, income levels vary across location and racial group. For instance, Ridge St and Fry's Spring partially share a border. Incomes for white residents in the former are higher than they are for white residents in the latter. By contrast, Black residents in Ridge St. see incomes that are less than a quarter of their counterparts in Fry's Spring. Income is an issue which residents feel strongly about. In the focus group conducted in mid-April 2022, it was clear that residents related income to access and social mobility. Both of these topics are very impactful and partially dictate the quality of life of each resident.

When viewing this data it is also important to recognize that the state's median household income is just below \$76,400. While it is evident that many different households across Charlottesville reach that threshold, many also do not. Most notably, it is clear that the majority of Black households do not reach that same level of income as white households, except for in Fry's Spring. The difference of income by race is a clear perpetuation of inequality in Charlottesville and requires active solutions to lead towards change for the better.

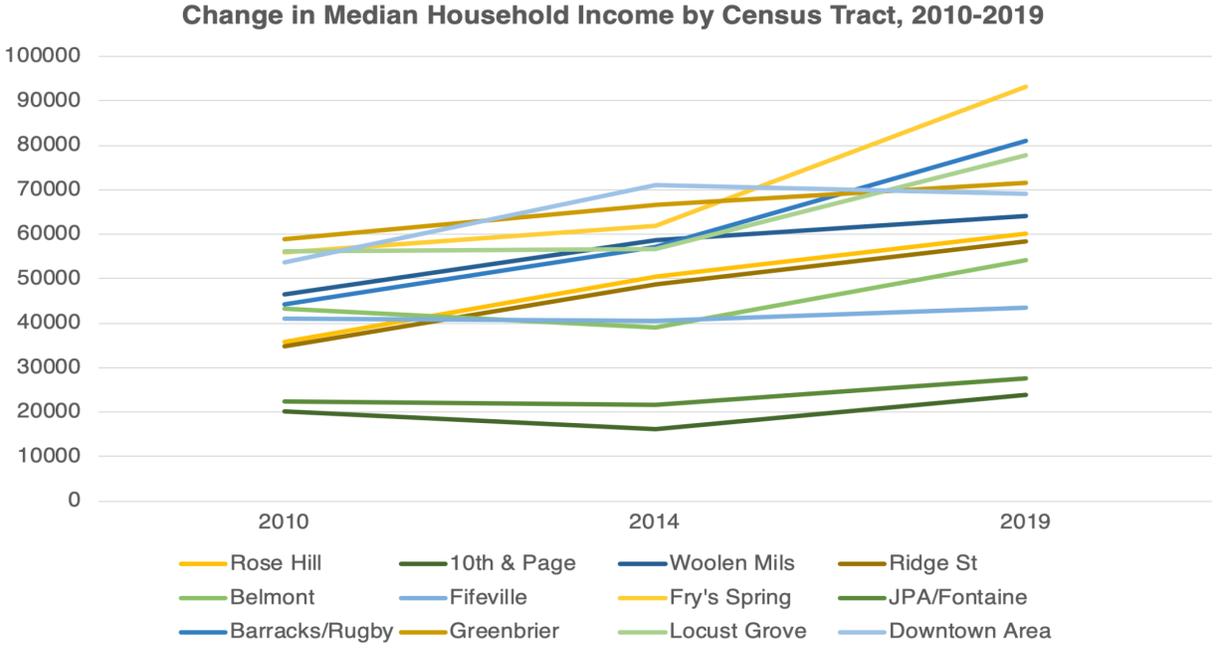


Figure C.3: Median Household Income between 2010-2019 in Charlottesville (Source: ACS)

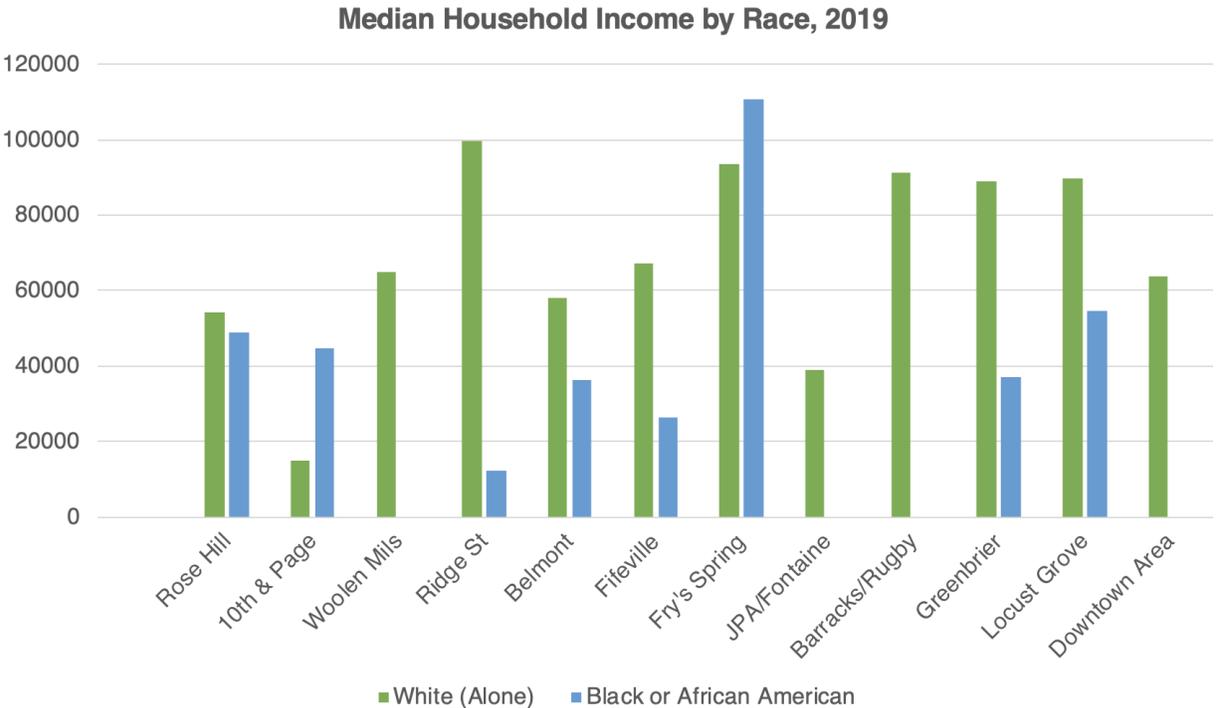


Figure C.4: Median Household Income in 2019 in Charlottesville, VA, disaggregated by race (Source: ACS)

3.1.c. Age

On average, Charlottesville's residents were older in 2019 than they were in 2010 (Figure C.5). Significant declines occurred within younger age groups. For instance, 15 to 19-year-olds and 20 to 24-year-olds declined the most of any age group between 2010 and 2019. Notable increases occurred within older age groups; 64 to 74-year-olds and 60 to 24-year-olds increased the most of any age group between 2010 and 2019.

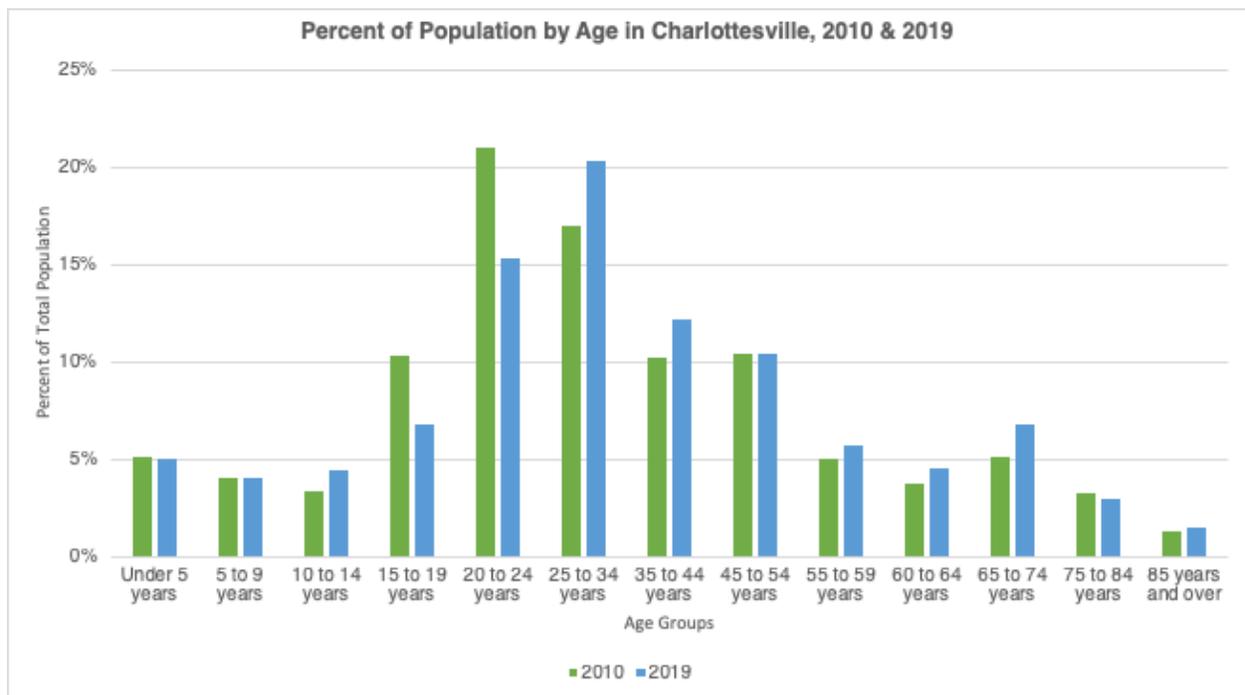


Figure C.5: Percent of Population by Age in Charlottesville, 2010 & 2019 (Source: ACS)

A common theme discussed in the interviews and focus group was the relationship between life expectancy and equity. Many participants highlighted the inequitable access to health care and explained the relationship between health care access and life expectancy. Some concluded that people avoid healthcare environments because they feel unwelcome. Many healthcare facilities lack diversity, which makes people feel like they do not belong. A participant explained, "people don't see people who look

like them when they come to my hospital. That alone is a barrier to a lot of people.”⁵ Other participants explained that the level of service within the healthcare industry is often tied to race. One participant provided an example of a 68-year-old Black gentleman who had not had a prostate exam in a few years. When asked why he had not received a prostate exam, he explained that his doctor had never offered to do one. Another participant, who is also Black, noted a similar experience with his healthcare provider.

3.2 Food Insecurity

Accessibility to local and healthy foods is of the utmost importance for successful communities to thrive. Food security is a factor that can affect all aspects of a person’s emotional, physical, and mental well-being, which is why it is imperative to understand the strengths and challenges that face Charlottesville today and over the past few years. Charlottesville’s work towards this type of improvement can be analyzed from multiple perspectives, like the need of attaining SNAP (Supplemental Nutrition Assistance Program) benefits and the health outcomes of the city.

Below are two graphics, the percentage of households receiving SNAP benefits across census tracts and the change in the number of households across 2010-2019 who receive SNAP benefits. The prior chart shows the variation across census tracts- it is evident that location and SNAP benefits have a correlation of people affected by food insecurity. Not unsurprisingly, the distribution of SNAP benefits and the median income level graphic shown earlier display a similar level of fluctuation depending on location.

The second chart depicts the change in number of households across 2010-2019 who receive SNAP benefits. This graphic shows a general increase overtime of people receiving SNAP benefits. This needs to be understood and analyzed with reference to

⁵ Community health worker in interview with UVA graduate students, March 22, 2022.

external factors like COVID changing the data in the future. Overall, it is evident that the data is showing a spike in the number of people requiring SNAP benefits. Although it is up to speculation, one could assume that SNAP is more highly required due to the fact that there has been an increase in the cost of living while income has not met those new needs.

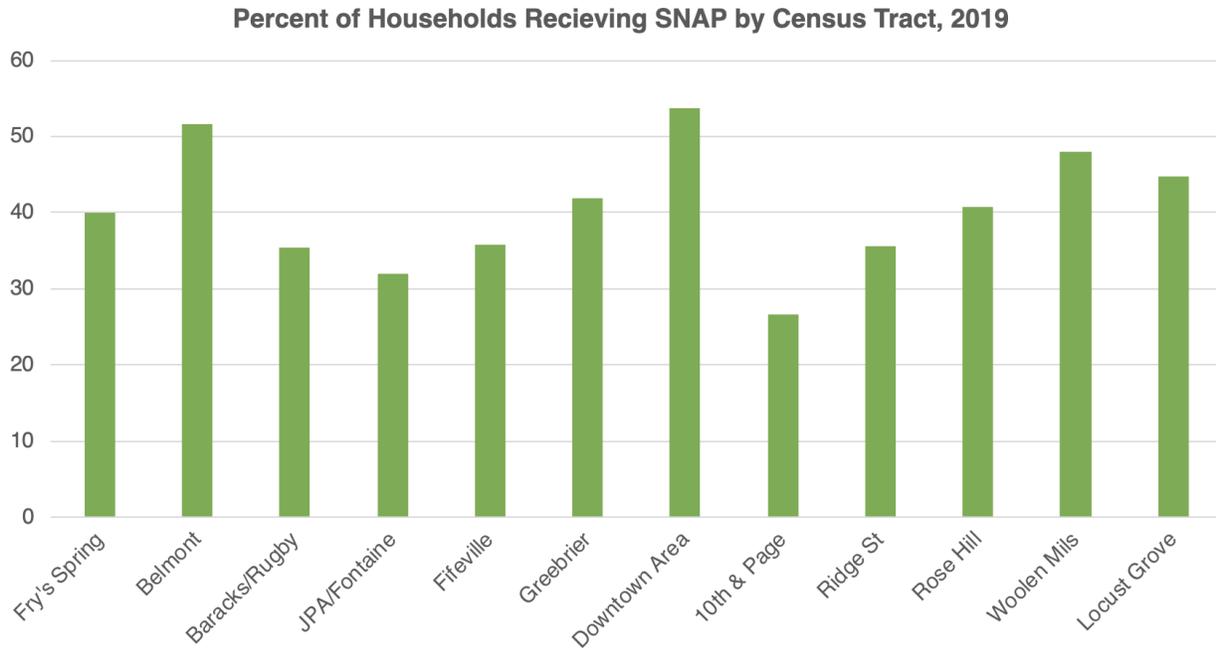


Figure C.6: Percentage of Households that Received SNAP Benefits in 2019 in Charlottesville

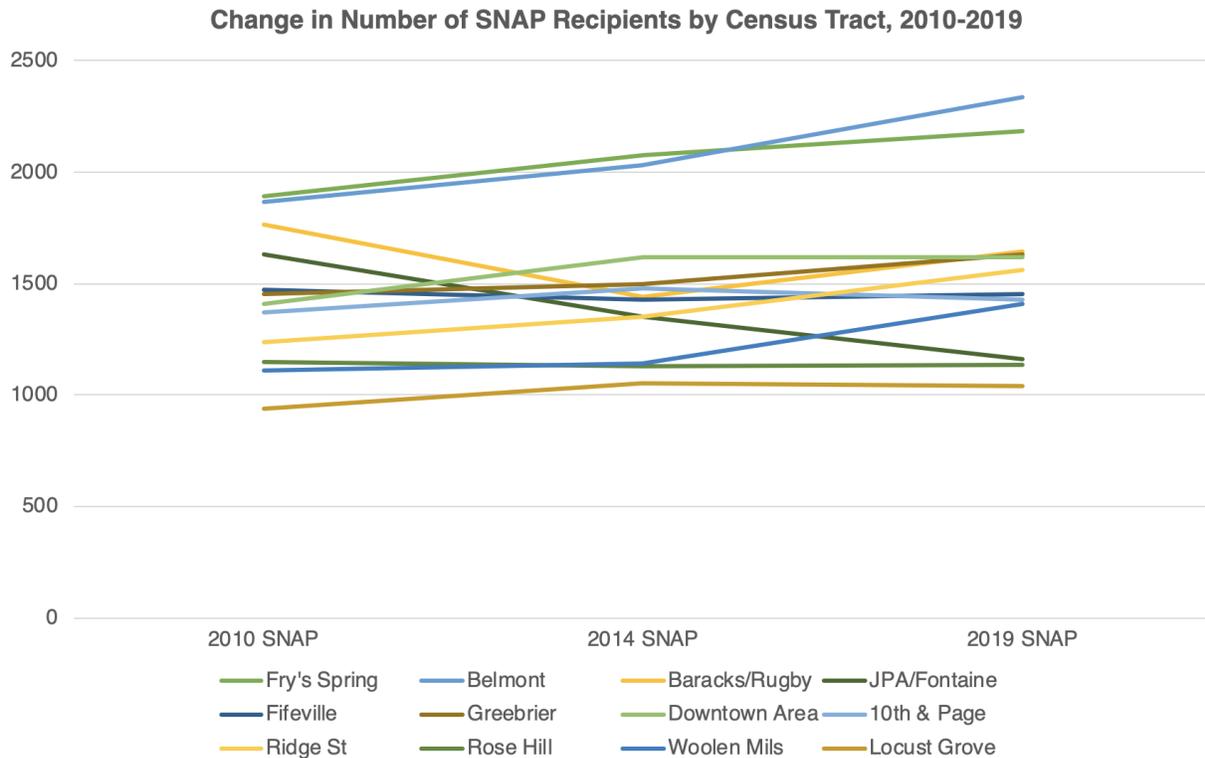


Figure C.7: Number of Households Receiving SNAP Benefits between 2010-2019

3.3 Employment

Charlottesville maintained a steady employment rate throughout the 2010s. The rate of employment in the total workforce (those aged 16-64) rose slowly from 57% to 61.4%, while the unemployment rate stayed at just 2.7-3.1% throughout (*Figure C.5.1*). When compared to nearby counties, it should be noted that employment numbers may be lower in Charlottesville due to the city's high student population. As of 2019, these rates were nearly the same for both men and women, with a difference in employment of just one percent for those aged 20 to 64 years old (*Figure C.5.3*). For race, however, there were noticeable disparities in the unemployment statistics (*Figure C.5.2*). On the low end, Hispanic or Latino residents only had an unemployment rate of 1.6% next to white residents, who had a rate of 2.5%. Black or African Americans had more than double these rates, with 7.6% unemployment, while Asian residents had 8.5%. The highest unemployment rate was seen in residents who identified with two or more

racers, who saw unemployment at 21.8%. American Indian and Native Alaskans as well as Native Hawaiian and Other Pacific Islanders had an unemployment rate of zero percent, though this may not be statistically significant due to the small size of those populations.

These numbers don't provide an explanation for the inequity seen in unemployment numbers in the city. It's possible that these differences stem from unequal access to education, training, and job access within the city. More than once, interviewees expressed the need for job training programs in Charlottesville communities, in one case saying "[U]ltimately, we provide the service and we help them move through their journey. Local governments can do the same thing. We can provide opportunities for youth to intern."⁶

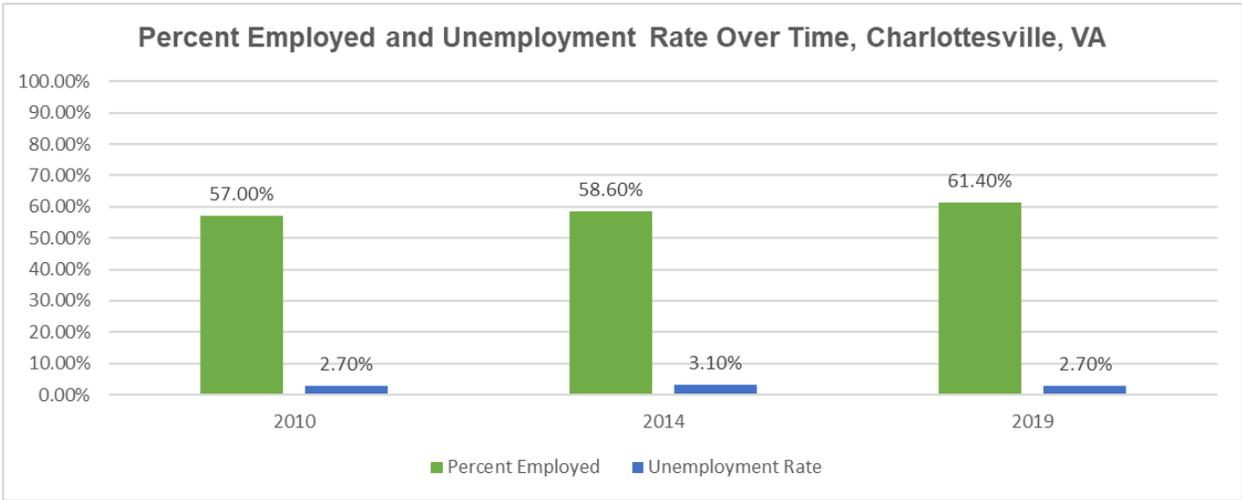


Figure C.8: Percent Employed and Unemployment Rate Over Time highlighting 2010, 2014, and 2019 in Charlottesville, Virginia (Source: ACS)

⁶ City government employee in interview with UVA graduate students, March 21, 2022.

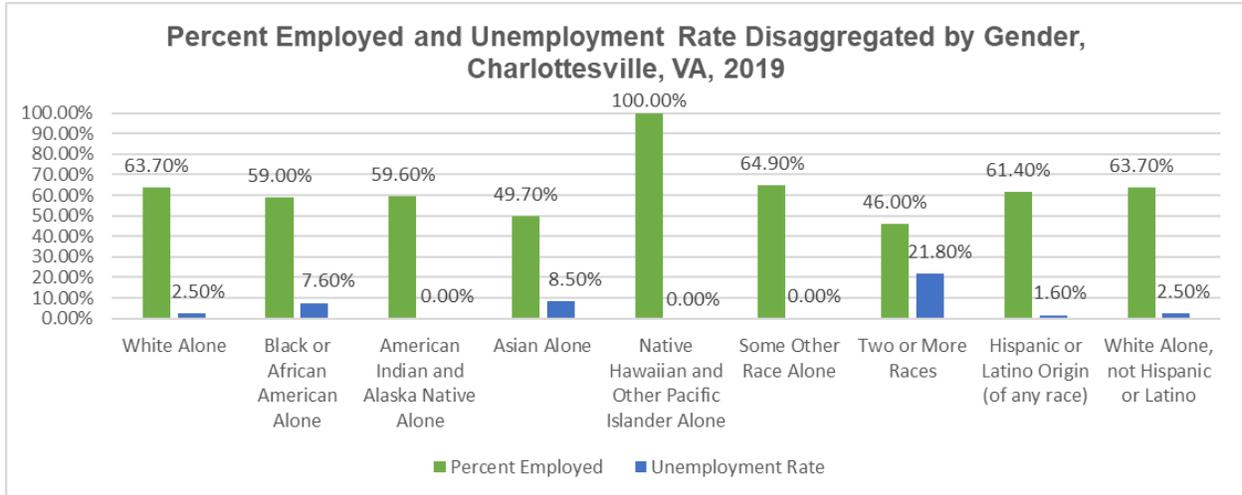


Figure C.9: Percent Employed and Unemployment Rate by Race in Charlottesville, Virginia in 2019 (Source: ACS) Note: American Indian/Alaskan Native and Other Races were excluded because both had populations of less than 100

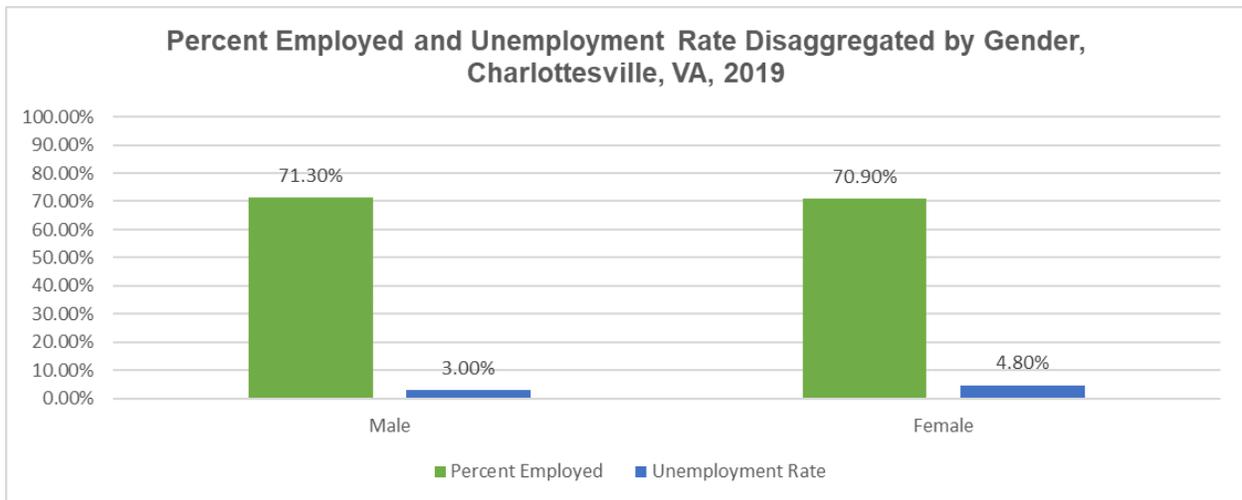


Figure C.10: Percent Employed and Unemployment Rate by Gender in Charlottesville, Virginia in 2019 (Source: ACS)

3.4 Housing

This report looks at median housing value, median rent, and rent burden to understand the relationship between residents and housing in the region. Housing data was pulled from the 2019 American Community Survey (ACS). The median home value represents the median dollar value of owner-occupied housing units and is an indicator of the

fiscal mobility and likelihood of potential homeownership for residents. Median rent and renter burden represent the ability of residents to have affordable housing access. *Figure C.11* displays the rent burden within Charlottesville and is separated by census tract to better understand the makeup of the area. Based on the data, there is a general mixture of increasing and decreasing rent burden from 2014 to 2019, with JPA/Fontaine having the highest increase percentage, changing from 64% in 2014 to 76% just five years later. Locust Grove has the highest change overall, seeing an 18% decrease in rent burden.

In *Figure C.12*, the median home value was compared from 2014 to 2019 to see how homes within Charlottesville changed in value over five years. The Downtown Area and Barracks/Ruby area are important. Median home values here are much higher than in surrounding tracts, with an increase in value for the Downtown Area of 16%. Most notable is the 10th & Page/Venable area, which saw a staggering 66% increase in median home value over five years. In 2014, homes in this area were worth, on average, \$189,100. In 2019, these same homes skyrocketed in value, to an average of \$315,700.

Lastly, *Figure C.13* describes the change in median gross rent change over time from 2014 to 2019. The highest increase seen in Charlottesville was in the Fifeville area, with a median monthly gross rent in 2014 of \$948, then increasing to \$1180 five years later. Residents within the Fifeville area most likely were strongly impacted by this change, with a 24% increase in just half a decade. Residents in the Ridge St. area, however, saw a 23% decrease in median gross rent. Paying, on average, \$819 in 2014, and \$627 in 2019, a \$192 decrease.

It's important to look at Charlottesville Counties through the eyes of the people who live there. A participant during the focus group gave their testimony on the housing situation within Charlottesville County; "As a lifelong Charlottesville resident, minus maybe five years, I have not seen it get much better over time. There are groups of

people whom we have set up in our community to be unhealthy because of zoning, because of things that happened with housing years ago.”⁷

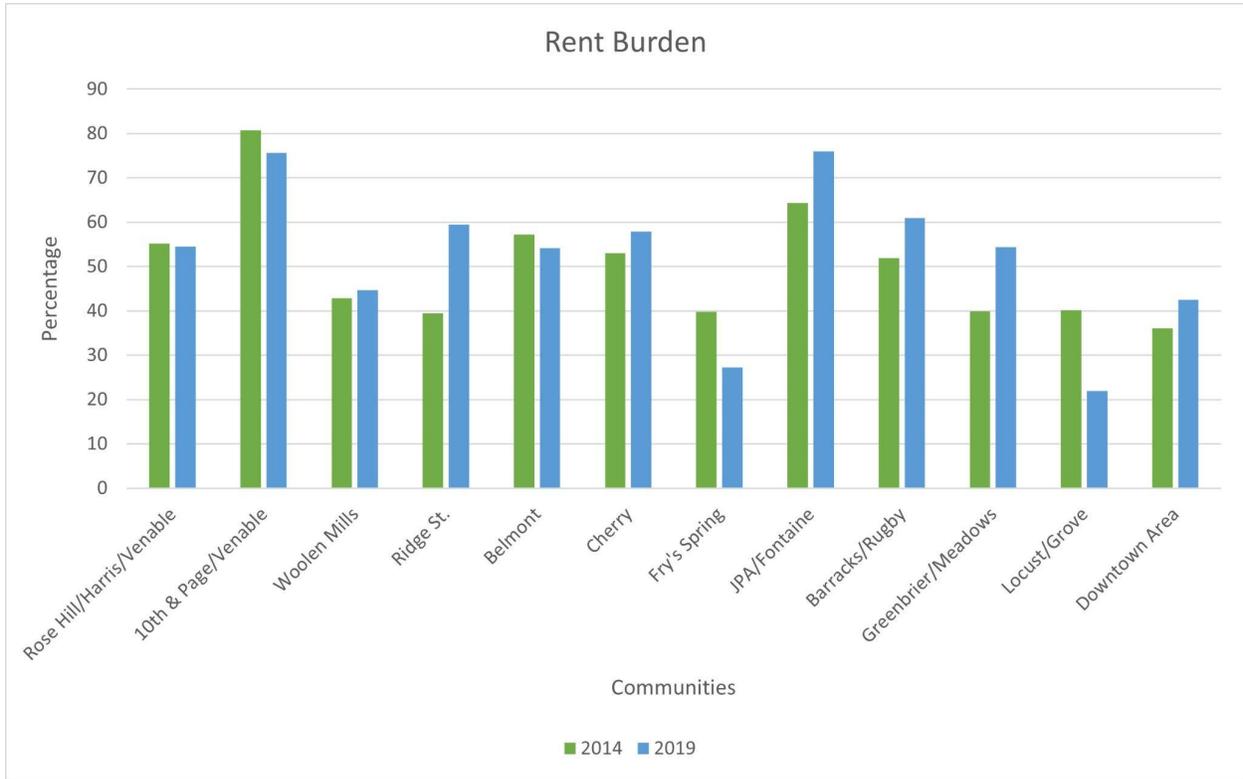


Figure C.11: Rent Burdened Households Over Time, 2014 - 2019 (Source: ACS)

⁷ Community health worker in interview with UVA graduate students, March 22, 2022.

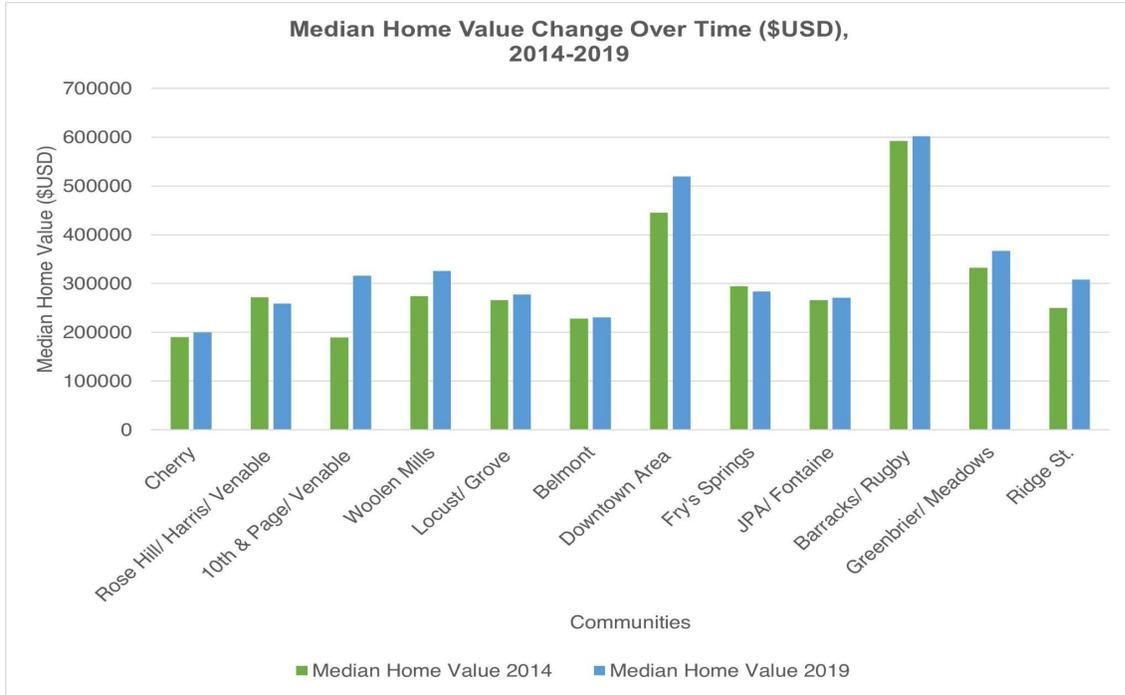


Figure C.12: Median Home Value Change Over Time (\$USD), 2014-2019 (Source: ACS)

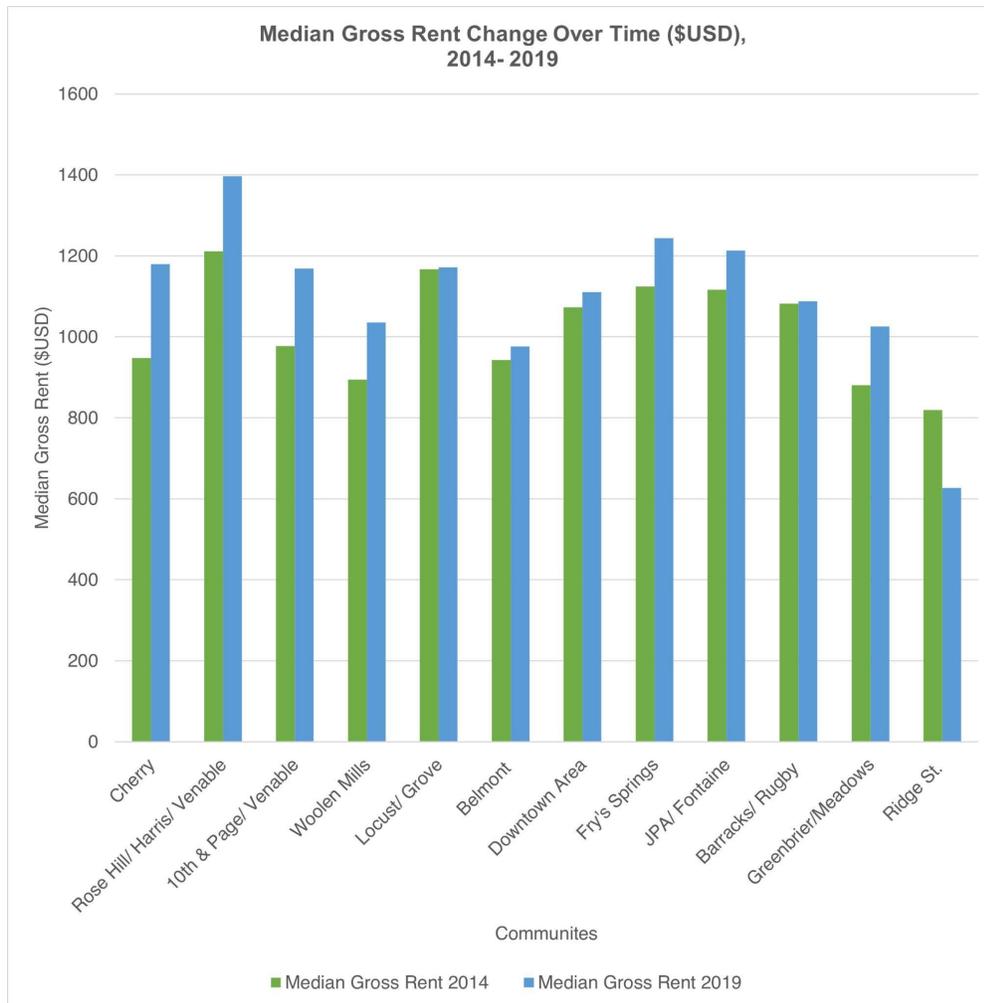


Figure C.13: Median Gross Rent Change Over Time (\$USD), 2014-2019 (Source: ACS)

3.5 Education

Research into Charlottesville’s school outcomes shows that while the city’s school systems receive higher funding than the state average, there are still places of visible inequity in the city’s school system. During the 2018-2019 and 2019-2020 school years, the city spent an average of \$15.5 to \$16.2k for each pupil in its public school system. In both years, this number is almost 25% higher than that of the state average, which has remained around \$11.6 to \$11.9k (Figure C.17). This higher investment may partially explain Charlottesville’s higher graduation rate and lower dropout rate as

compared to the rest of Virginia. For the year 2019, Charlottesville saw a 95.73% graduation rate while the Virginia average was at 91.52% (*Figure C.14*). This is despite the fact that more Charlottesville high school students qualify for free and reduced lunch programs than the state average (*Figure C.18*).

When disaggregated, the data reveal a visible disparity across racial groups within the school system. While white students in 2019 were graduating at a rate of 97.46%, only 90.91% of Hispanic students were graduating with six percent having dropped out. Black students had a graduation rate of 95.92% (*Figure C.15*). In interviews, participants saw these differences resulting from inequality in school funding and in student discipline. One participant explained, “even today, you can look at things like our schools and who is being suspended or disciplined. There is just inequity all over... [B]etween elementary school and middle school and then high school for particularly black males, we are really failing them.”⁸

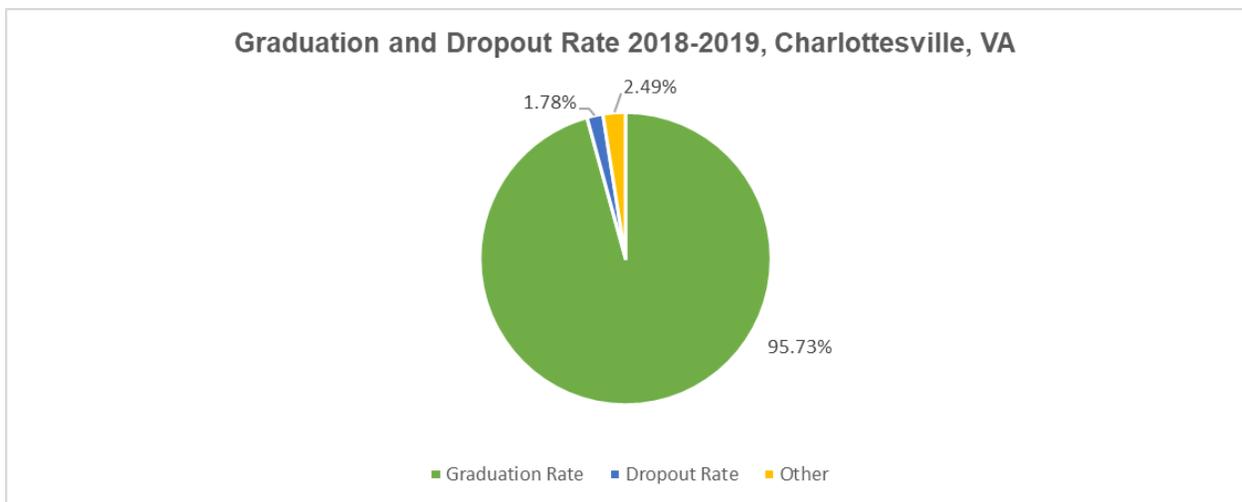


Figure C.14: Graduation and Dropout Rate 2018-2019 in Charlottesville, Virginia (source: Virginia DOE)

⁸ Community health worker in interview with UVA graduate students, March 22, 2022.

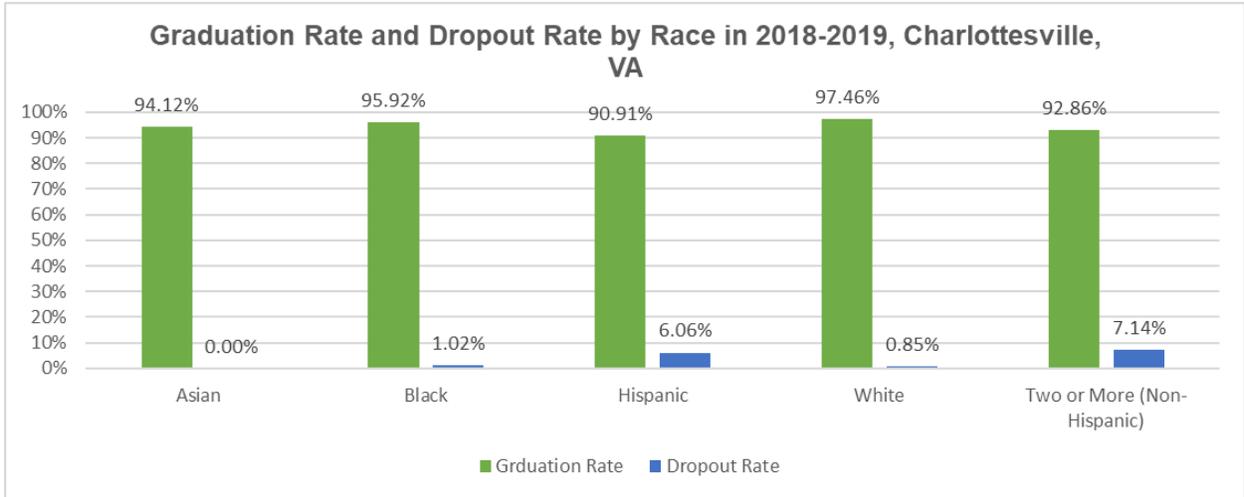


Figure C.15: Graduation and Dropout Rate by Race in 2018-2019 in Charlottesville, Virginia (Source: Virginia DOE)

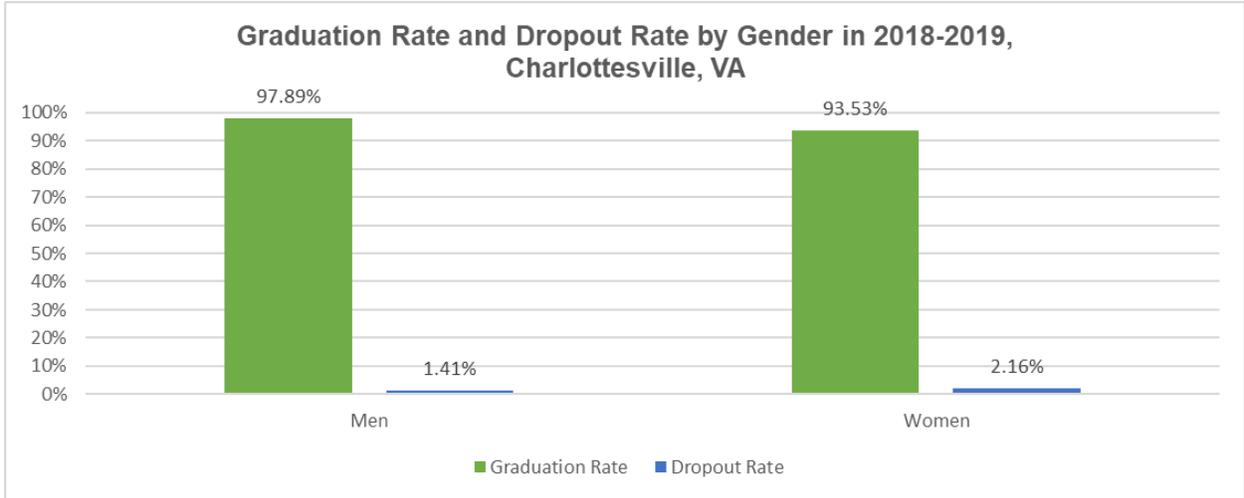


Figure C.16: Graduation and Dropout Rate by Gender in 2018-2019 in Charlottesville, Virginia (Source: Virginia DOE)

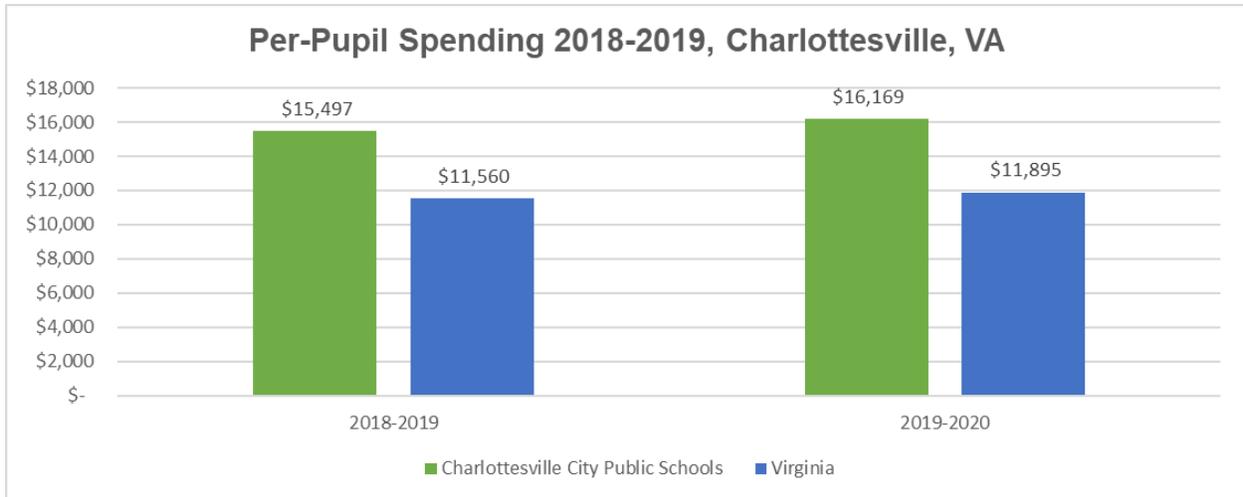


Figure C.17: Per-Pupil Spending in 2018-2019 School Year in Louisa County, Virginia (Source: Virginia DOE)

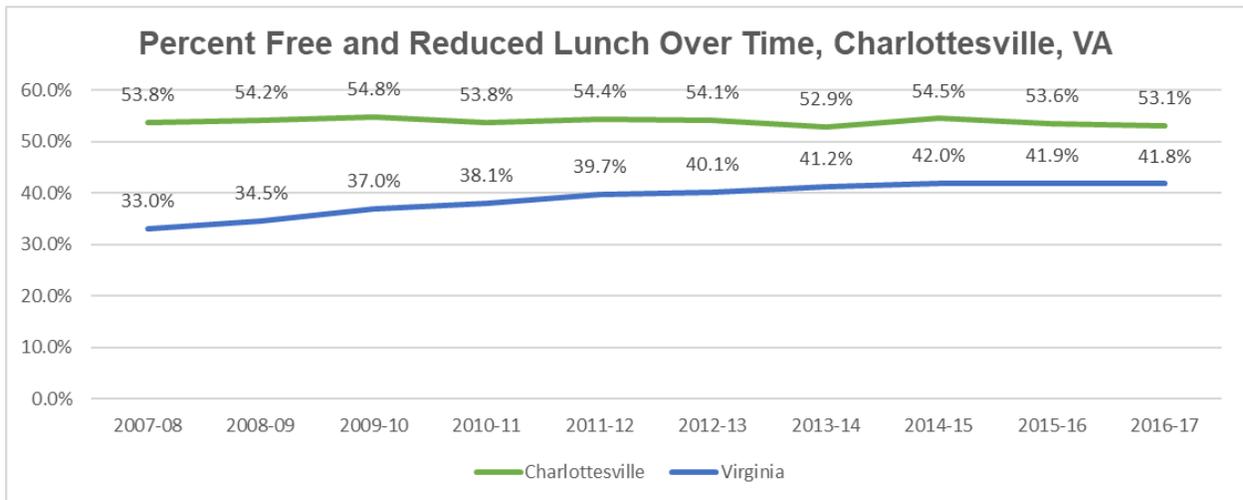


Figure C.18: Percent Free and Reduced Lunch From The 2011-2012 School Year to The 2019-2020 School Year (Source: The Annie E. Casey Foundation)

3.6 Digital Divide

While most Charlottesville residents have internet subscriptions and computer access, there are differences in digital access across Charlottesville. Fifeville, Ridge Street, and the 10th & Page neighborhoods have the highest percentages of households without

internet subscriptions and computer access within Charlottesville (*Figures C.20 and C.19*). Within these neighborhoods, the highest percentages of residents without computer access or internet subscriptions are white or Black (*Figures C.19 & C.20*). Additionally, residents without internet subscriptions are low-income (*Figure C.21*); the income brackets 'less than \$10,000' and 'Between \$10,000 - \$19,000' have the greatest number of residents without internet subscriptions.

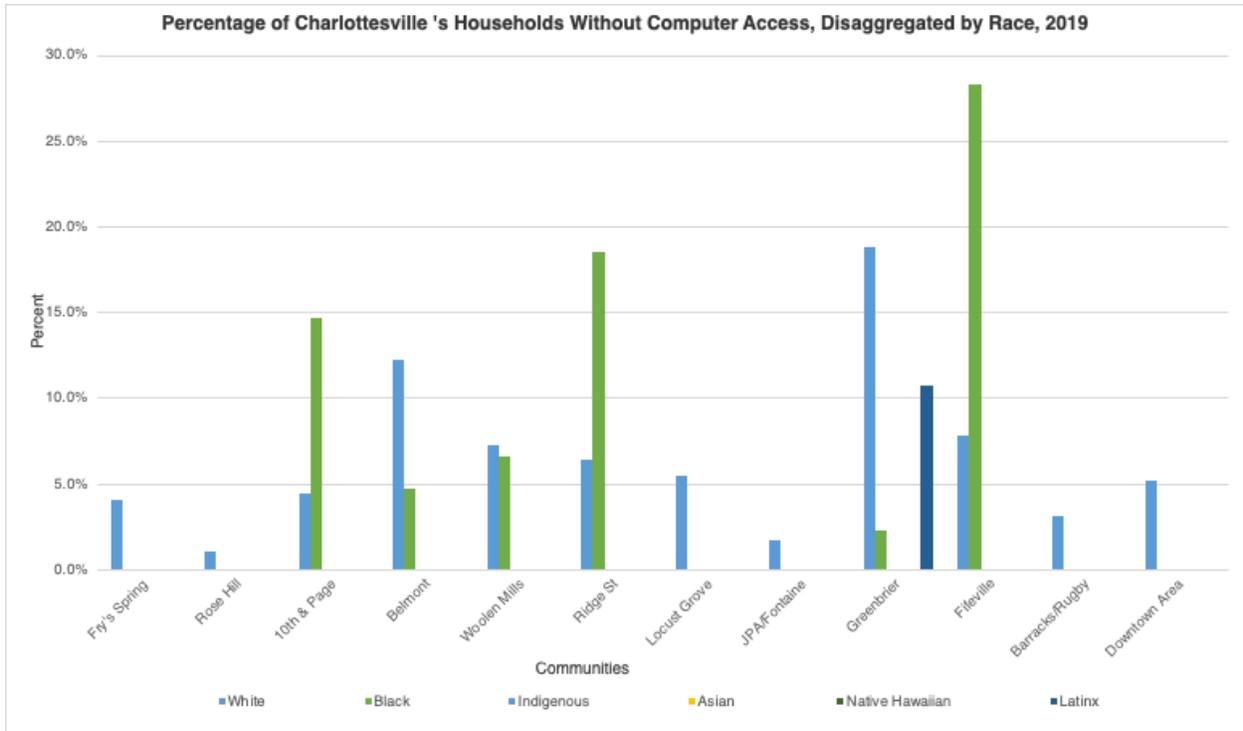


Figure C.19: Percentage of Charlottesville's Households Without a Computer, Disaggregated by Race, 2019. (Source: ACS)

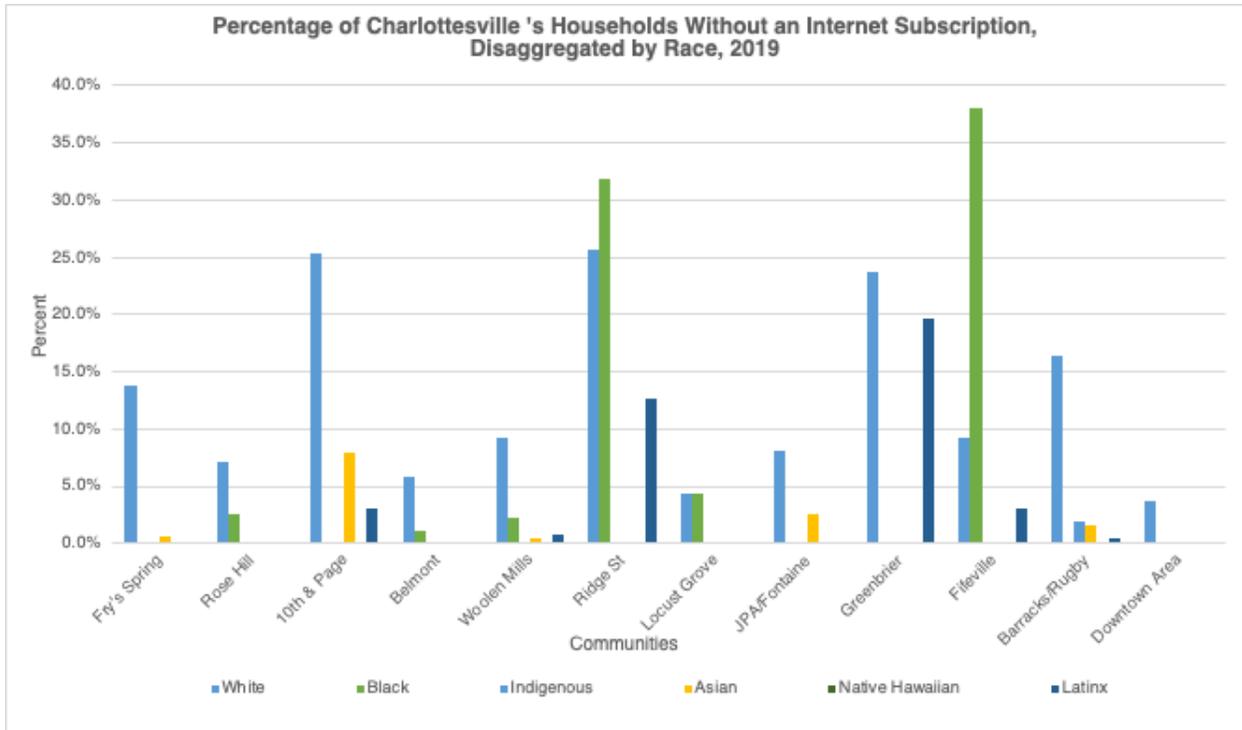


Figure C.20: Percentage of Charlottesville's Households Without an Internet Subscription, Disaggregated by Race, 2019. (Source: ACS)

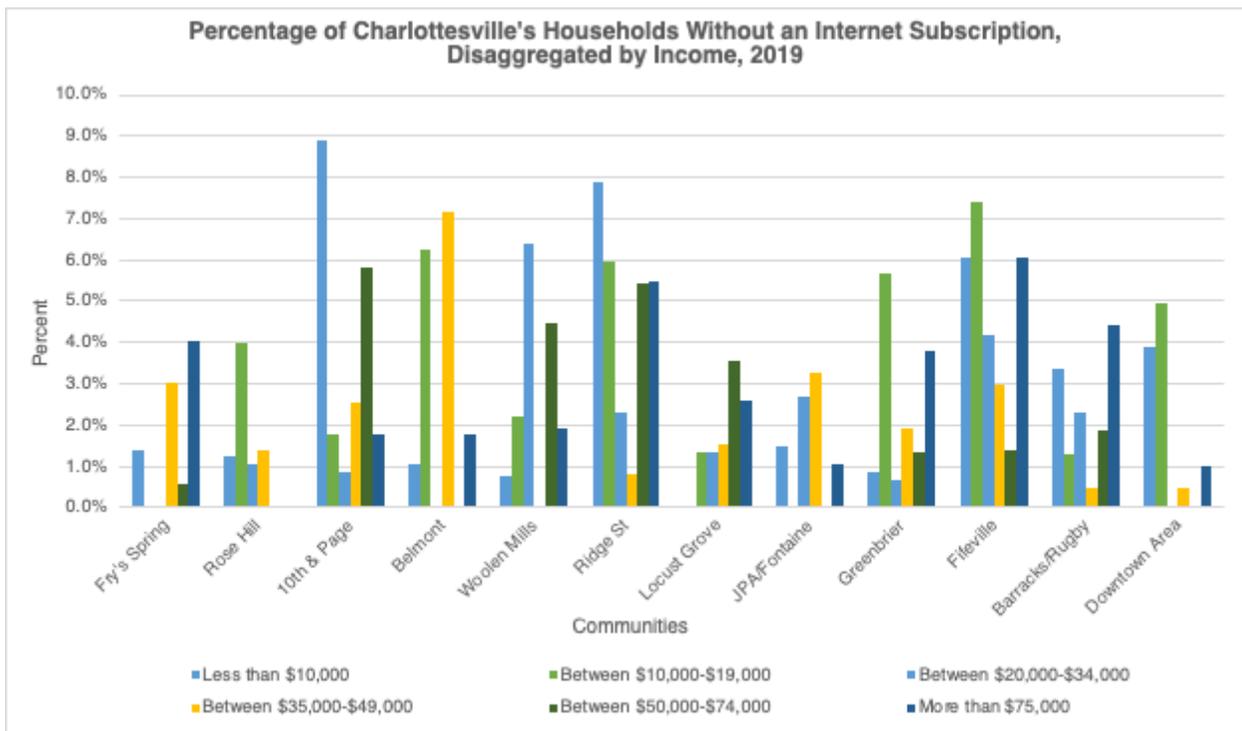


Figure C.21: Percentage of Charlottesville's Households Without an Internet Subscription, Disaggregated by Income, 2019 (Source: ACS)

Digital access was only mentioned once within our interviews and focus group. One participant reflected on their recent doctor's office visit. They explained that the doctor's office required them to check in on an iPad. When the participant asked what they do if someone is not comfortable with technology, the office staff said that there was no alternative. The participant explained that this could be embarrassing or awkward for the patient. Interestingly, digital access was mentioned very little within Charlottesville compared to the other counties. This could be due to most residents having access to the internet and computers. More analysis and interviews are needed to better understand digital access in Charlottesville. It would be interesting to interview stakeholders from the Fifeville, Ridge Street, and the 10th & Page neighborhoods.

3.7 Mobility

Mobility was examined in terms of the working population. In this section, the data represents 60% of Charlottesville's working population (American Community Survey, 2019).

There are differences in mobility patterns across Charlottesville. More workers live in Fry's Spring, Fifeville, and JPA/Fontaine who do not have access to a vehicle compared to Locust Grove and Barracks/Rugby (Figure C.10.1). Examining vehicle access is critical because the majority of Charlottesville residents commute to work by driving alone (Figure C.10.3). The average travel time to work displays a similar trend to vehicle access. Residents who live within Fry's Spring, Fifeville, 10th & Page, and JPA/Fontaine have the longest commute times to work, while Downtown has the fastest commute times in the city (Figure C.10.2). Examining central Charlottesville, the proximity to urban amenities associated with Downtown likely contributes to the quick commute

times in this region. In southwestern Charlottesville, the limited access to vehicles likely contributes to the longer commute times. Despite the varying mobility patterns across Charlottesville, commute times to work are lower than the state average. In 2019, the average commute time to work in Virginia was 27.6 minutes (American Community Survey, 2019).

A common problem discussed throughout the interviews and focus group was the inequitable access to transportation within Charlottesville. Many participants highlighted the time required to use public transportation. Two participants mentioned that transportation was also considered a barrier to equity. There are services in Charlottesville, such as health care, which are physically inaccessible for those who rely on public transportation. One participant said “You look at the rural communities and there are people 20, 30 minutes from Charlottesville. But when you've gotta come into the city on a JAUNT bus and stay there for four hours, for something that takes 30 minutes, you've given up half your day. And if you're dealing with patients with, you know, grave illnesses, chronic illnesses, then they spend most of their time trying to figure out how to get to their services.”⁹ Another participant explained, “not everyone has the opportunity to purchase a car, so if we can get to 15-minute transit opportunities how life-changing could that be?”¹⁰

⁹ Health equity non-profit worker in focus group, April 14, 2022.

¹⁰ City government employee in interview with UVA graduate students, March 21, 2022.

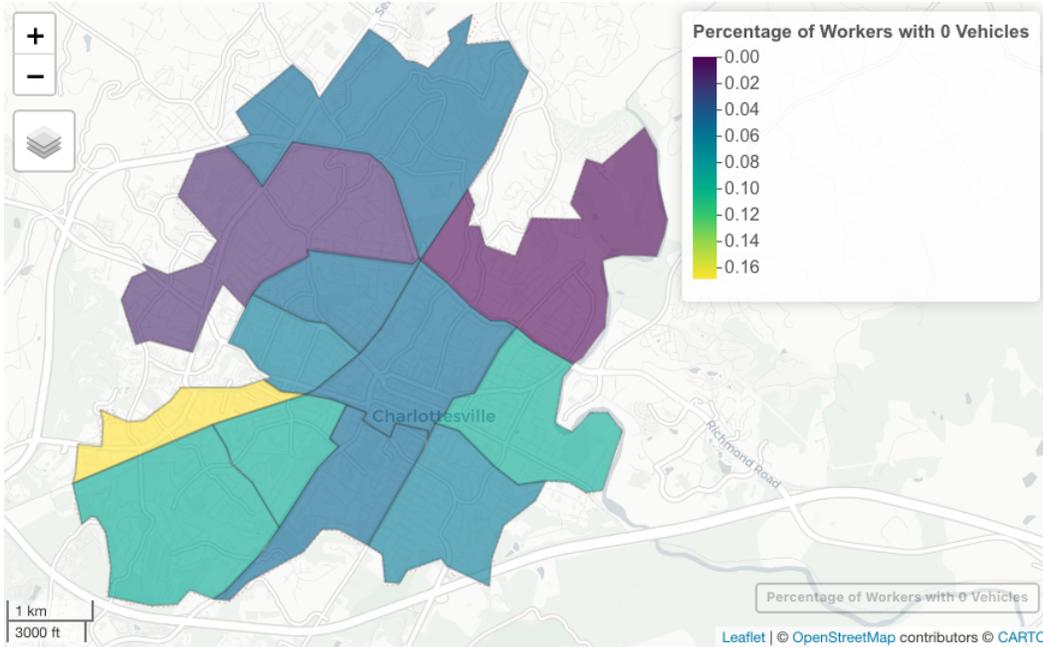


Figure C.24: Percentage of workers who do not own a vehicle in Charlottesville by census tract, 2019 (Source: ACS)

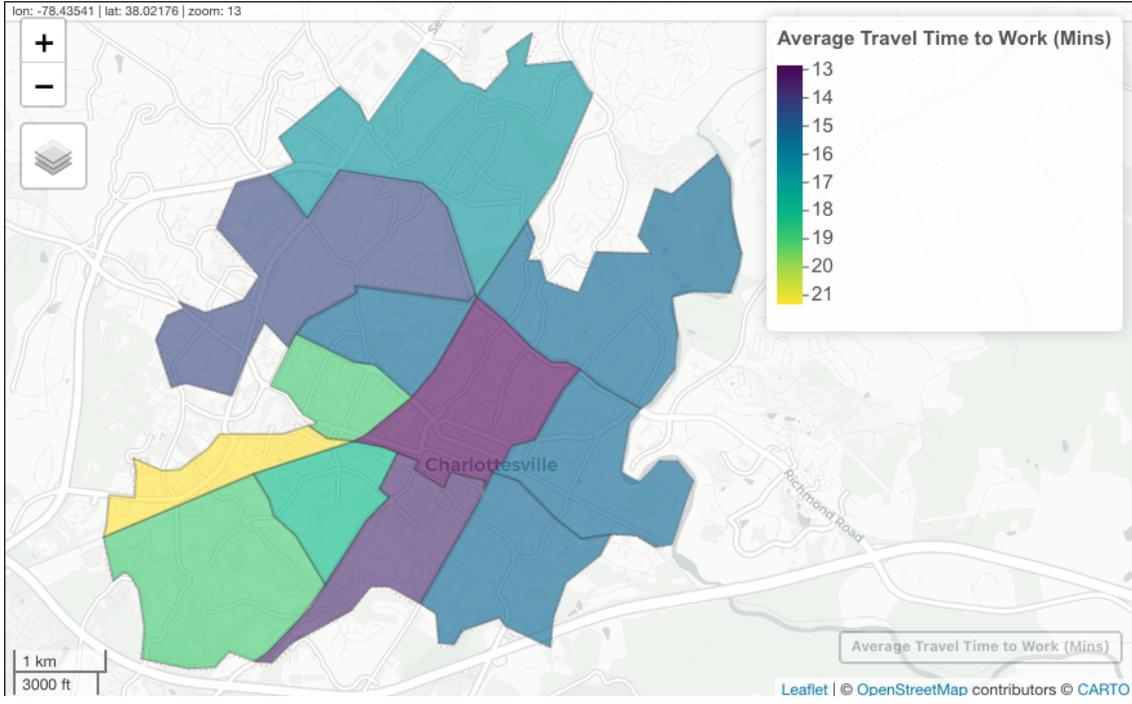


Figure C.25: Average worker commute in minutes per census tract in Charlottesville, 2019 (Source: ACS)

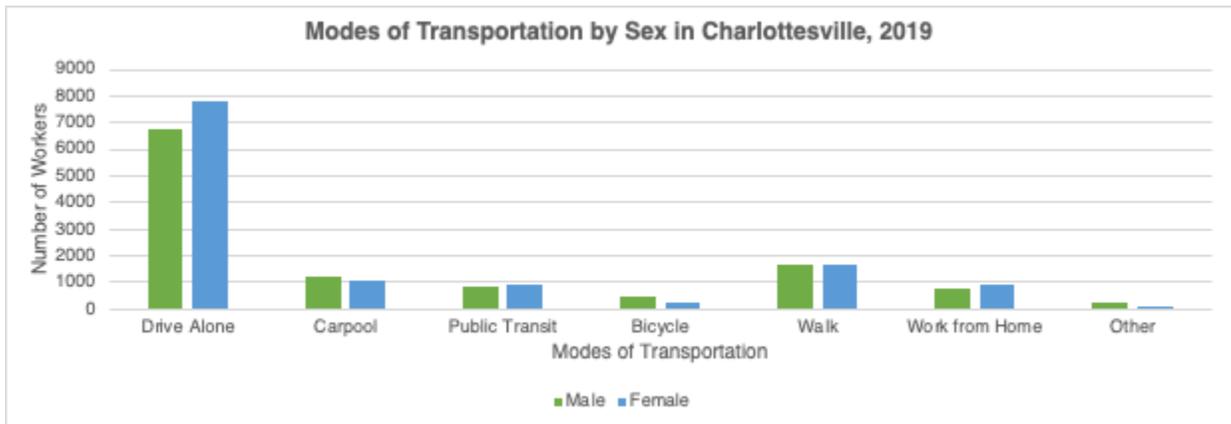


Figure C.26: Modes of Transportation by Sex in Charlottesville, 2019 (Source: ACS)

3.8 Land Use + Environment

We analyzed the Multi-Resolution Land Characteristics (MRLC) consortium data from 2019 to assess land use in Charlottesville. *Figure C.22* shows the land class cover from the National Land Cover Database’s (NLDC) 2019 dataset. The majority of Charlottesville is dominated by developed land, albeit at varying densities. The land classifications used in *Figure C.23* were Cultivated (Land Class Codes (LCC) 81,82), Developed (LCC 21, 22, 23, 24), Herbaceous (LCC 71), and Forested (LCC 41, 42, 43). Developed areas dominate the entirety of Charlottesville, with no major variation across census tracts. Developed land covers 89% of the city, with forested land comprising another nine percent of the total land coverage. Cultivated land and Herbaceous land combined only make up two percent of Charlottesville’s makeup. Green space is not nearly as prevalent as in surrounding counties. UVA requires ever-increasing development to serve its growing student population, while businesspeople, many of whom work near the Downtown Area, account for the high concentration of development in and around the city center. Due to the high volume of development across the entire county there is a lack of green space, which could lead to negative impacts such as human physical, mental, and social health, as well as natural impacts like urban island heat effect and a lack of air quality, noise reduction

and water filtration. Areas such as the Downtown area within Charlottesville would see the most impacts of a lack of green space, with the red line indicating this rise in development.

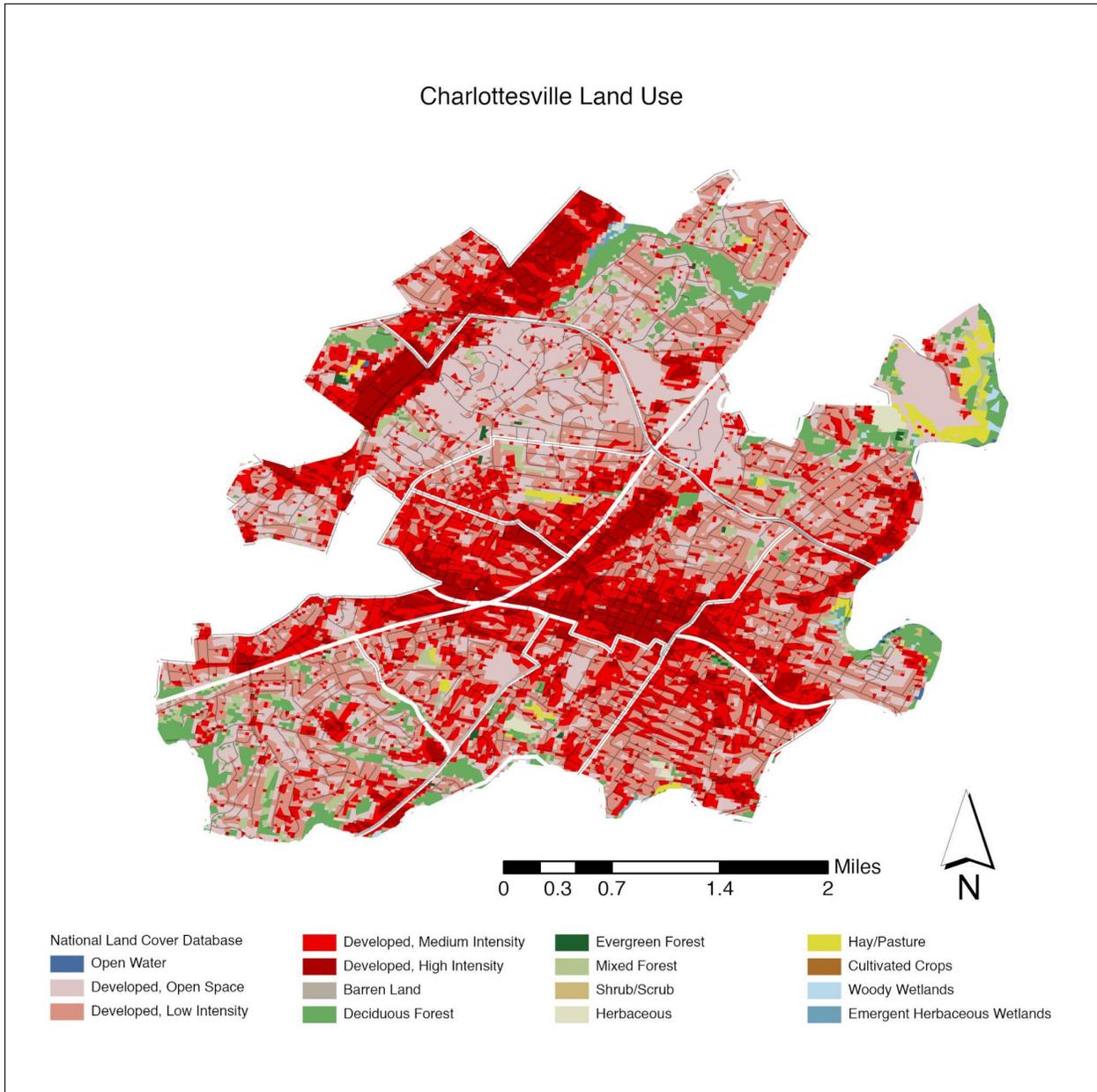


Figure C.22: Land Cover Map, Charlottesville, 2019 (Source: MRLC & National Land Cover Database)

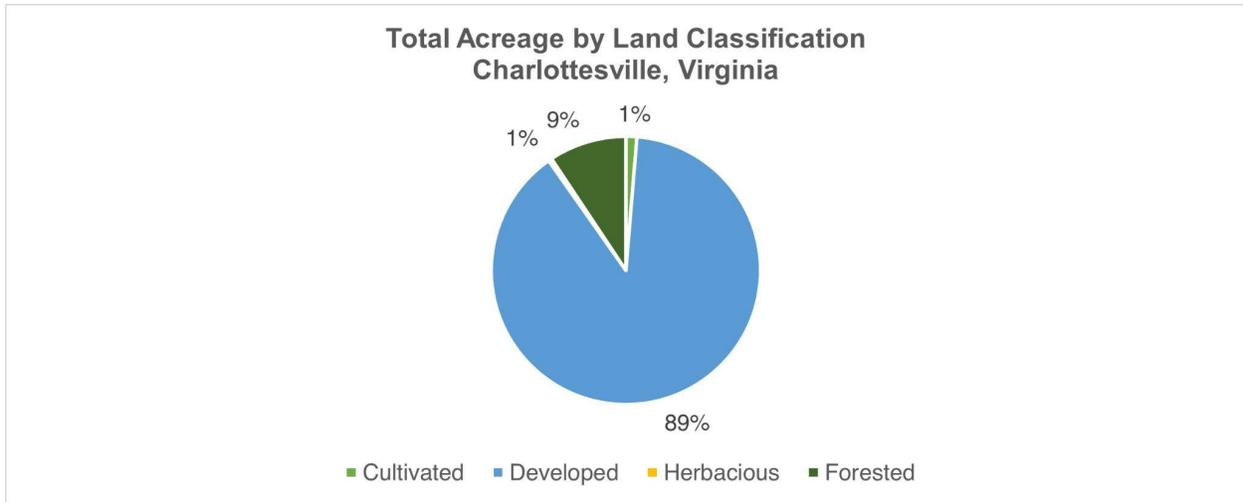


Figure C.23. Acreage by 2019 Land Classification, Charlottesville, VA, 2019. (Source: MRLC & National Land Cover database)

Conclusion

Charlottesville is a community rich in history and strengths. The education system has outperformed statewide averages in graduation rates and per-pupil spending in recent years. Compared to other counties within the region, the city is also much more racially diverse and sees shorter overall commute times to work. Most of the city’s land is developed, meaning there are more services and opportunities within its borders when compared to the more rural counties that surround the city.

It is important to note, however, that several areas of opportunity to improve still exist, especially when disaggregating key data points. For instance, in most census tracts, incomes for Black households still lag behind their white counterparts. Additionally, poorer residents tend to have fewer opportunities to access the internet. This lack of digital access has key ramifications for residents, especially in the wake of the COVID-19 pandemic when key services like healthcare are moving to more online-oriented formats. Cost of living is increasing as well, as reflected in the increased median monthly rents in 2019 versus 2014. Even a perceived strength in the city relative to the region—commute times—requires further scrutiny, as one observes longer commutes for those living further away from the urban core. In short,

geographic and demographic considerations are extremely influential in determining life opportunities in Charlottesville.

An important point noted in the focus group but not reflected in the data is that Medicaid recipients or non-English speakers frequently encounter difficulty navigating the healthcare system. Finding doctors who accept Medicaid is a chore in and of itself, but finding a doctor who accepts Medicaid and/or offers language interpretation is even more difficult.

Of course, the city's history has benefited white residents at the expense of minority populations. The legacy of the razing of Vinegar Hill in 1965, which sat vacant for several years thereafter, was a key point that came up often during our interviews. This action had severe material consequences in the destruction of a thriving Black community by displacing residents and stripping them of the ability to pass down family-owned homes. It had immaterial consequences as well; it further eroded trust in the local government. The relationship between marginalized communities and local government remains fragile today.

Focus group participants frequently mentioned the necessity of building a "trust factor" within the community and offered several ways to do this. One proposal was for local leaders like UVA and the city government to host "community events where those people that are actually living the experiences get to talk to [sic] you guys. We bring forth what we hear and what we know from our own living experience in the communities, but I feel like the next step would be to get out into the communities and have these conversations. And they, people will tell you, gladly, where they feel they're being shortchanged and what things would be better."¹¹ Other participants noted that, when working with marginalized communities, it is important to remember that trust is built over time rather than overnight. Doing so requires institutions to "[genuinely] listen to [residents]. Get their input and actually make a concerted effort to genuinely

¹¹ Health equity non-profit worker in focus group, April 14, 2022.

use their input.”¹² The city may be making inroads in this endeavor with the recent hiring of a deputy city manager for Racial Equity, Diversity, and Inclusion, but more work remains to achieve a more equitable Charlottesville.

We would like to thank our interviewees and focus group participants for their time and insights. Their responses and feedback were invaluable to the creation of this report. It was a pleasure and honor to work with community leaders who are fighting for a better Charlottesville. We hope that this report is a building block for them and other stakeholders to continue their mission of addressing inequity in the city.

¹² Maternity health services employee in focus group, April 14, 2022.

CHAPTER 2. FLUVANNA COUNTY

Introduction

Today, the majority of residents commute outside of the county for work. According to the Virginia Workforce Commission “Community Profile of Fluvanna County, Virginia” 2020 report, the top five employers in Fluvanna are the Fluvanna School Board, Fluvanna Correctional Center for Women, the County of Fluvanna, Fork Union Military Academy, and AG Dillard Inc¹³.

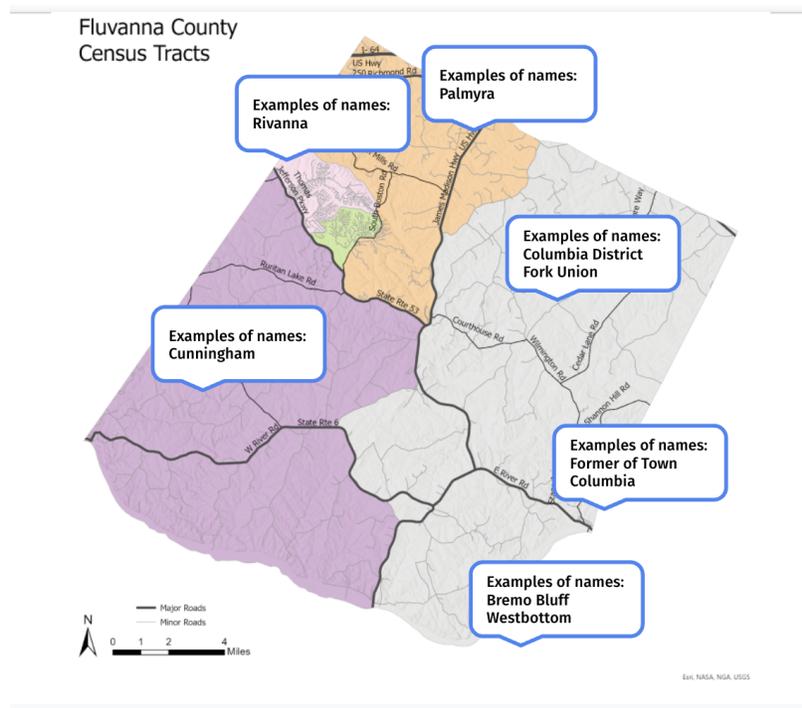


Figure F.I.1. Names for census tracts, which was reached through consensus during the focus group discussion on April 14, 2022. Data sourced from the United States Census Bureau for Fluvanna County, VA, 2021.

¹³ Virginia Employment Commission. *Virginia Community Profile, Fluvanna County*. Virginia Labor Market Information, 2022.

Fluvanna is composed of three census tracts: 201.01, 201.02, 202, and 203. During a Fluvanna County resident focus group on April 14, 2022 the census tracts were given their locally recognized names. As shown on Figure F.I.1, these tracts are named Rivanna/Lake Monticello, Palmyra, Columbia/Fork Union, and Cunningham. Bremono Bluff, Westbottom, and Columbia do not have separate census tracts but are placed to show the lack of representation of these communities within the Columbia/Fork Union tract. The members of the focus group disputed the size of the census tracts in relation to their real community make ups, and concluded that the best naming conventions followed the election districts within the county. For example the northern area of the Columbia/Fork Union tract was said to be significantly different from the southern area of the tract where Bremono Bluff and Westbottom are located.

According to information gathered from a focus group of Fluvanna County residents, equity is a primary concern that divides the residents of the Lake Monticello private community and other Fluvanna residents. The presence of a gated community within the rural locality has created a distinct disconnect between economically advantaged and disadvantaged residents, which is reflected in tensions within the municipal government. Within our focus group, our participants alluded to residents of Fluvanna who do not wish to invest in public amenities: “Not everybody lives at the lake and the lake is a private, gated community...We need something [accessible for everybody]... if you can’t get into the lake to use, what do you have?” This is also reflected in food access, transportation access, and access to other public services within the county.

Focus Areas

3.1 Demographics

3.1.a. Race

The majority population of Fluvanna County is white, as every community within the county has a white population of at least 74 percent (Figure F.D.1). The community with

the greatest racial diversity is Columbia/Fork Union, which is 74 percent white, 23.7percent Black, 0.4 percent American Indian or Alaska Native, and 1.9 percent of the population is made up of people who identify with two or more races (Figure F.D.2). The Lake Monticello/Rivanna community is home to the largest population of Asian residents, as well as those who identify with two or more races.

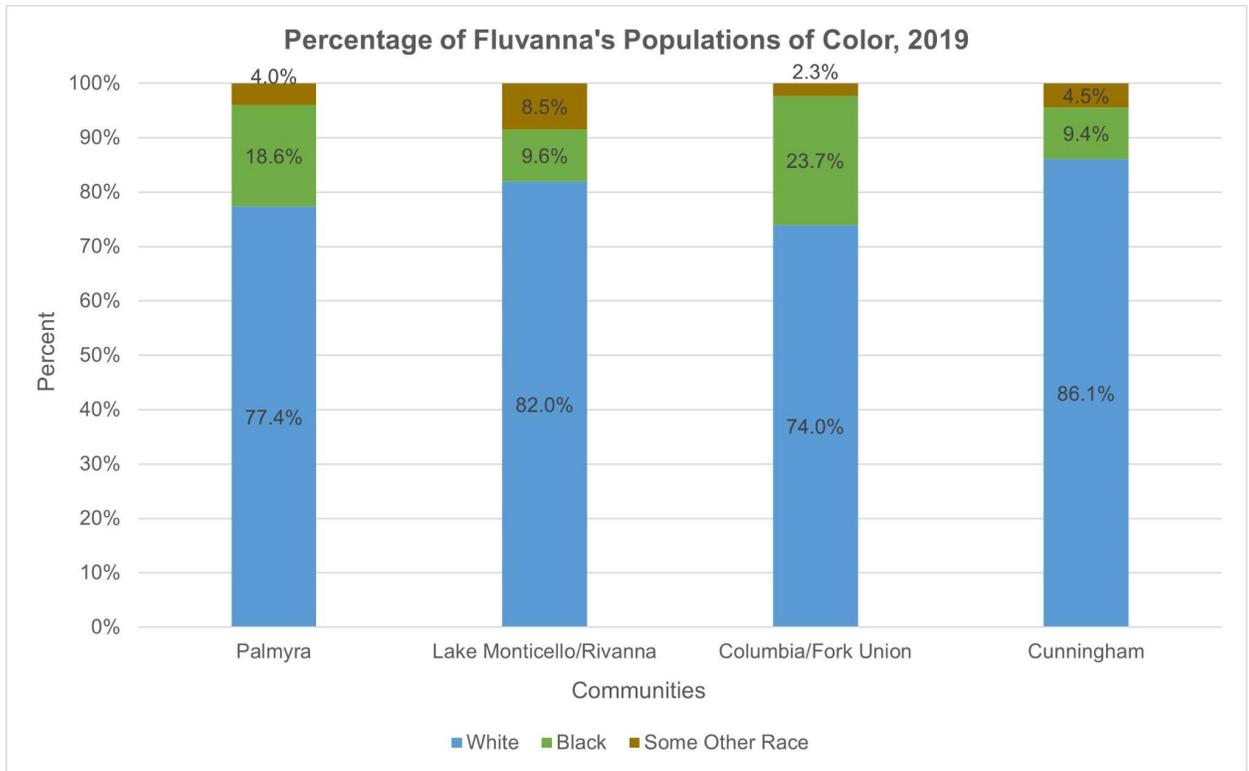


Figure F.D.1 Percentage of Fluvanna’s Population of Color, 2019. The majority of all communities within Fluvanna County are White, with minority racial groups making up anywhere between 13.9 percent of the population to 26 percent of the population. A breakdown of the “Some other race” category can be found in Figure F.D.2. Data taken from the American Community Survey 5-year estimates for Fluvanna County, VA, 2015-2019.

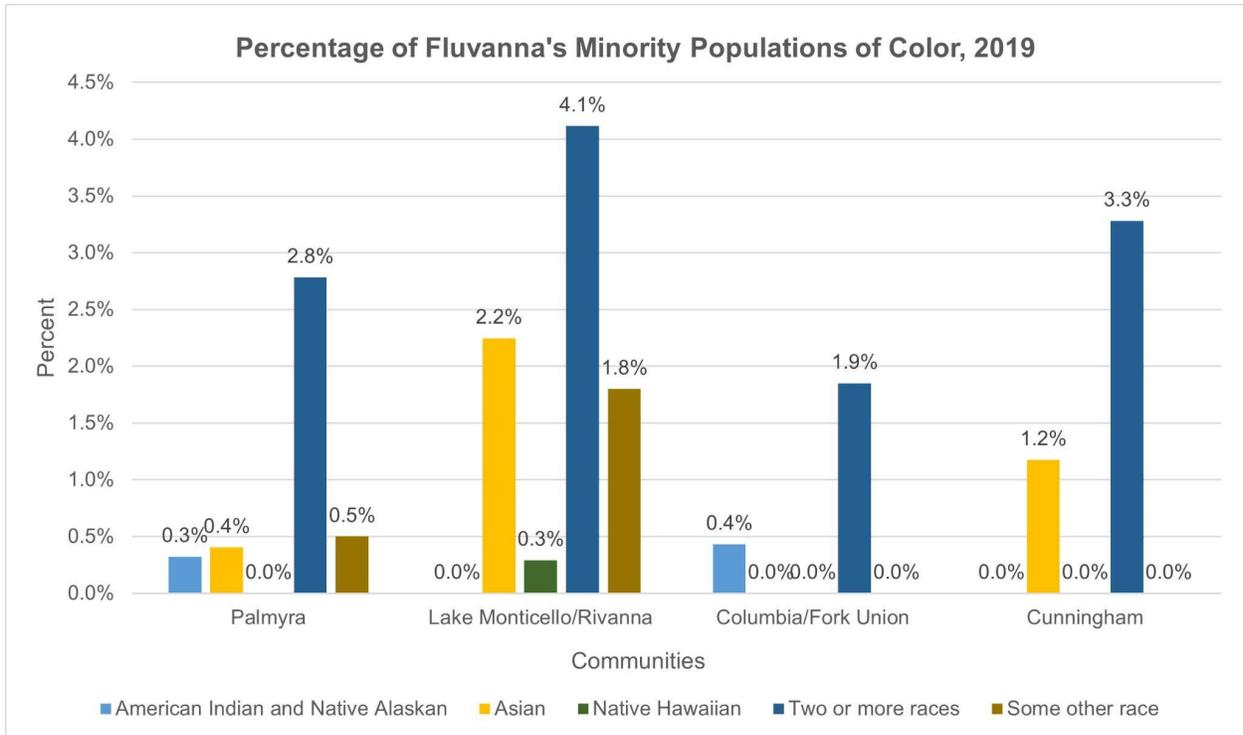


Figure F.D.2. Percentage of Fluvanna’s Minority Populations of Color, 2019. Fluvanna County residents include individuals from the entire spectrum of minority racial demographics, including American Indian and Alaskan Native, Asian, Native Hawaiian, and those who identify with two or more of these races, or another racial makeup. The largest population within these minorities are those that identify with two or more races. Data taken from the American Community Survey 5-year estimates for Fluvanna County, VA, 2015-2019.

3.1.b. Income

Fluvanna’s median household income varies by census tract and race. All census tracts experienced an increase in median household income between 2014 and 2019, except for Palmyra which experienced a slight decrease (Figure 1). As of 2019, Rivanna/Lake Monticello had the highest median household income at just over \$80,000 while Cunningham had the lowest median household income at \$67,000. Figure 2 disaggregates median household income by race in 2019. The greatest

disparity is seen in Columbia District/Fork Union where the median income for households with only white residents is \$75,800, and the average income for Black households is \$37,000.

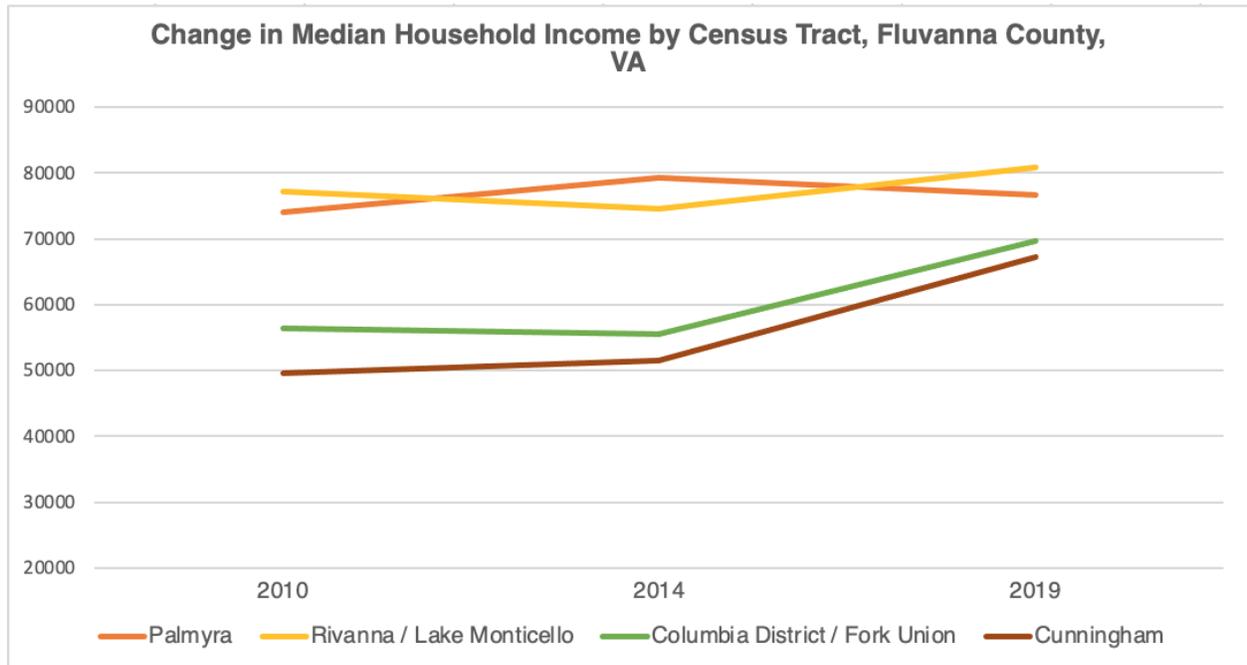


Figure F.D.3. Change in Median Household Income by Census Tract, Fluvanna County. Data taken from the American Community Survey 5-year estimates for Fluvanna County, VA, 2015-2019.

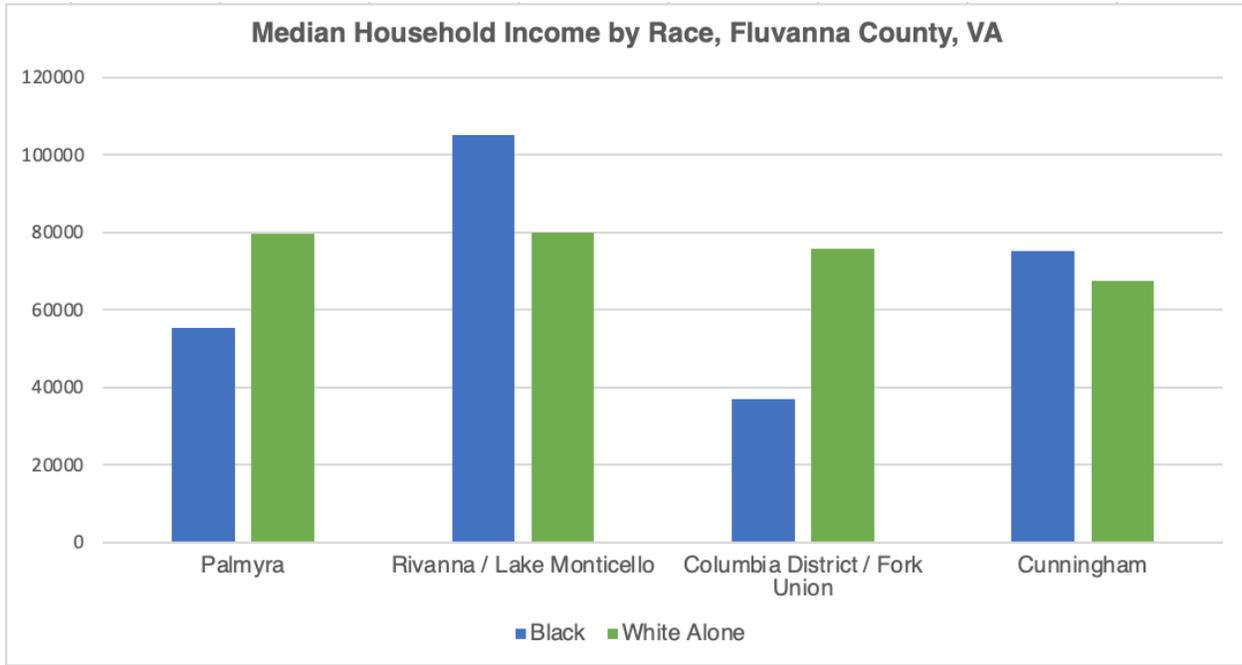


Figure F.D.4: Median Household Income disaggregated by Census Tract and Race, Fluvanna County. Data taken from the American Community Survey 5-year estimates for Fluvanna County, VA, 2015-2019.

3.1.c. Age

Generally, the difference in percentage of population by age within Fluvanna county was relatively similar between 2010 and 2019, however a few anomalies exist (Figure D.X). The largest change in population was among the group of residents between 65-74 years of age which grew 3 percent over nine years. Other notable differences are that since 2010, the percentages of people 25-54 years of age decreased an average of 2 percent, and children under the age of ten make up much less of the population than they did in 2010. Generally, it appears that middle aged and younger inhabitants are moving out of the county, while people aged sixty and older are remaining.

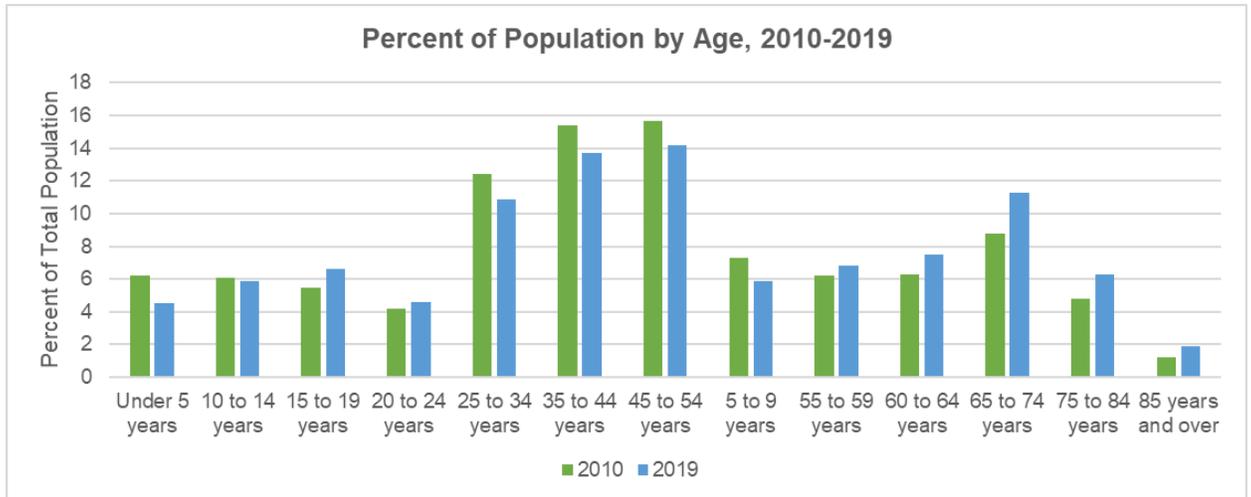


Figure F.D.4. Percentage of population by age, 2010-2019. Data taken from the American Community Survey 5-year estimates for Fluvanna County, VA, 2010-2019.

3.2 Food Insecurity

In Fluvanna County, there is little variation in enrollment in SNAP Benefits across census tracts. As of 2019, Cunningham had the highest percentage of households receiving SNAP Benefits at 39.6 percent, followed closely by both Columbia District/Fork Union and Rivanna/Lake Monticello (Figure 1). The percentage of households receiving SNAP benefits in Palmyra is lower than the other three census tracts at 30 percent of the population. Palmyra and Columbia District/Fork Union both experienced a 1 percent increase in SNAP recipients between 2014 and 2019. Cunningham experienced a 3 percent decrease in the percentage of households receiving SNAP benefits, while Rivanna/Lake Monticello SNAP recipients decreased by 1 percent. Further disaggregation would be necessary to determine the causes of these differences.

A participant in the Fluvanna County Focus Group explained that there are “two grocery stores in the county.” They explained that “one is a local mom’s house, the other is Food Lion... or you go to Charlottesville or drive to Richmond.” The Food Lion is in the Lake Monticello area. The lack of access to grocery stores in Fluvanna County

requires access to transportation and time, which increases the cost of food and contributes to food insecurity.

Examining which populations in Fluvanna are impacted the most by food insecurity can help the government and local organizations effectively address the issue. Solutions which could alleviate food insecurity include expanding access to a variety of grocery stores throughout the county which offer a range of food options for affordable prices, as well as improved public transportation to existing grocery stores. Addressing food insecurity is critical to ensuring that all Fluvanna residents have the opportunity to live a healthy life.

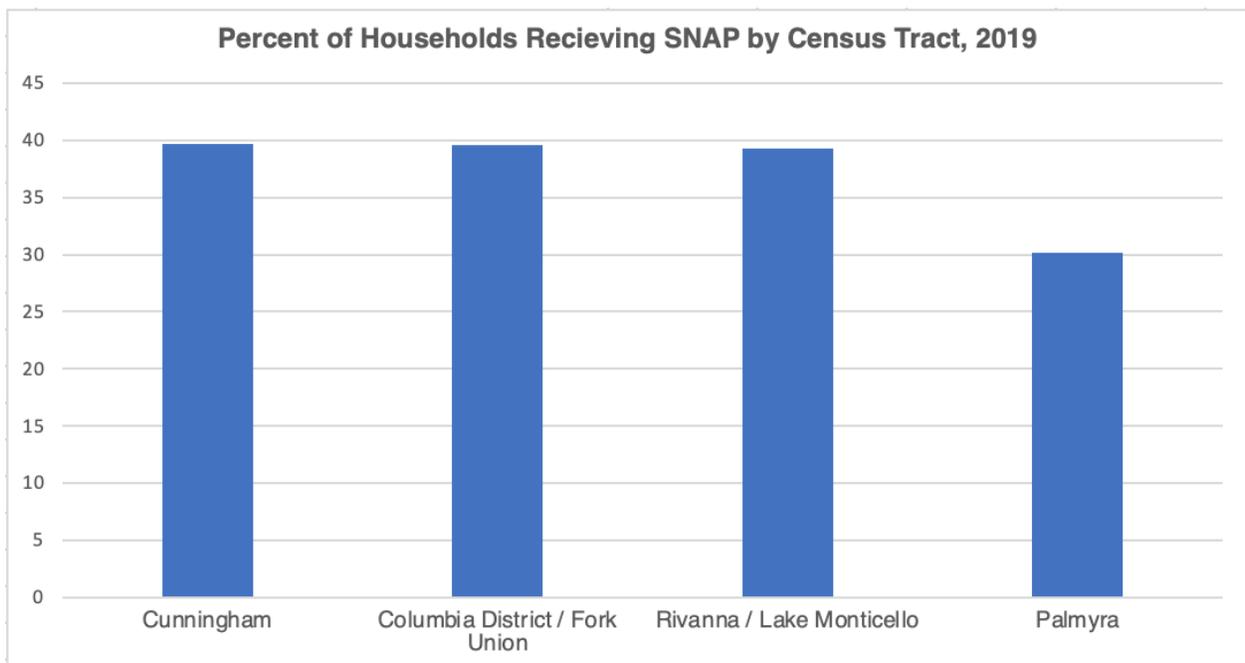


Figure F.F.1: Percent of households receiving SNAP by Census Tract, Fluvanna County. Data taken from the American Community Survey 5-year estimates for Fluvanna County, VA, 2015-2019.

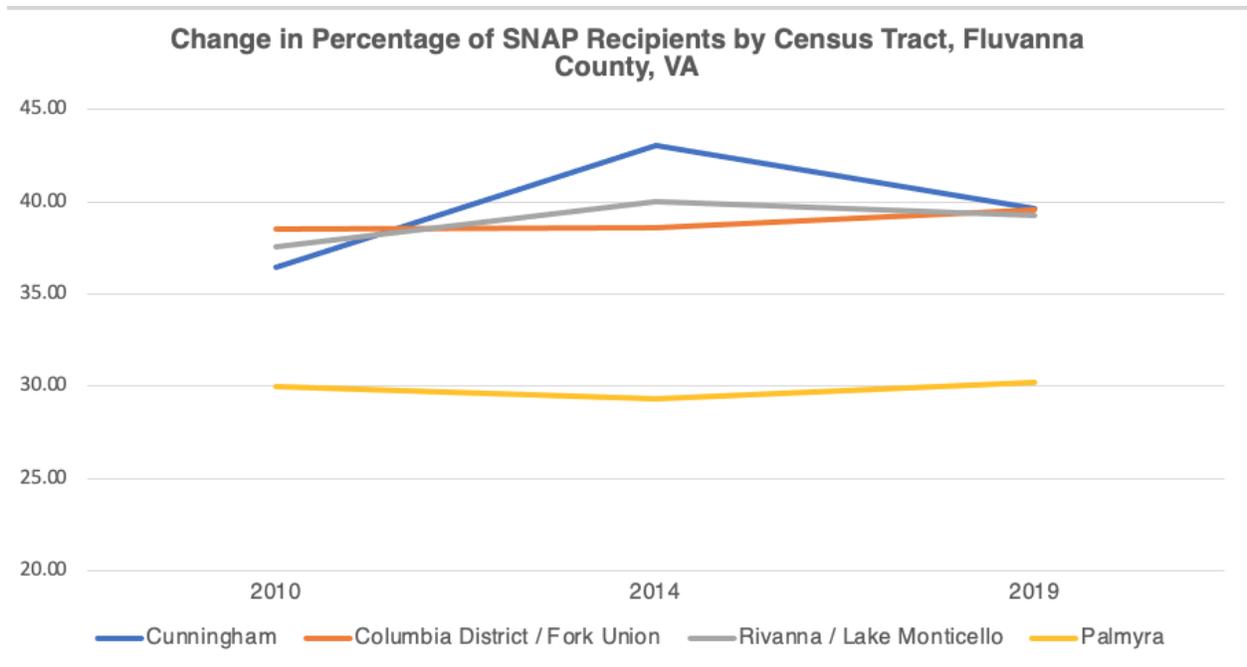


Figure F.F.2: Change in Percent of households receiving SNAP by Census Tract, Fluvanna County. Data taken from the American Community Survey 5-year estimates for Fluvanna County, VA, 2015-2019.

3.3 Employment

Approximately 15 percent of Fluvanna’s workforce is employed within the county, with 84 percent commuting to a different locality. The top five employers as of 2020 in the county were the Fluvanna County School Board, Fluvanna County Correctional Center for Women, County of Fluvanna, Fork Union Military Academy, and AG Dillard inc. Plans were announced in 2020 to relocate Silk City Printing to the previously abandoned Thomas Furniture factory in Fluvanna. When fully realized, Silk City Printing is anticipated to be a top employer in the county.

Economic access and capabilities are likely the most direct indicator of equity in any locality. Though not the sole determinant of socioeconomic stratification, racial and political divides within Fluvanna must be understood through financial autonomy and

the geographic distribution of economic power. Therefore, employment is a vital aspect of this report. The following figures demonstrate employment by educational attainment, by sex, and by race, using data obtained from the American Community Survey for 2010, 2014, and 2019.

Our analysis has indicated that white and Black populations have the highest employment rate (approximately 60 percent) of any ethnic/racial groups, with Asian and Hispanic populations averaging between 40 percent and 50 percent, respectively (Figure E2). When disaggregated by sex, males were recorded with a higher employment percentage at 84 percent compared to the 64 percent recorded with females (Figure E3). Employment rates between 2010 and 2019 (using three data points) remained relatively stable, with 2010 recording 66.7 percent and 2019 recording 66 percent. Unemployment rate (defined as the unemployed working age population actively seeking work) was more volatile, moving from 4.7 percent in 2010 to 6.3 percent in 2014 and 2.5 percent in 2019 (Figure E1).

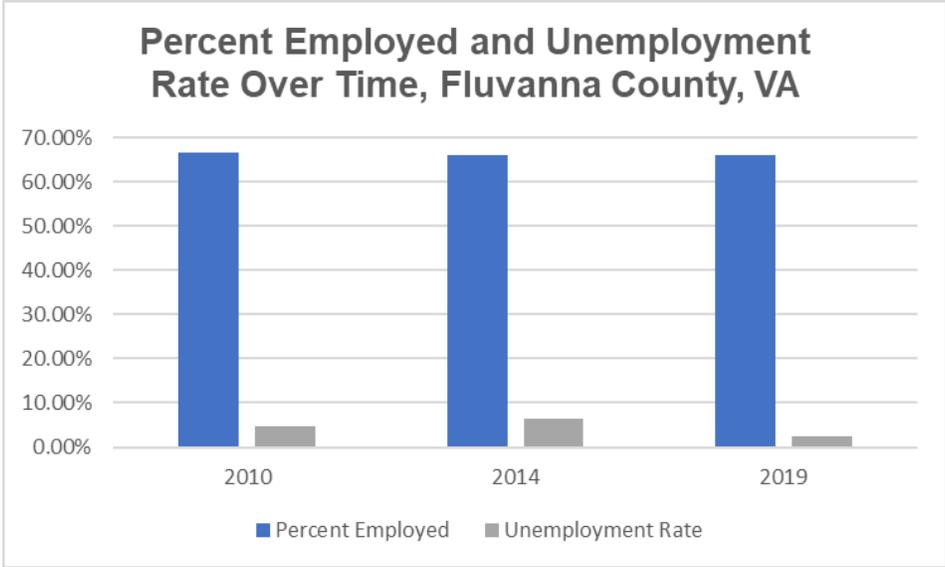


Figure E1: Percentage of Working-Age Population Employed and Unemployment Rate Over Time, Fluvanna County. Data taken from the American Community Survey 5-year estimates for Fluvanna County, VA, 2010, 2014, 2019.

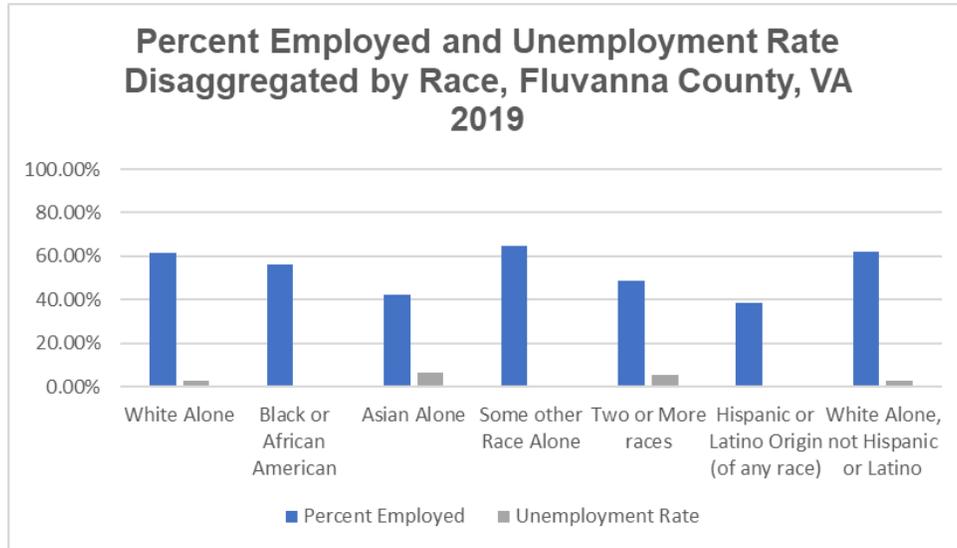


Figure E2: Percentage of Working-Age Population Employed and Unemployment Rate Disaggregated by Race, Fluvanna County. Data taken from the American Community Survey 5-year estimate for Fluvanna County, VA, 2019.

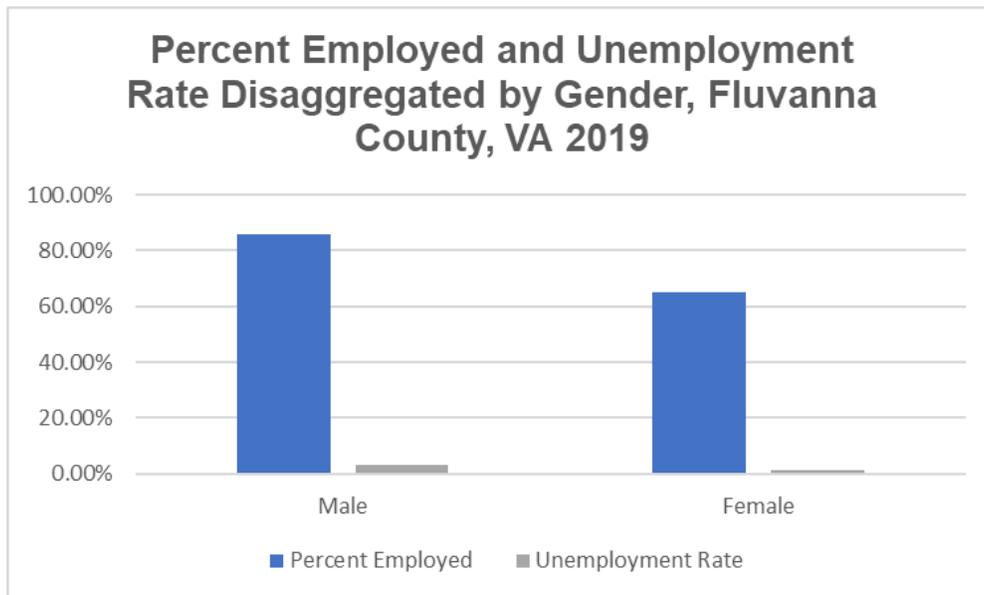


Figure E3: Percentage of Working-Age Population Employed and Unemployment Rate Disaggregated by Gender, Fluvanna County. Data taken from the American Community Survey 5-year estimate for Fluvanna County, VA, 2019.

3.4 Housing

As mentioned within the introduction and the income section, there are significant financial differences within the county. Home ownership and rent burden is a key component to financial success. Being able to purchase a home determines multiple quality of life factors which are discussed throughout this profile. The average median home value in Fluvanna is \$231,875, the average median gross rent is \$1,167, and the average percentage of rent burdened households is 36.6 percent.

As mentioned within the income section of this profile, the Rivanna/Lake Monticello census tract has the highest median household income of \$80,000 and Cunningham has the lowest median household income of \$67,000. According to housing data gathered from the 2019 ACS, Palmyra has the highest median home value of \$278,800 as shown in Figure F.H.1. Rivanna/Lake Monticello has the second highest median home value of \$233,300. Columbia/Fork Union has the lowest median home value of \$188,900. When examining median home value, it is important to consider the median household income. If the median home value of an area is much higher than the median household income resident is able to afford, then only wealthier residents have the ability to live in that area. Palmyra and Rivanna/Lake Monticello could be considered areas that are only accessible to more affluent consumers, since these areas have the highest and second highest median home values, respectively.

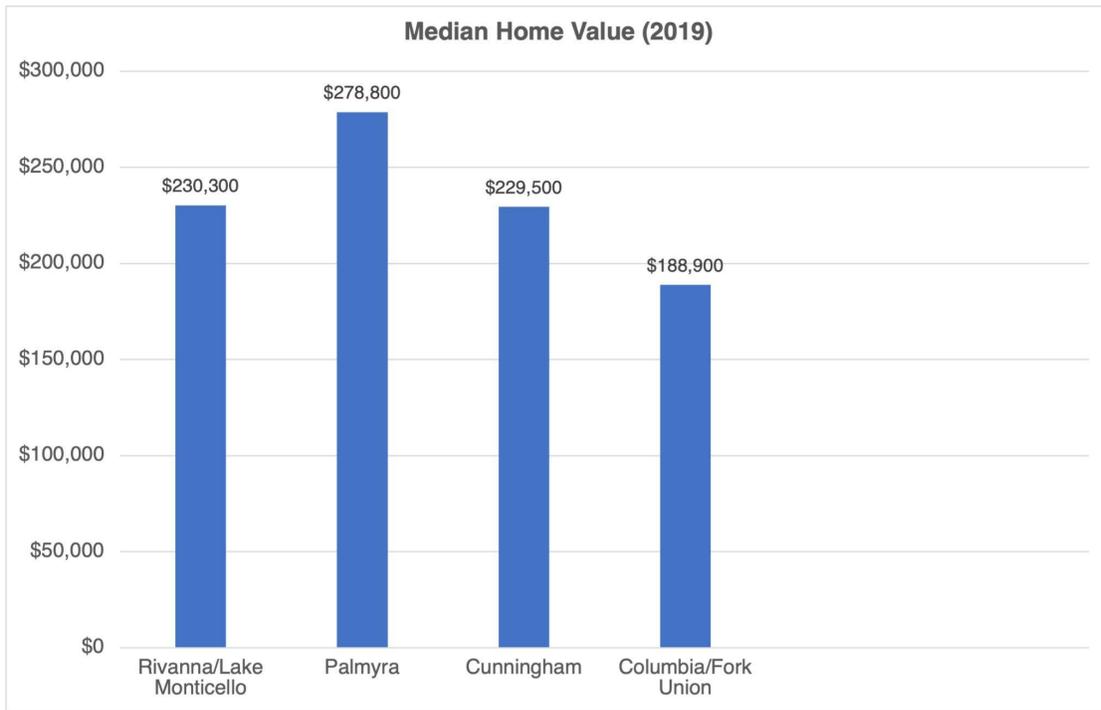


Figure F. H. 1. Median home value in 2019 by census tract. Data from American Community Survey 5 year estimates for Fluvanna County, 2019.

Median gross rent is another variable to consider when analyzing housing affordability. Residents in lower income brackets may only be able to consider rentership as a housing option. Looking at median gross rent from the 2019 ACS data, Rivanna/Lake Monticello is the most expensive with a median gross rent of \$1,548 as shown in Figure F.H.2. Columbia/Fork Union has the lowest median gross rent of \$854. Rent burdened households within each census tract were also calculated. In 2019, Palmyra had the highest percentage of rent burdened households with 47 percent, while Columbia/Fork Union with 21 percent had the lowest percentage of rent burdened households.

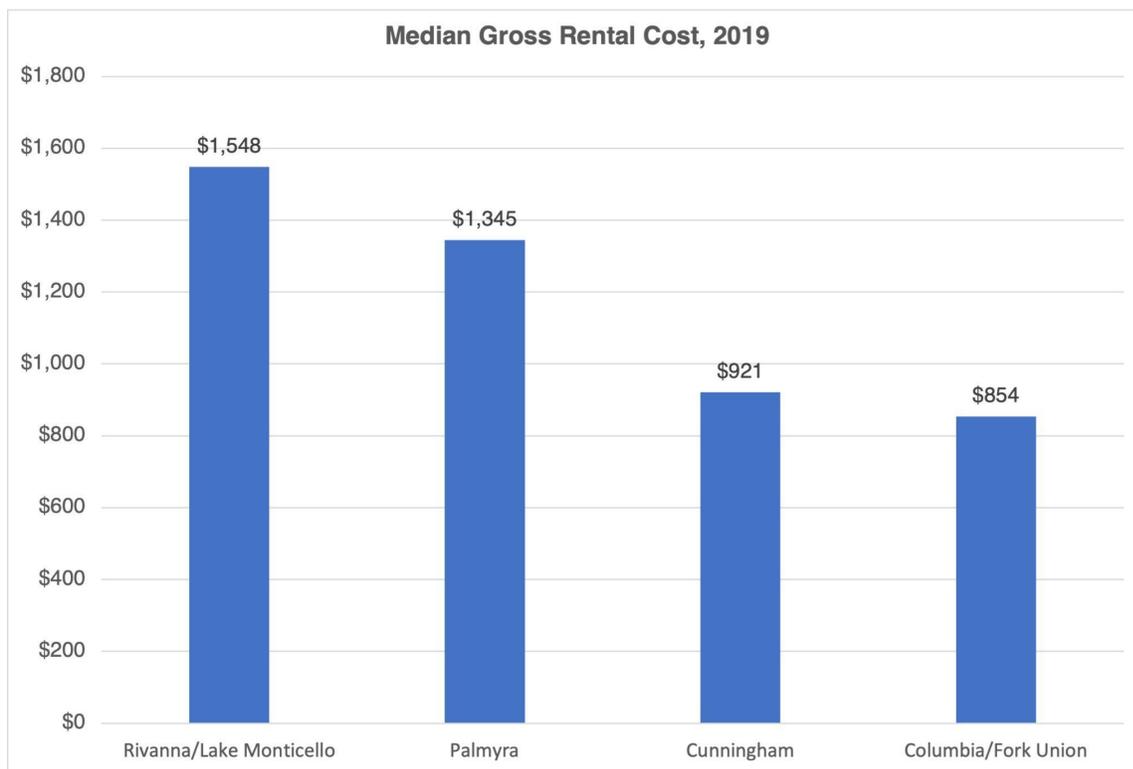


Figure F. H. 2. Median gross rent cost by census tract in 2019. Data from American Community Survey 5 year estimates for Fluvanna County, 2019.

Median home value change and median gross rent change between 2014-2019 were then analyzed using ACS data to changes to affordability. Changes within these two variables could be due to changes in land use such as new development, as well as changes in access to public services. A significant change in the cost of housing can of course influence affordability for those in lower income levels. A decrease in housing value could also decrease public school and public services funding within the respective area. The Cunningham census tract had the highest percent change between 2014 and 2019 in median housing value, a 20.6 percent increase or \$39,300, as shown in Figure F.H.3. Rivanna/Lake Monticello experienced a 3.6 percent increase (\$8,000) and Palmyra experienced a 6.2 percent increase (\$16,200). Columbia/Fork Union experienced the lowest change in value with a 1.5 percent decrease or -\$2,800.

The significant increase in Cunningham is likely due to increased housing development within the census tract but could result in less affordability.

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Figure F. H. 3. Median home value change over time between 2014 and 2019. Data from American Community Survey 5 year estimates for Fluvanna County, 2019.

The change in median gross rent between 2014 and 2019 was also synthesized within the county's census tracts. The Palmyra census tract had the highest increase in median gross rent with a percent change of 21.5 percent (\$234) as shown in Figure F.H.4. Rivanna/Lake Monticello experienced a 10.7 percent increase (\$150) in median gross rent and Cunningham experienced a 6.35 percent (\$55) increase. Columbia/Fork Union experienced a significant decrease in rent of -23.1 percent or -\$257. As shown in Figure F. H. 5., there have been significant changes in rent burdened households between 2014 and 2019. Palmyra experienced the highest increase in rent burdened households with a 20 percent increase while Columbia/Fork Union had the highest decrease in rent burdened households with a 33 percent decrease. Cunningham experienced a 14 percent increase and Rivanna/Lake Monticello experienced a 20 percent decrease in rent burdened households.

When looking at median housing value and median gross rent from a larger perspective, it is important to consider whether renters or homeowners in Columbia/Fork Union have the same access to public services and job opportunities as renters or homeowners in more affluent areas, such as Palmyra and Rivanna/Lake Monticello. The change in housing value and rent can also influence funding and access to public services, including public schools. Large disparities in affordability within a county such as Fluvanna may be an indicator of the level of equity within the county.

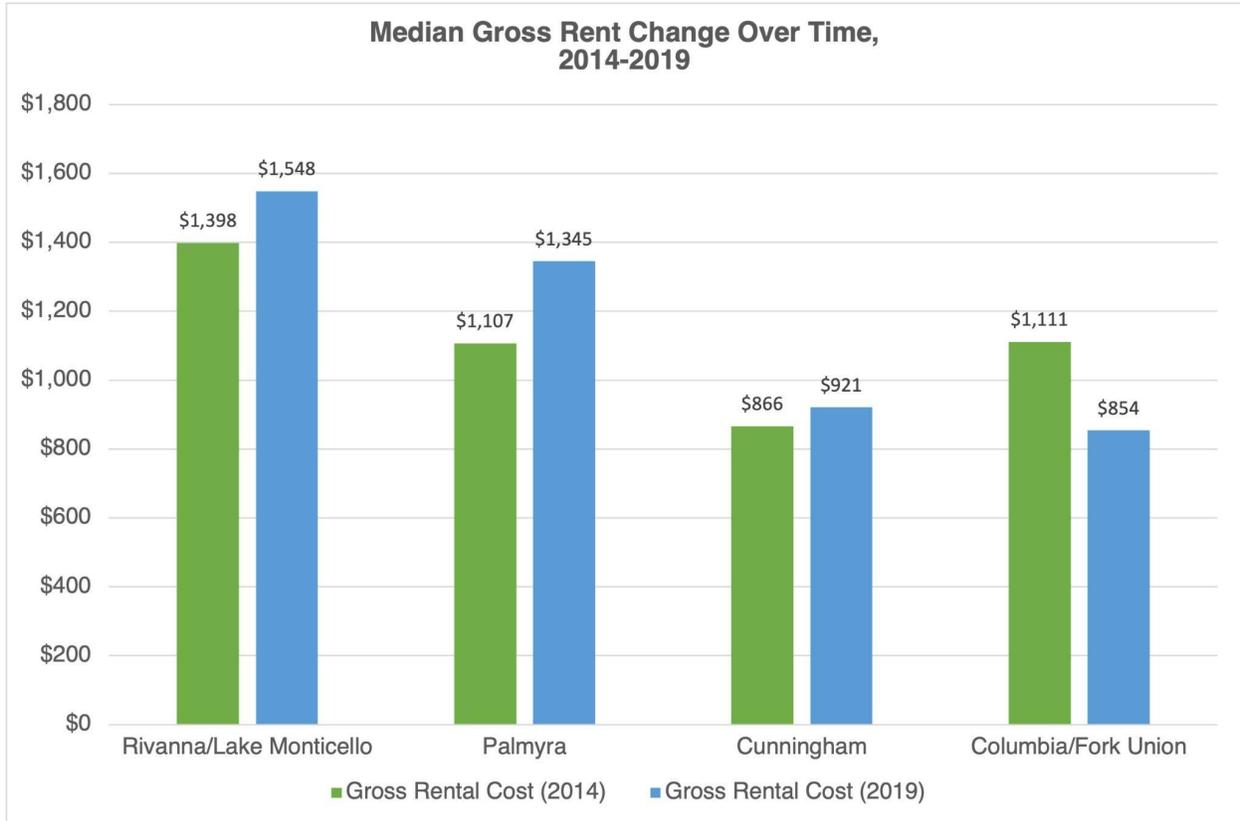


Figure F. H. 4. Median gross rent change between 2014 and 2019. Data from American Community Survey 5 year estimates for Fluvanna County, 2019.

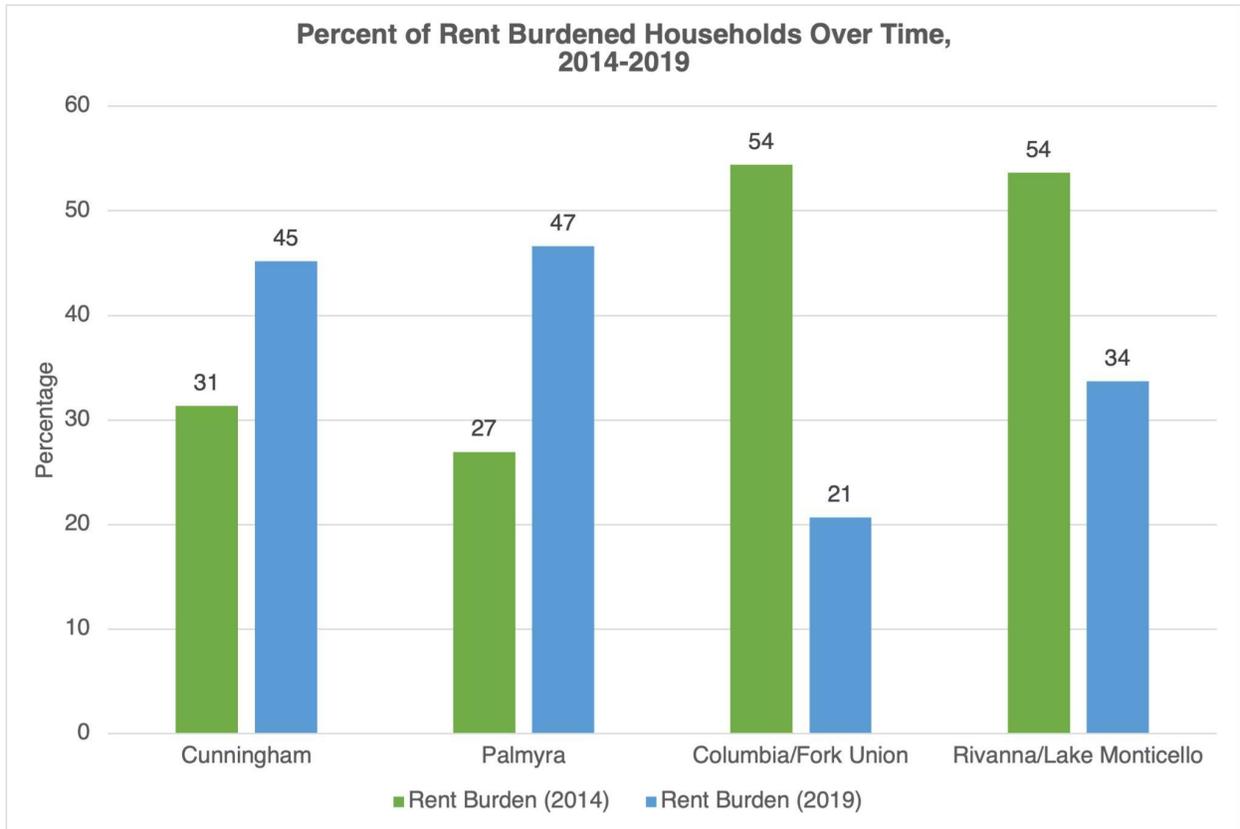


Figure F. H. 5. Percent of rent burdened households change over time between 2014 and 2019. Data from American Community Survey 5 year estimates for Fluvanna County, 2019.

3.5 Education

School outcomes are demonstrated to be directly tied to long term socioeconomic status. Existing political, social, or ethnic divides within Fluvanna can also be articulated through disaggregated educational data regarding measures like graduation rates, absenteeism, and free or reduced lunch. Beyond showing the differing outcomes among various communities, education data also elucidates County funding of its municipal operations. The following figures demonstrate Fluvanna High School graduation and dropout rates disaggregated by race and sex, as well as per-pupil funding, and free/reduced lunch rates on a schoolwide scale. Data was obtained from

the Virginia Department of Education and the National Center for Education Statistics for 2014 through 2019.

2018-2019 Fluvanna High School data indicates a graduation rate of 93.8 percent and a dropout rate of 1.82 percent, with the remaining 4.38 percent defined as “other” (Figure F.E.1). Black, white, and Hispanic graduation rates were similar for the 2018-2019 school year, with each at approximately 93 percent (Figure F.E.2). Black and white dropout rates were 2.04 percent and 2.03 percent, respectively, and the Hispanic dropout rate was 0 percent (Figure F.E.3). Male and female graduation rates were 92.6 percent and 94.7 percent, respectively, and dropout rates were 2.11 percent and 1.52 percent, respectively (Figure F.E.4). Per-pupil spending in 2018-2019 was recorded at \$9968 compared to the state average \$11560 (Figure F.E.5). Conclusions drawn from this insight should be cautious, as many factors including municipal organization and County funding can affect per-pupil spending outcomes. Free and reduced lunch eligibility was compared over a nine-year period, indicating a slowly increasing rate between 2011-2012 (27.8 percent) and 2016 (30 percent), before spiking in 2018 and 2020 to approximately 36 percent (Figure F.E.5).

Our focus groups also included a lot of discussion about providing education in schools about employment opportunities that do not require a Bachelor’s degree—we will include qualitative analysis of that discussion in this section as well.

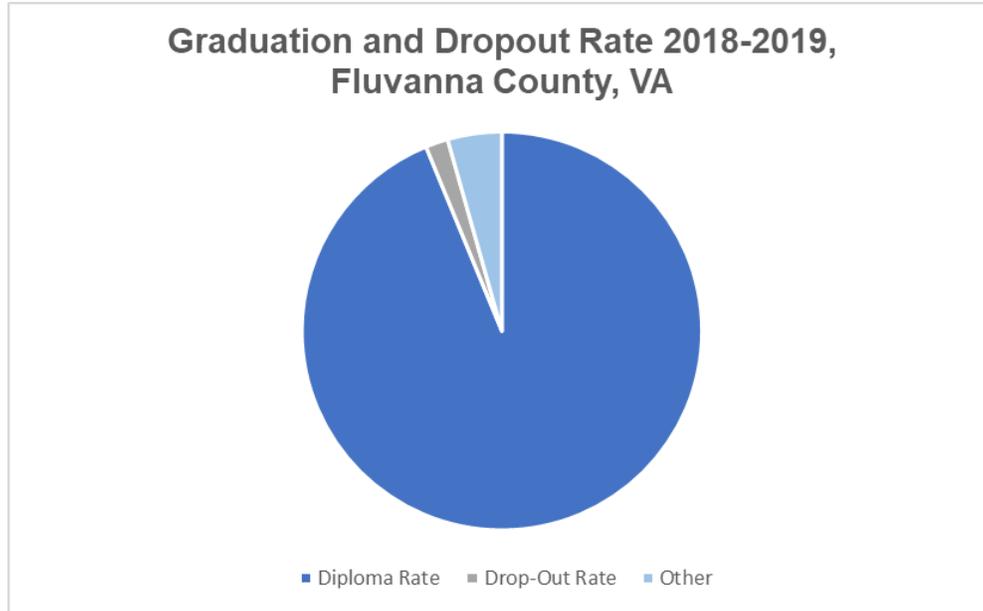


Figure F.E.1. Graduation and Dropout Rates in Fluvanna County High Schools, 2018-2019. Data retrieved from the Virginia Department of Education

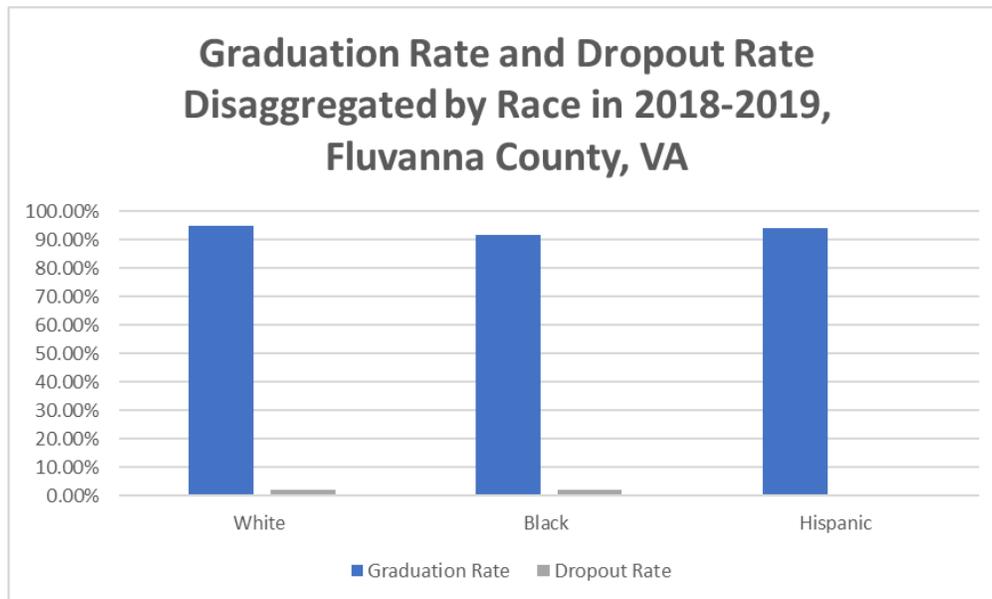


Figure F.E.2. Graduation and Dropout Rates Disaggregated by Race in Fluvanna County High Schools, 2018-2019. Data retrieved from the Virginia Department of Education

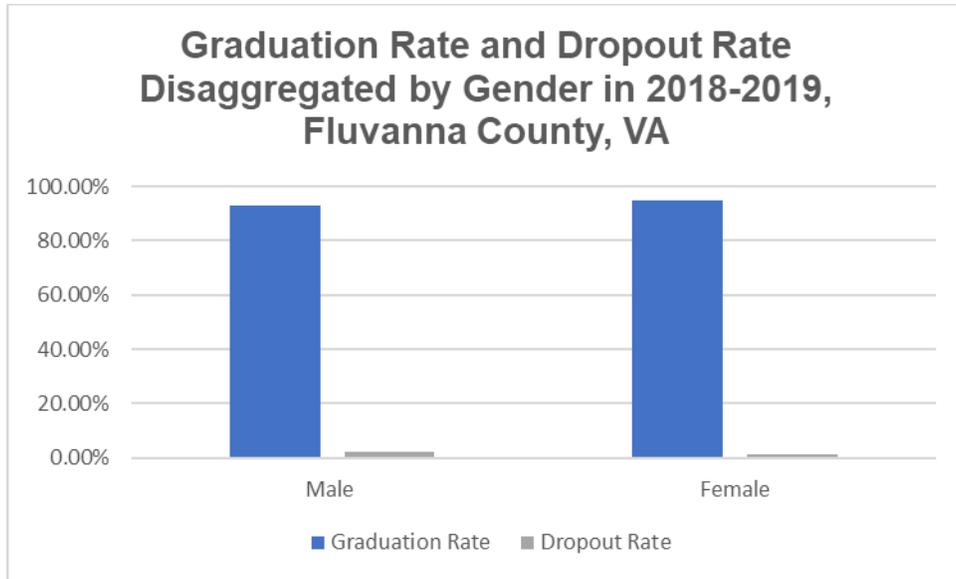


Figure F.E.3. Graduation and Dropout Rates Disaggregated by Sex in Fluvanna County High Schools, 2018-2019. Data retrieved from the Virginia Department of Education

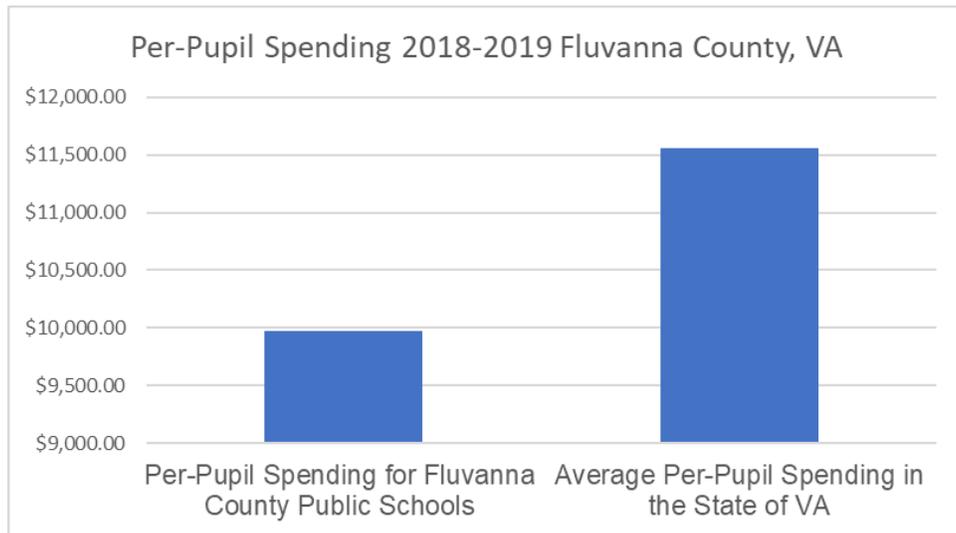


Figure F.E.4. Per-Pupil Spending, Comparison of Fluvanna County and State of Virginia average, 2018-2019. Data retrieved from the Virginia Department of Education School Quality Profiles

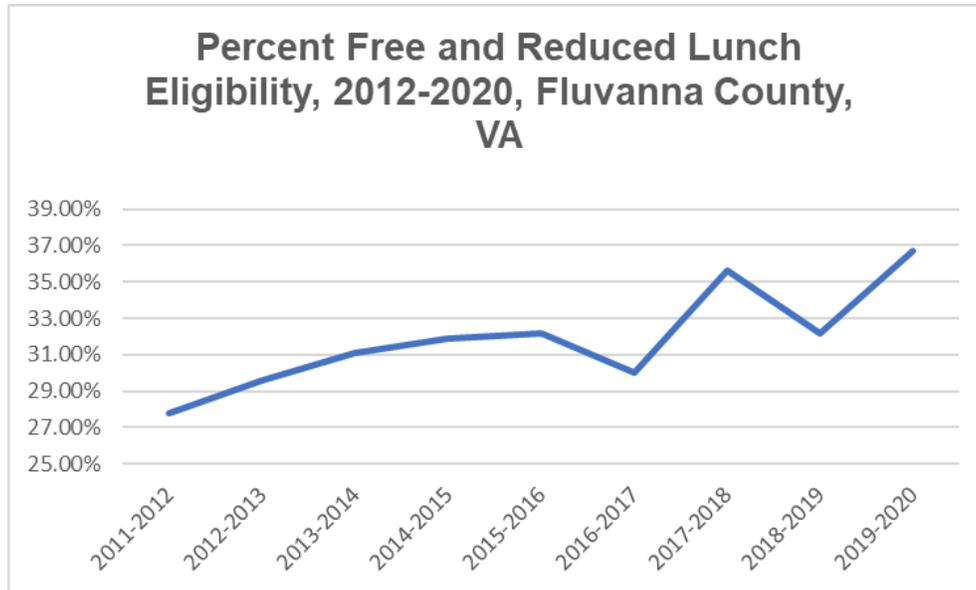


Figure F.E.5. Percentage of Fluvanna County High School Students Eligible for Free and Reduced Lunch, 2012-2020. Data retrieved from the Virginia Department of Education

3.6 Digital Divide

In Fluvanna County, there are distinct differences in Internet and computer access across both socioeconomic status, race, and across the geographical regions. Within the county, the geographical regions with the highest levels of households without internet and computer access were in Cunningham and Columbia/Fork Union on the western side of the county, whereas Lake Monticello/Rivanna have much higher percentages of households with internet access. When examining computer and internet access with regards to race (Figure F. D. 1, F.D.2)), the majority of those without access are white residents; however, given that the strong majority of Fluvanna County is white, further disaggregation and deeper research may be needed to elucidate whether populations of color experience a greater disparity within their race. For example, in Columbia/Fork Union, 9.8 percent of the Black households do not have internet access (F.D.2); however, the total Black population for this geographical region is only 23.7 percent.

Larger percentages of Black households do not have a computer at home in both Columbia/Fork Union and Palmyra (Figure F.D.1). In Lake Monticello/Rivanna, however, the percentages of households without a computer are all relatively low and are more evenly distributed across races. Given that the population of the Lake Monticello/Rivanna tract is 82 percent white, however, may mean that the smaller minority populations are experiencing greater inequities with regards to computer access.

The majority of households without internet access across all communities are white (F.D.2). In Columbia/ Fork Union and Cunningham, over 25 percent of households do not have an internet subscription, compared to less than 10 percent for Palmyra and Lake Monticello/Rivanna. This may be due to the income disparities between these two communities, as discussed in the Income section above.

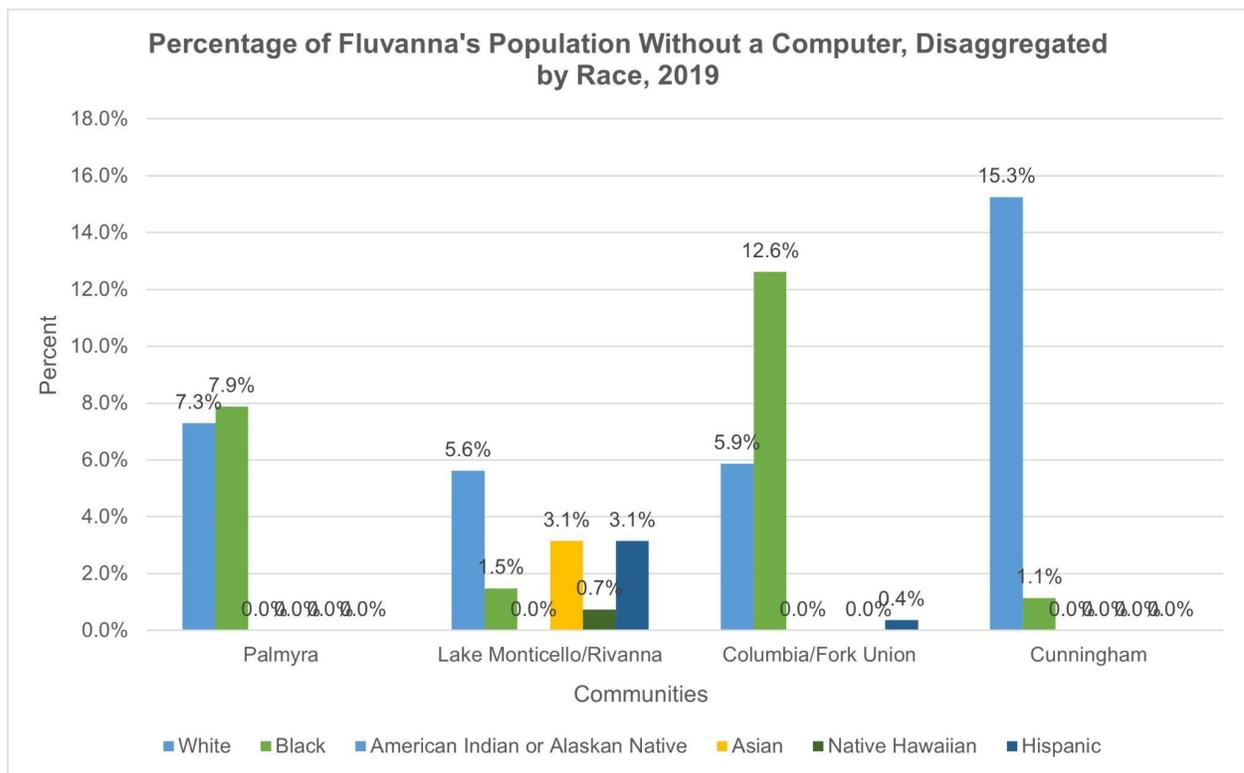


Figure F.D.1. Percentage of Fluvanna’s Population Without a Computer, Disaggregated by Race, 2019. Percentage indicates the number of households within each identified community. In both Palmyra and Columbia/Fork Union, the majority of residents

without a computer at home are Black, followed by White. In Lake Monticello/Rivanna, there are residents of multiple racial backgrounds that do not have a computer at home. Given the small populations of minority racial groups, however, this indicates that individuals from minority racial backgrounds experience greater inequities regarding computer access. Data taken from the American Community Survey 5-year estimates for Fluvanna County, VA, 2015-2019.

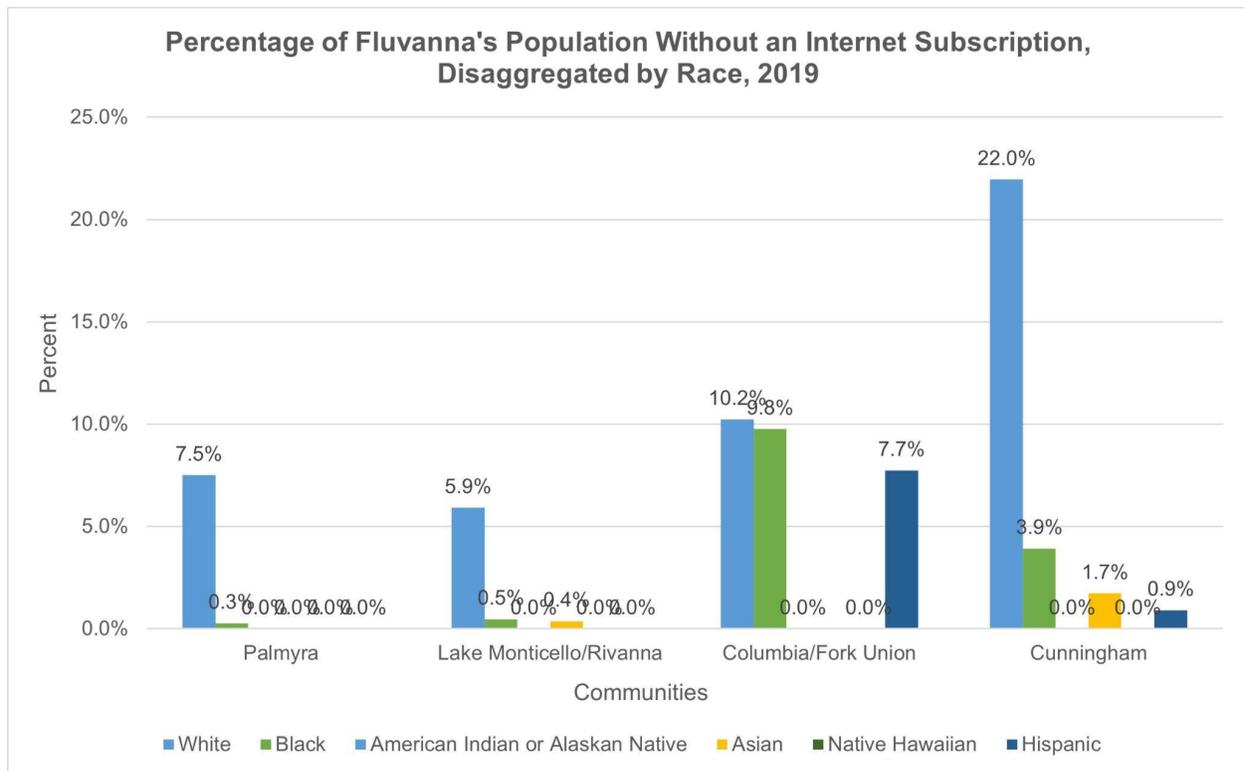


Figure F.D.2. Percentage of Fluvanna’s Population Without an Internet Subscription, Disaggregated by Race, 2019. Percentage indicates the number of households within each identified community. Across all communities, the majority of households without an internet subscription are white. In Columbia/Fork Union and Cunningham, over 25 percent of households do not have internet access, compared to less than 10 percent for both Palmyra and Lake Monticello/Rivanna. This may be due to income disparities between these communities, which is discussed in more detail in the Income section. Data taken from the American Community Survey 5-year estimates for Fluvanna County, VA, 2015-2019.

As for the relationship between internet access and income (Figure F.D.3), there does not appear to be a strong correlation between an increase in income and a decrease in the percentage of households without internet access. However, this again may be due to skews within the data, as the income bracket of the majority of residents in Fluvanna County falls between \$35,000 and \$75,000. As with the disaggregation by race, however, it should be noted that each percentage is representative of the total population, which means that income brackets with a smaller overall number of households would result in smaller percentages. This may mean that very low income populations, while small, have a larger relative population of households without internet access within their income bracket. Additionally, given the racial disparities with regards to median household income (F.D.3), communities of color may again be experiencing greater inequities with regards to internet access, regardless of income.

Closing the digital divide within a more rural county like Fluvanna is crucial for helping low-income and otherwise socially vulnerable residents have greater access to education and therefore potential employment. Having internet access, as one interviewee described, also gives individuals a voice and provides ease of access to sharing information and organizing for change. Increasing data infrastructure at a local government level may also help to bridge some of these gaps.

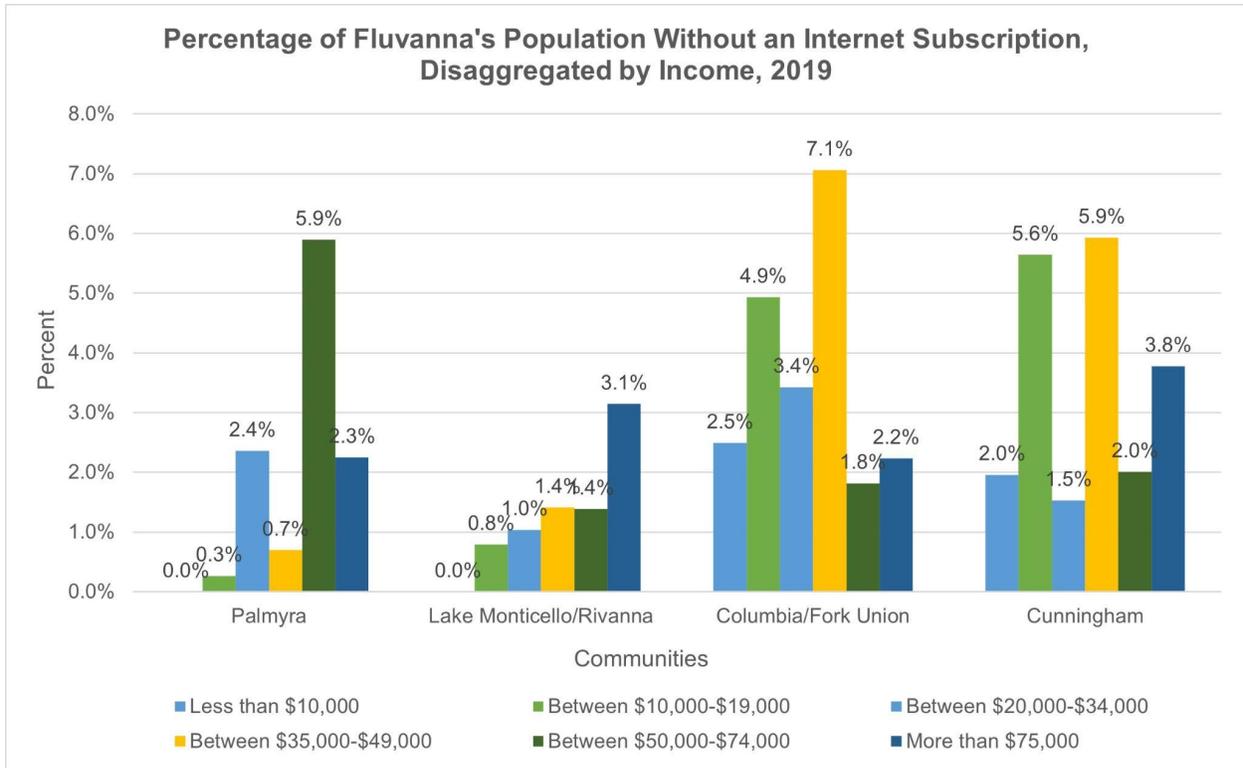


Figure F.D.3. Percentage of Fluvanna’s Population Without an Internet Subscription, Disaggregated by Income, 2019. Percentage indicates the number of households within each identified community. There do not appear to be trends in internet access when disaggregated by income in all four communities. It should be noted, however, that each percentage indicates the number of households within the total population of that community, and therefore smaller populations would also result in smaller percentages. Data taken from the American Community Survey 5-year estimates for Fluvanna County, VA, 2015-2019.

3.7 Mobility

Although Fluvanna is a very rural county, some visual patterns can be discerned from looking at the percentage of workers without a personal vehicle (figure F.M.1). The rate of vehicle ownership is already high among workers (likely due to the absence of available public transportation), however some census tracts such as Lake Monticello/Rivanna are lower than the surrounding tracts. Additionally, the eastern

tracts of Bremono Bluff/Westbottom, Columbia, and Fork Union saw a relatively higher percentage of personal vehicle owners. Regardless, more granular data is needed to understand issues of transportation access in terms of personal vehicle access. It should also be noted that the amount of workers without vehicles per ACS data, while not zero, is incredibly low: values range from only .2 percent to 1.4 percent.

It appears that the average travel time to work is higher as the distance from the greater Charlottesville area increases (figure F.M.2). Areas in Lake Monticello and the northwest census tracts have relatively lower travel times to work, while areas to the southwest near the Fork Union and Lake Monticello/Rivanna area, have significantly higher travel times. Again, a finer resolution of data is necessary to make informed reflections regarding travel time.

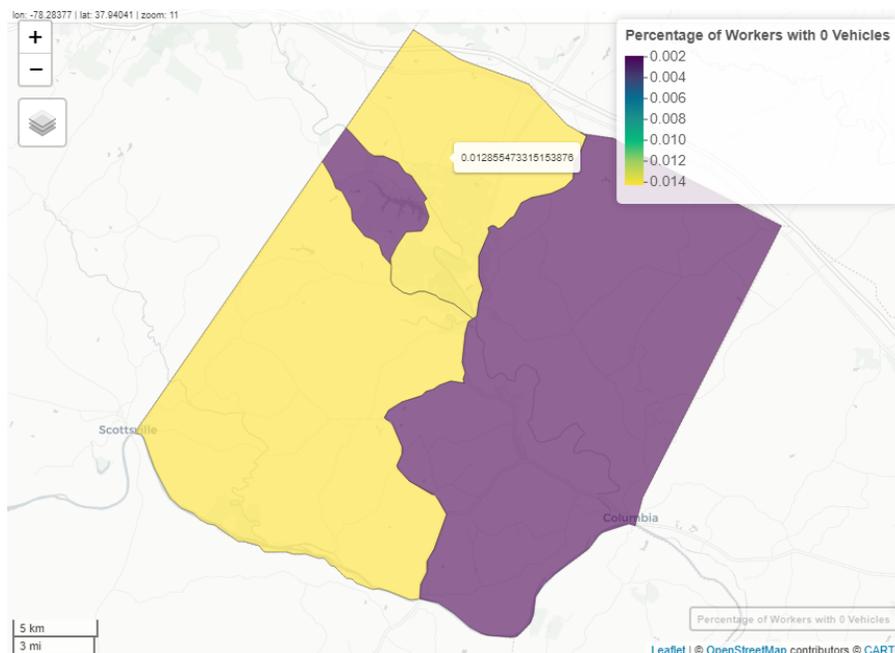


Figure F.M.1. Percentage of workers within Fluvanna County without a personal vehicle. Data taken from the American Community Survey 5-year estimates for Fluvanna County, VA, 2019.

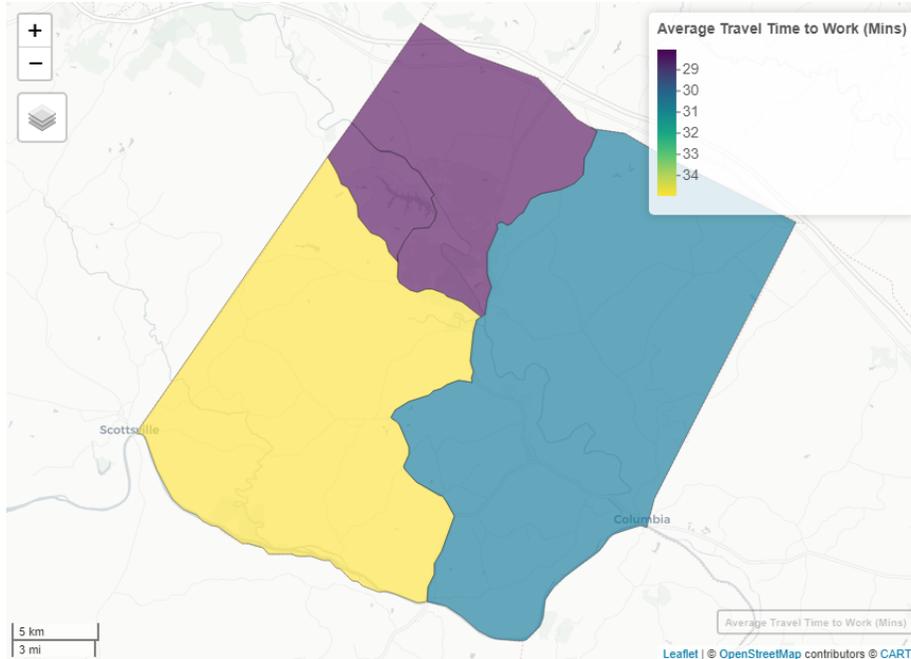


Figure F.M.2. Average travel time to work for workers within Fluvanna County across all transportation modes. Data taken from the American Community Survey 5-year estimates for Fluvanna County, VA, 2019.

In figure F.M.3, several modes of transportation are examined by the median age of the user groups. Notably, public transit is used by the group with the oldest median age which is likely using the JAUNT service which connects distant counties to the greater Charlottesville Area Transit (CAT) system. During the focus groups, one participant noted:

“There is no cab, there is no local bus or commuter (options). And then I can't imagine what the cost would be if there was. I would assume that Medicaid or Medicare would cover that cost for some individuals, but for everyone else, I know they can call JAUNT, But there are only so many JAUNT (buses) in the area. ...The other problem with that is the length of time. I might be able to catch the JAUNT bus at 7:30 in the morning to get to my 10:30 medical appointment in Charlottesville, but then I'm not gonna get back home until 4:30

or 5:00 that afternoon. Then there are challenges with where the JAUNT lets me off, and where I have to go and then get back (in time to catch it)."

For those without a personal vehicle, living in a rural area like Fluvanna county requires assets to come to them or family/friend connections to help bridge the access gap. Transportation options like ridesharing services or a regularly-scheduled public transportation system are not available, or would be prohibitively expensive to access. Also, the ACS estimates transportation and travel times solely in the context of employment, therefore many users will not be represented. The total population of Fluvanna County is 25,594 while the total worker population is 12,475, meaning transportation data only represents 48.74 percent of the working-age population (adults over 18 years old). This calculation was internally performed using ACS 5-year estimates. A more-accurate analysis of transportation users would need to focus on users outside the working population such as the retired, unemployed, homebound, or homeless. The average commute time in the state of Virginia is roughly 28 minutes.

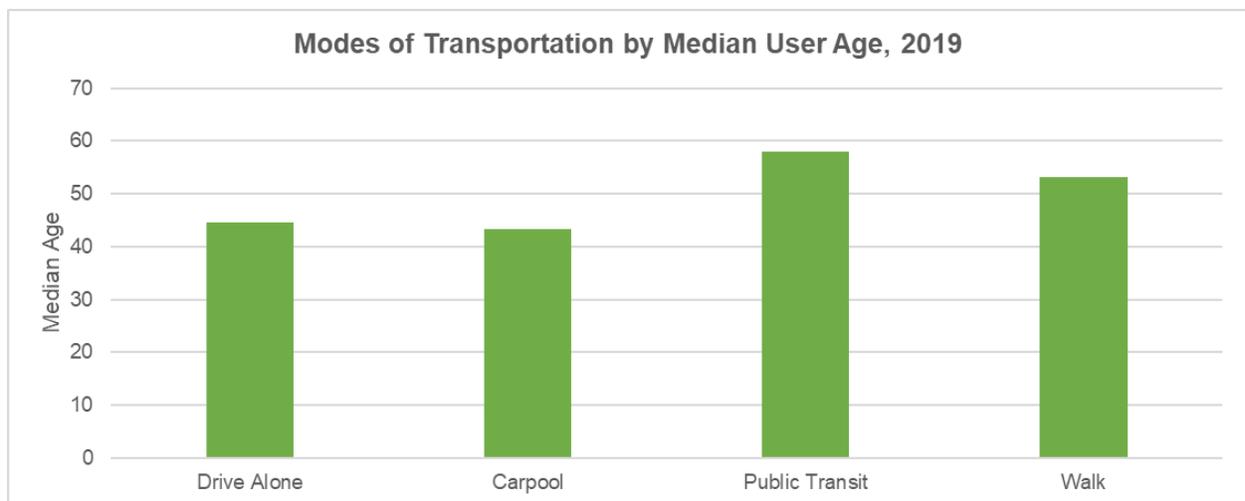


Figure F.M.3. Modes of transportation used by workers by median age of user group. Data taken from the American Community Survey 5-year estimates for Fluvanna County, VA, 2019.

Finally, figure F.M.4 disaggregates various forms of commuter transportation for workers by their sex. The three most-used modes of transportation are traveling in a vehicle (alone), followed by carpooling, and lastly working from home, with driving alone by far the greatest. On average across this graph, male and female workers are similarly likely to use any specific form of commuter transportation.

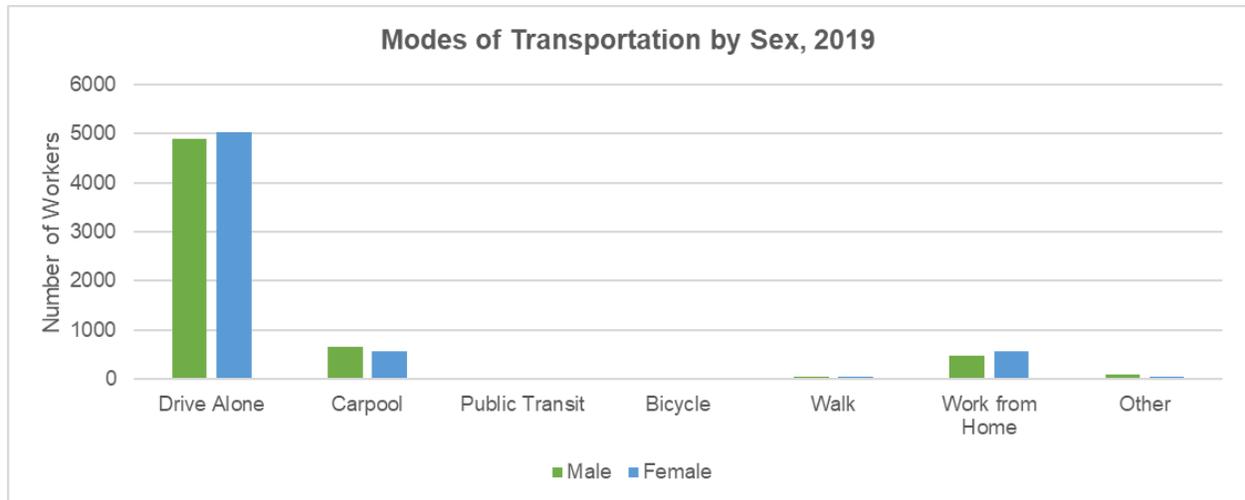


Figure F.M.4. Modes of transportation used by workers within Fluvanna county by sex. Data taken from the American Community Survey 5-year estimates for Fluvanna County, VA, 2019.

In summary, the fact that Fluvanna County is mainly rural and inherently has a larger distance to community assets and resources. is a barrier to mobility equity in itself. It would likely be unreasonable to attempt to implement a regular bus schedule to serve the entire community at an interval that would be useful. Options are limited for available transportation other than personally-owned vehicles for those residents who are capable of driving a vehicle. This would suggest, however, that in order to decrease barriers, vehicle access must be improved and access to an affordable form of shared transportation for those who cannot drive should be more readily available. A final, holistic option would be to bring more community support amenities and assets closer to the identified communities that are most impacted by transportation inequity. These assets involve all of the equity perspectives, including access to mobile healthcare

providers, farmer's markets and other food distribution hubs, and employment/education outreach.

3.8 Land Use + Environment

Using data from the 2013 Multi-Resolution Land Characteristics (MRLC) Consortium and the National Land Cover Database, the percentage of land use acreage was determined to examine access to green space and graphically establish the structural and geographic features of Fluvanna county. These features include developed land, forested areas, planted/cultivated land, and herbaceous areas, and could influence residents' access to public green space, food, job opportunities, medical services, and other public services. Areas that are highly developed are likely to have less access to public green spaces, while low development areas may have less access to services. In the case of Fluvanna, gated-dated development versus other forms of development influence access to natural amenities. These maps and graphs graphically display the developed versus rural divide mentioned in the focus group.

As shown in Figure F.L.1-2, overall 66.6 percent of Fluvanna is forested, 13.93 percent is cultivated, 6.91 percent is developed, and 4.8 percent is herbaceous. Figures F.L. 3-6 show the percentage of acreage per land use within each census tract. Most notable is the Rivanna/Lake Monticello tract that is 29 percent developed, which is about 22.1 percent more than the total county acreage of developed area. Columbia/Fork Union and Cunningham have the lowest percentage of acreage of developed area with about 4.9 percent and 5.1 percent, respectively.

When looking at the acreage within each census tract it is important to note the size of each tract. Columbia/Fork Union consists primarily of the entirety of the Eastern half of Fluvanna while Rivanna/Lake Monticello is a fraction of the Northwestern section of Fluvanna. Most of the development within the county is located in Rivanna/Lake Monticello and secondarily in Palmyra. This could lead to a disproportionate distribution of public services, access to transportation, access to health care, and access to food. During the focus group discussion, one point on the disparity of

developed versus rural areas was mentioned. Since the majority of Fluvanna county residents live within the Palmyra and Rivanna/Lake Monticello tracts, other residents that may live in rural areas with less development do not have access to certain amenities. One point of contention within the county is the introduction of a public pool or at least a splash pad within the Pleasant Grove County Park. Residents have expressed concern about the level to which this amenity will be used since many county residents use lake access. However, as discussed in the introduction, the Lake Monticello neighborhood is a gated community with limited access to the lake. This leaves other residents, in other areas throughout the county, without access to such an amenity.

Land Use/ Land Cover
Fluvanna County, 2019

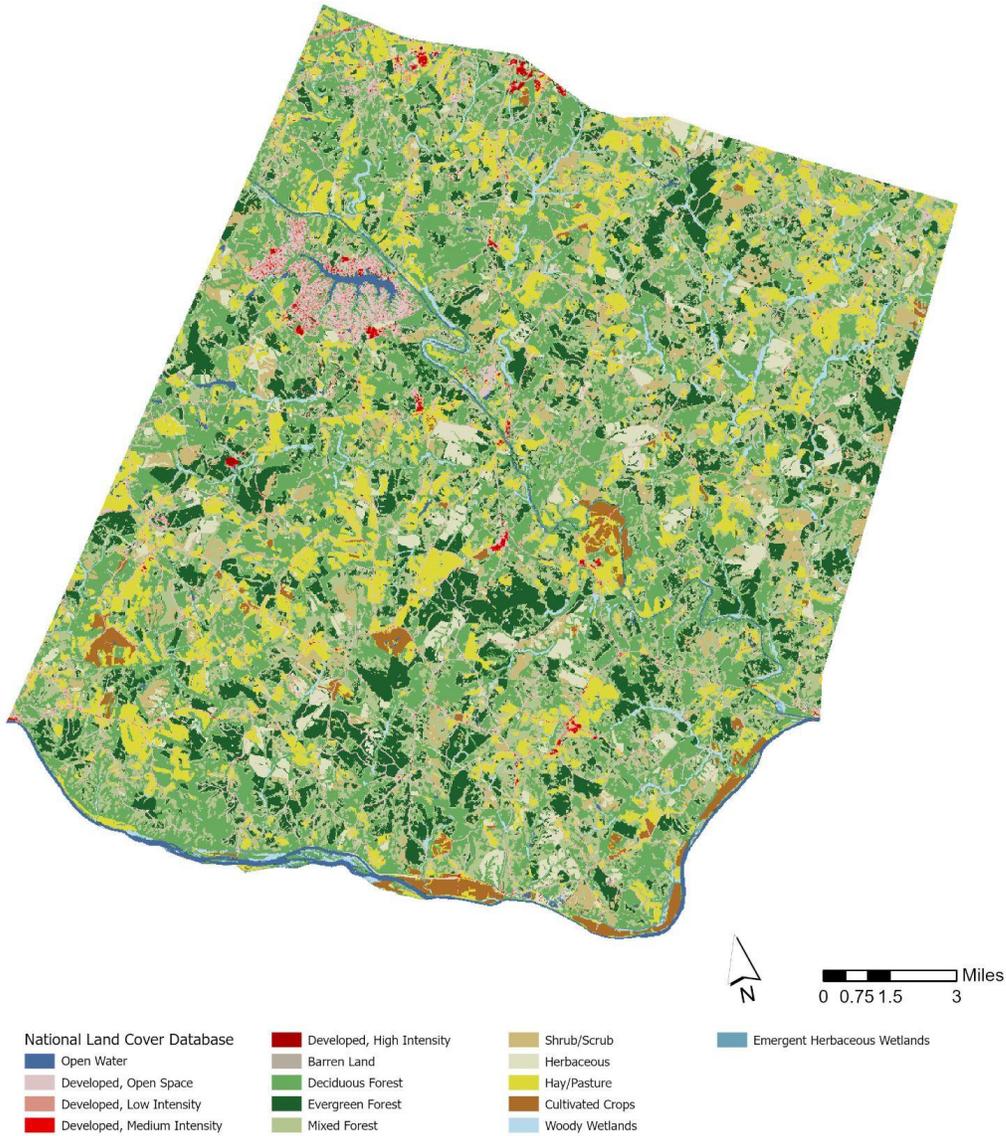


Figure F. L. 1. Land Use/Land Coverage map of Fluvanna County in 2019. Data from Multi-Resolution Land Characteristic (MRLC) Consortium 2019 National Land Cover Database (NLCD).

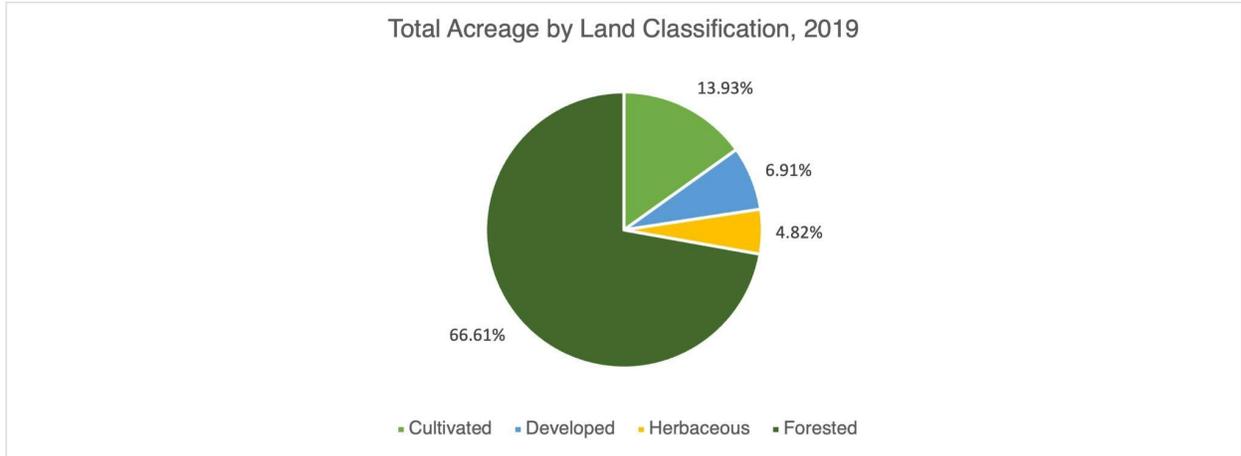


Figure F. L. 2. Total Percent Acreage by Land Classification of Fluvanna County in 2019. Data from Multi-Resolution Land Characteristic (MRLC) Consortium 2019 National Land Cover Database (NLCD).

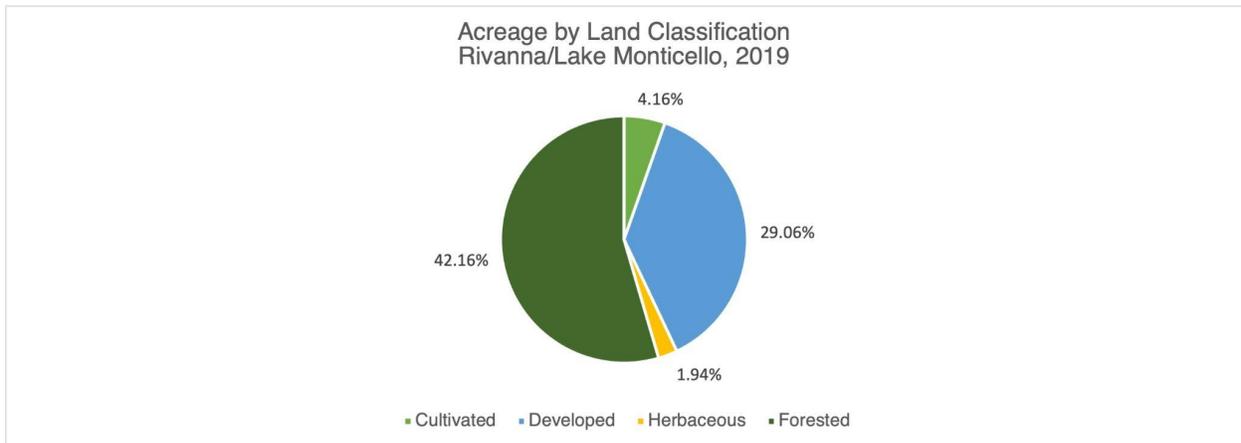


Figure F. L. 3. Total Percent Acreage by Land Classification of Rivanna/Lake Monticello in 2019. Data from Multi-Resolution Land Characteristic (MRLC) Consortium 2019 National Land Cover Database (NLCD).

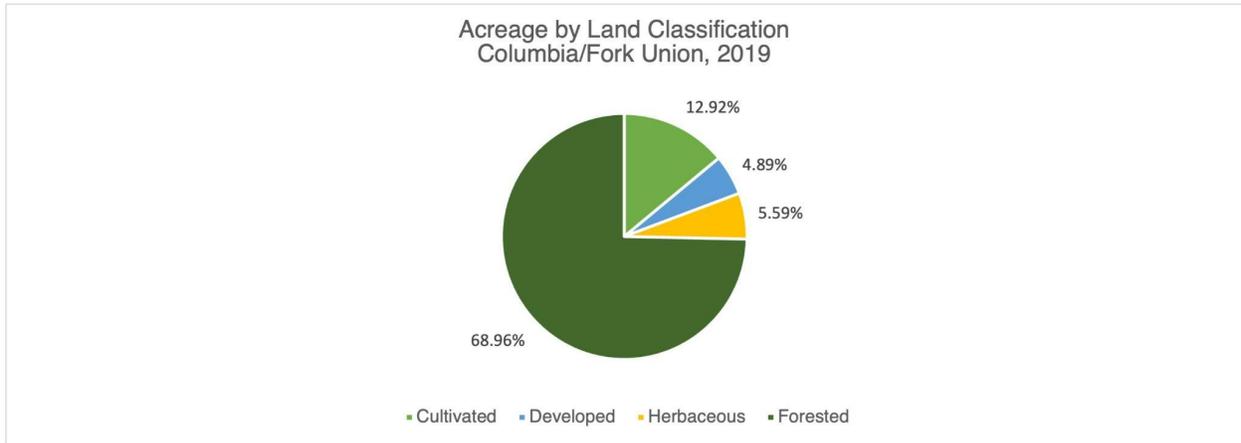


Figure F. L. 4. Total Percent Acreage by Land Classification of Columbia/Fork Union in 2019. Data from Multi-Resolution Land Characteristic (MRLC) Consortium 2019 National Land Cover Database (NLCD).

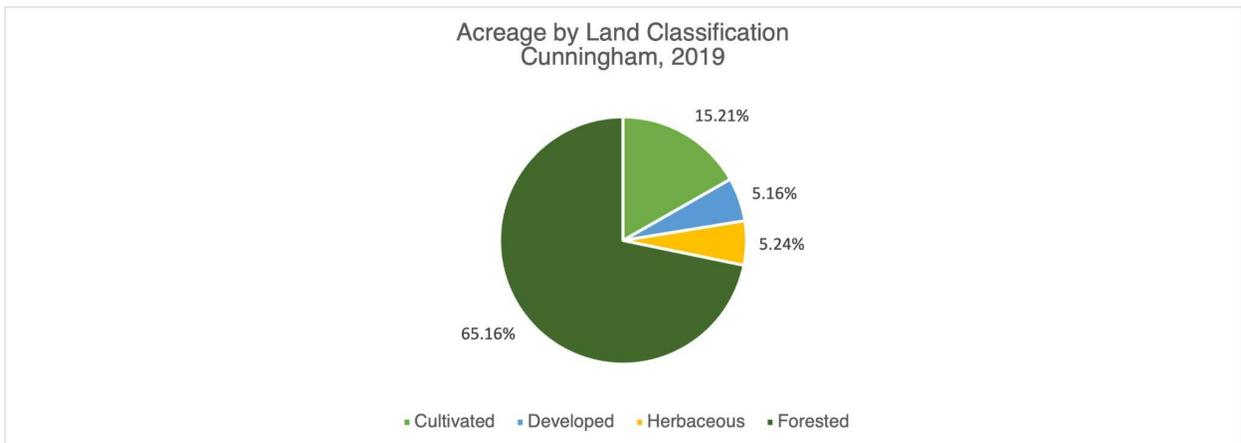


Figure F. L. 5. Total Percent Acreage by Land Classification of Cunningham in 2019. Data from Multi-Resolution Land Characteristic (MRLC) Consortium 2019 National Land

Cover Database (NLCD).

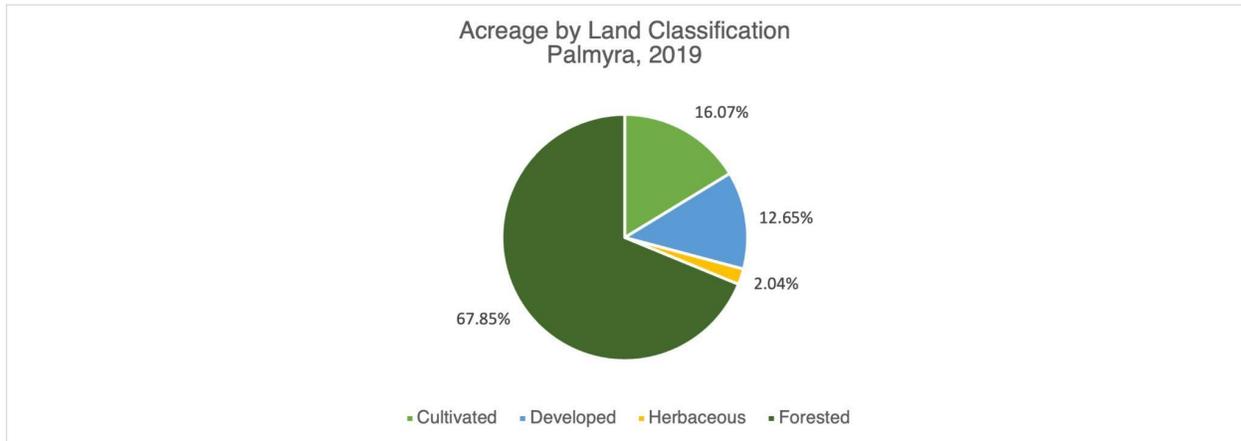


Figure F. L. 6. Total Percent Acreage by Land Classification of Palmyra in 2019. Data from Multi-Resolution Land Characteristic (MRLC) Consortium 2019 National Land Cover Database (NLCD).

Conclusion

The largest takeaway from the focus areas combined is the apparent divide between heavily developed areas in Fluvanna versus rural, lightly developed areas. This divide can be seen within almost every area of this profile. The distribution of public services, food access, transportation access, and other services is unevenly distributed, leaving those living in rural areas with limited access to services that improve quality of life. As mentioned by members of the focus group, future plans for services ought to consider rural communities within the county to ensure advancement towards equity.

CHAPTER 3. GREENE COUNTY

Introduction

"A great place to call home," Greene County was established in 1838 and named after Revolutionary War hero Nathanael Greene. The county is a small, rural community with a population around 20,000 residents.¹ The county maintains a total area of 156.8

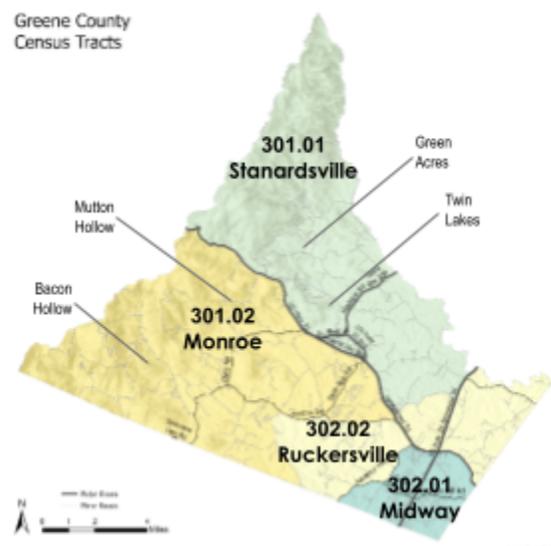
square miles and is the second-smallest county in Virginia by land area, with the county seat located in Stanardsville.²

Greene is part of a Metropolitan Statistical Area, alongside Albemarle, Buckingham, Fluvanna, and Nelson counties.²



Situated in central Virginia, near the Blue Ridge Mountains and Shenandoah National Park, Greene is a prime destination for outdoor recreation. The county sits at the headwaters of more than six miles of the James and Rappahannock Rivers making it part of the Chesapeake Bay Watershed.³ The county has placed approximately 8,700 acres, or 8.5% total, of the county land within conservation easements, making protection and preservation a priority.⁴

There are four census tracts (figure G.x.2) within Greene County, as of 2020, with tract 302.01 around Ruckersville maintaining the largest percentage of the population at approximately 7,000 people - per the 2020 U.S. Census. This census tract has been undergoing a transition over the last few decades from a rural community to a largely suburban community with many residents out-commuting to other areas for



work and school.³ Along with Route 29 in Ruckersville, Route 33 which runs diagonally across all four census tracts encompasses much of the projected growth areas in and around Stanardsville.³ These growth areas present opportunities for the county to play a critical role in equitable development and pathways to diverse and thriving communities.

As part of the Regional Equity Analysis, we evaluated the county map and the naming conventions utilized for each of the four census tracts so that they accurately reflect the resident's point of view. In general, the county follows the voting district naming conventions (figure G.x.2), however there are additional areas that have developed unique identifiers within the community which reflect the history, neighborhoods, and pathways across the county. Census tract boundaries changed after the 2020 census and 2019 data was collected for this analysis. In order to reflect these changes, census tract 302, which as of 2020 consists of census tracts 302.02 and 302.01, will be referred to as Ruckersville/Midway. Monroe and Stanardsville were not affected.

Greene County is proud of its rural heritage and independent spirit, which is reflected in the voices and commitment the community has to developing and establishing meaningful change and growth. This research and analysis allow us to better visualize information and link it with quality-of-life indicators to develop a regional profile that will aid in advocating equity, connection, and wellbeing across the region.

Focus Areas

Throughout our research and interview process, we gained an intimate understanding of Greene County through first-hand accounts of residents and employees. This analysis has allowed us to identify certain barriers and common themes that were expressed through our interviews and focus groups with key stakeholders. In particular, one theme that stood out in the process was the idea of an urban and rural divide. Being a rural county Greene has expressed frustration with the inability to keep up with

more urban and rapidly developing regions across the Commonwealth of Virginia. The overarching goal is to create highly efficient, connected, and livable communities that are desirable to live in and remain true to the Greene County spirit.

Working towards identifying the intersections of need, desire, and opportunity will be necessary in creating equitable spaces and quality of life in the region. By providing relevant data that will aid in the process of institutional accountability and opportunity for collective action, we can ensure justice and openness. Researchers will only begin to understand these barriers by first listening to their community. A key stakeholder raised the point, “I think it's doing the research, but the very important research is listening to the primary sources, which are the residents.”

Through collaboration with key community members, the compiled Greene County equity profile highlights the barriers and focus areas raised by stakeholders ranging from food insecurity and access to advanced medical care to funding deficiencies from low population counts. Residents face



unprecedented accessibility concerns in a time of modernization and digitalization; however residents remain resilient and continue to speak out in support of their communities and advocate for vulnerable residents that are unique to many rural counties in Central Virginia.

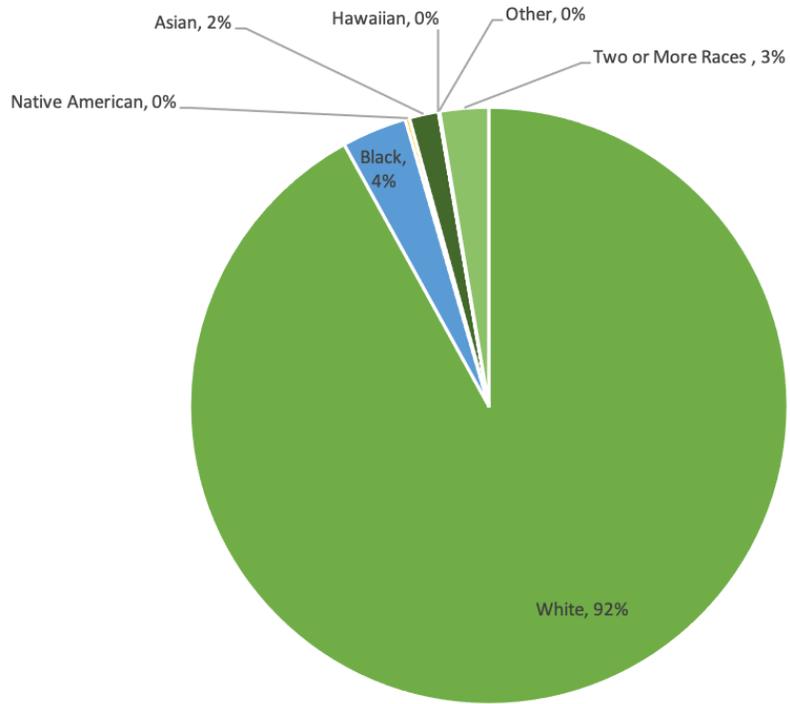
Keeping equitable planning with quality of life and community wellbeing at the forefront of the decision-making process is highly important, and will support the invisible, social, legal, and institutional barriers to making the community more

accessible to all. This analysis hopes to serve as a key resource for community members in advocating for its development and recognition while advancing equitable access for all residents and vulnerable members of Greene County.

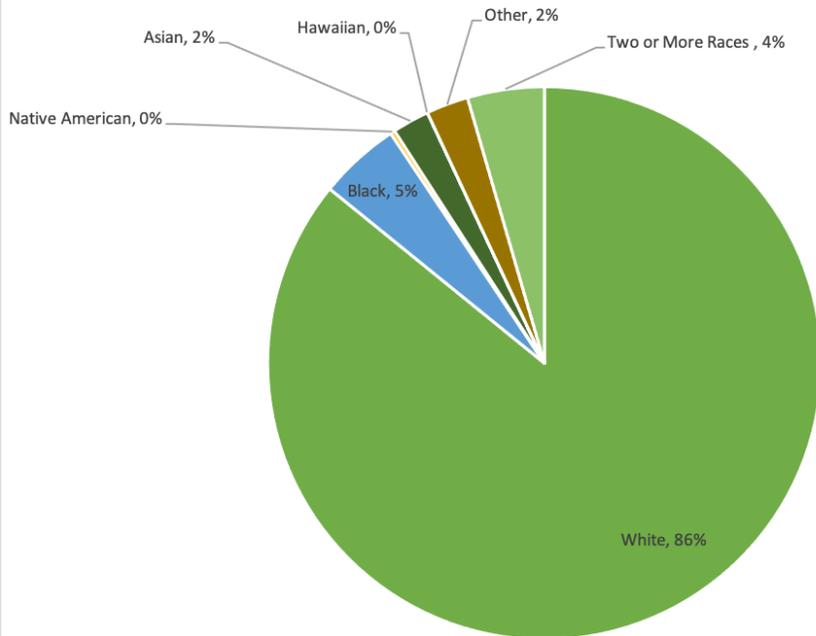
3.1 Demographics

3.1.a. Race

Greene County has a large white population with all three census tracts having a white population over 80%. The second highest racial demographic in Greene County is the Black population which is at 10% or lower for all tracts (Figure G.x.4). Due to the low minority population in Greene County it is difficult to access data sources disaggregated by race. Furthermore, data may not accurately show vulnerability of specific minority groups in the county since data may be divided by the total population rather than by each minority group. Although there is a large population of white individuals in Greene, we still see racial disparities. The largest population of unemployed people are Black at 6.6% versus 4.4% for white. The dropout rate for Black students is 11.1% compared to just 1.19% for white students. It is often difficult to provide services to smaller communities. An interview respondent mentioned "it can be a challenge to reach vulnerable populations such as the Spanish and Mennonite communities as they often do not feel comfortable reaching out for assistance and how important it is to build trust to allow them to feel comfortable asking for help and for receiving help when they need it."



Racial Demographics in Monroe, Census Tract 301.02 (2019)



Racial Demographics in Standardsville, Census Tract 301.01 (2019)

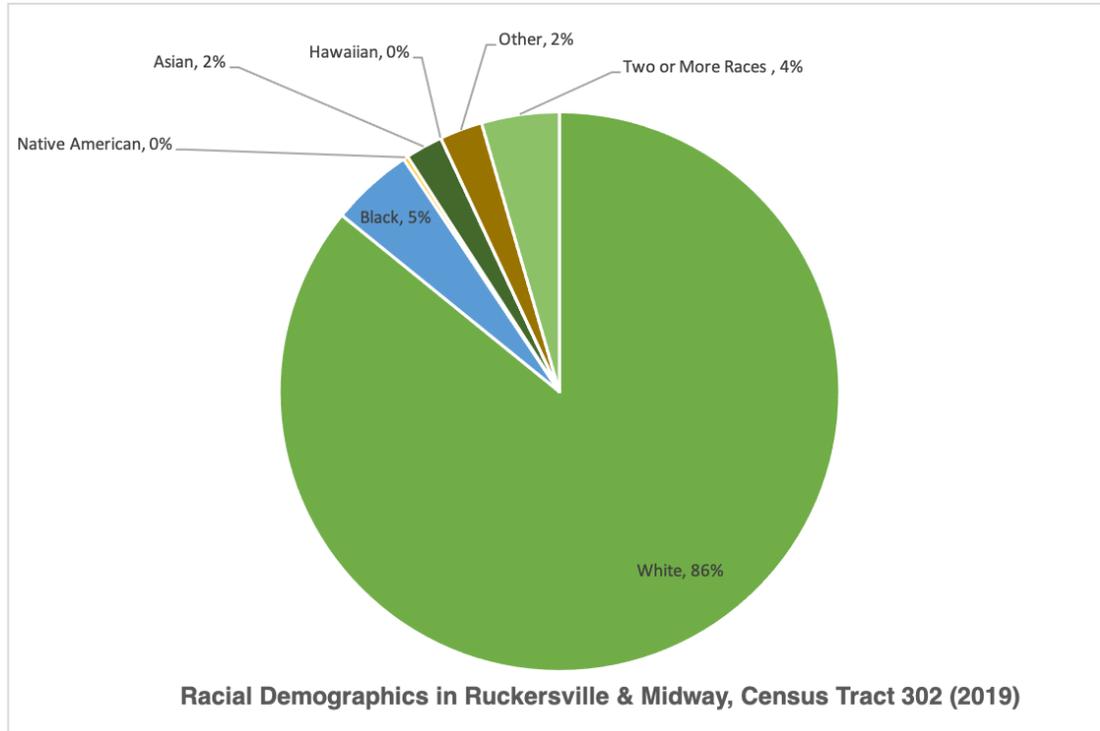


Figure G.x.4, G.x.4, and G.x.4: Greene County Racial Demographics by Percentage of Total Population by Census Tract, 2019. (Source: American Community Survey, 5 Year Estimates).

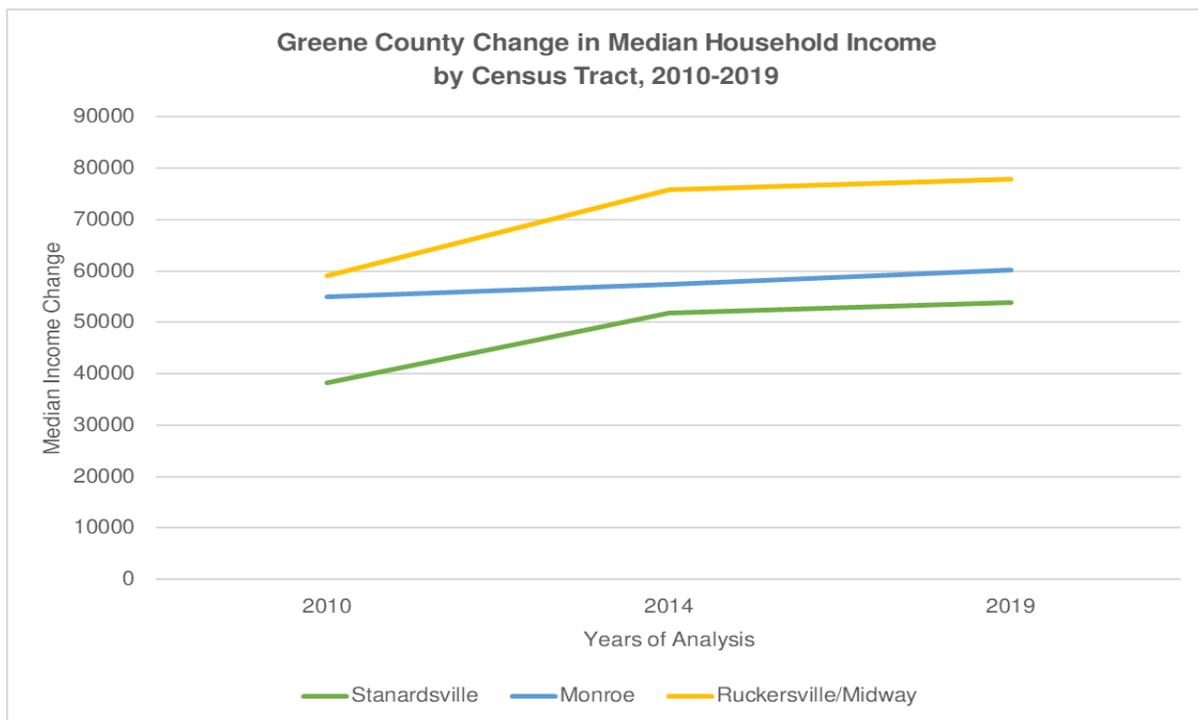
3.1.b. Income

Income is utilized as a measure of the economic wellbeing of residents and their communities. By evaluating this data we can provide insight into the financial resources of households which are strongly linked to other indicators such as employment levels, educational attainment and health⁵. Median household income has grown only modestly in recent years, with household wealth not returning to pre-recession levels and further affected by the economic downturn as a result of the COVID pandemic.⁷

An analysis of household income metrics from the U.S. Census Bureau’s American Community Survey (ACS) for the years 2010, 2014 and 2019 was developed for Greene

County and has revealed an income divergence between the census tracts. As seen in figure G.x.5 below, the Ruckersville/Midway tract rises over the other two, with household incomes breaching the \$200,000 mark. This rise is most likely due to the tract's recent growth in both population, development, and accessibility to higher paying jobs outside the county. The change between median household income levels, as seen in figure G.x.6 below, also reflects this change with Ruckersville/Midway rising since 2010. However, Stanardsville and Monroe tracts remained largely static with little change between 2014 and 2019.

The median household income in Greene County for 2019 was \$67,398 which is more than the U.S. median annual income of \$65,712.⁶ However, the average household income difference between white and Black residents [for 2019] is at an astonishing 138%, indicating significant income inequality in Greene County. Figure G.x.5 demonstrates this disparity, showing the Ruckersville/Midway tract with only a slight 13% difference. However, the contrast with the Stanardsville census tract at 62% and Monroe at 76% indicates a racial barrier that requires further analysis.



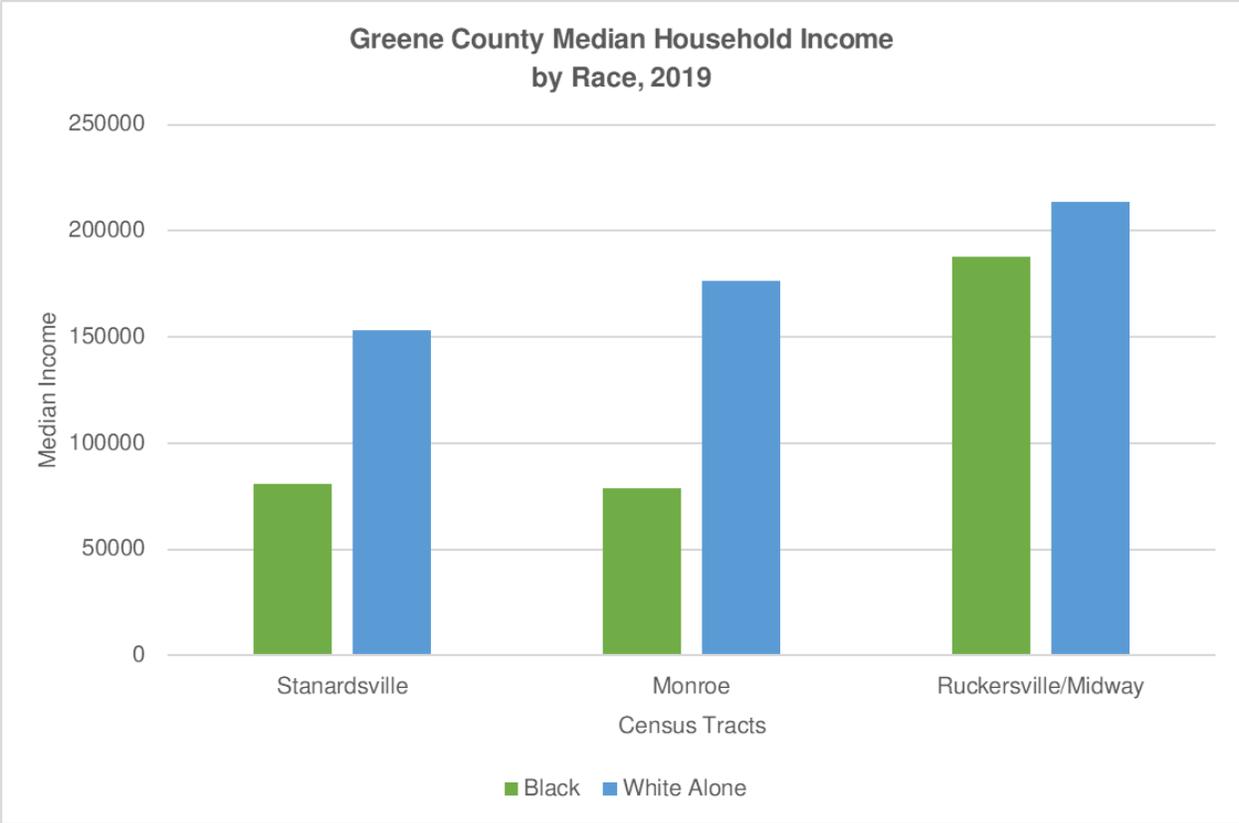


Figure G.5: Greene County Change in Median Household Income by Census Tract, 2010-2019. (Source: American Community Survey, 5 Year Estimates).

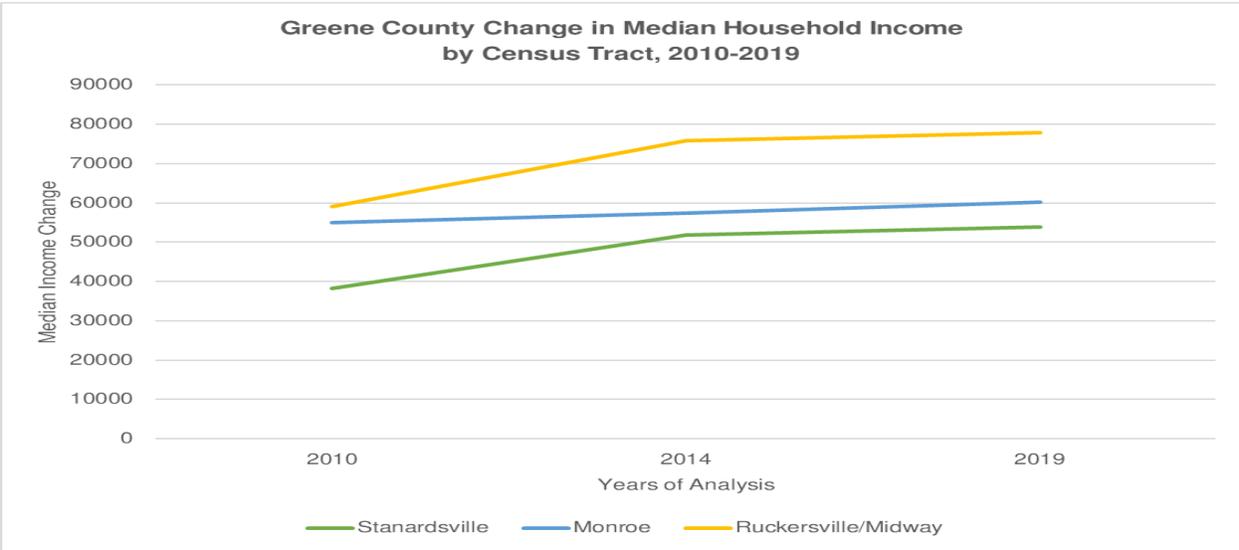


Figure G.x6: Greene County Change in Median Household Income by Census Tract, 2010-2019. (Source: American Community Survey, 5 Year Estimates).

3.1.c. Age

The median age in Greene County was 39.6 years old in 2019 (Figure G.x.7), but the change in time from 2010 suggests that the population is aging or there is an out-migration of younger people. In the coming years, services and programs tailored to the needs of seniors may become more necessary in Greene County.

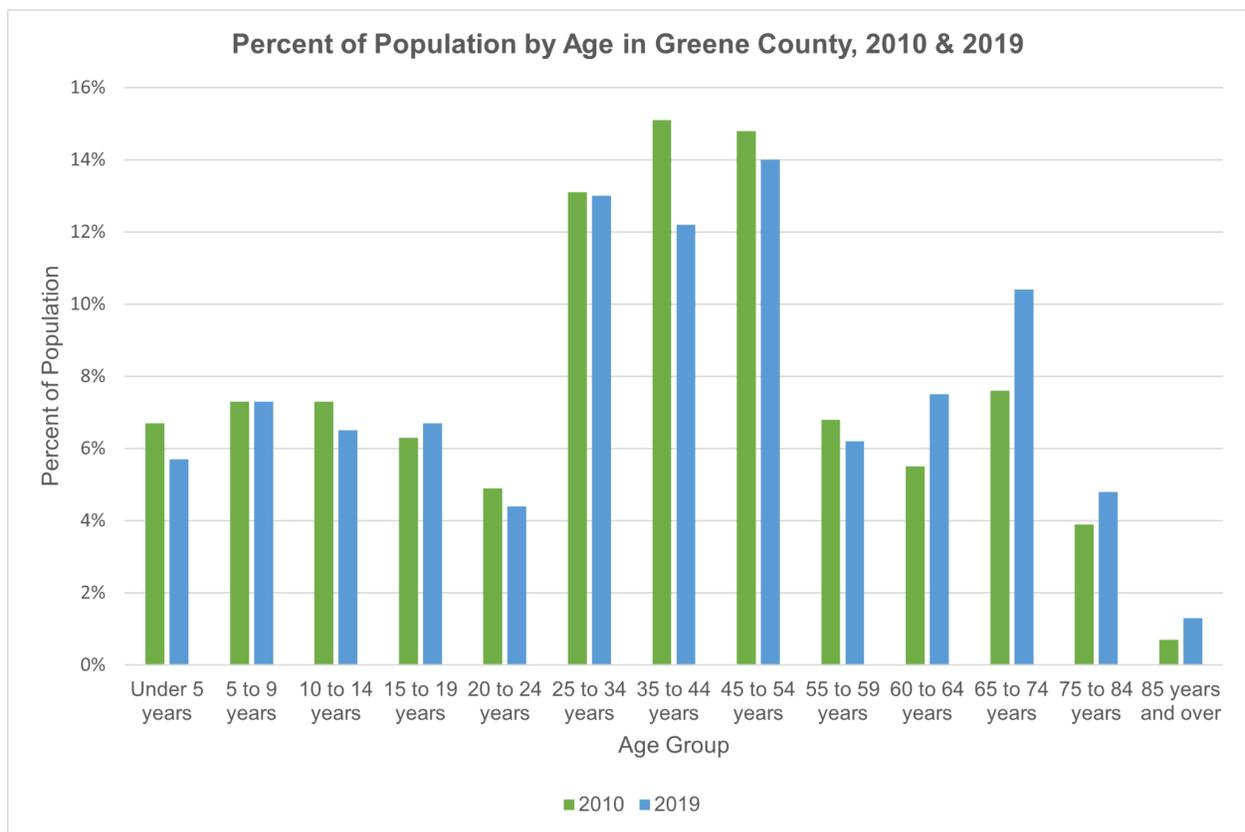


Figure G.x.7: Greene County Percent in Population by Age, 2010-2019. (Source: American Community Survey, 5 Year Estimates).

3.2 Food Insecurity

Food insecurity means being without regular and reliable access to affordable and nutritious food, the causes of which are often complex and can include poverty, unemployment, low income, lack of affordable housing, poor healthcare access and racial discrimination⁸. The use of the Federal Supplemental Nutrition Assistance Program (SNAP) which provides benefits to low-income families can reduce the likelihood of being food insecure by roughly 30%, making the program valuable to the approximately 1,550 food insecure people in [2019] Greene County.^{9,10}

While Greene County is making excellent strides at building intercommunity accessibility to food assistance with local organizations such as Feeding Greene, the use of SNAP benefits appears critical for a small county that doesn't quite meet the poverty level threshold for most grants according to an interview participant. As of 2019, the percentage of families receiving SNAP benefits is largest within the Stanardsville census tract at 39% and lowest in Monroe at 38%. However, all tracts remain relatively close (Figure G.x.9).

All three census tracts displayed a decrease in SNAP recipients in 2014, mostly likely due to the improving economy after the Great Recession, but as seen in figure G.x.10 Ruckersville/Midway saw the highest increase between 2014 and 2019 by 7%.

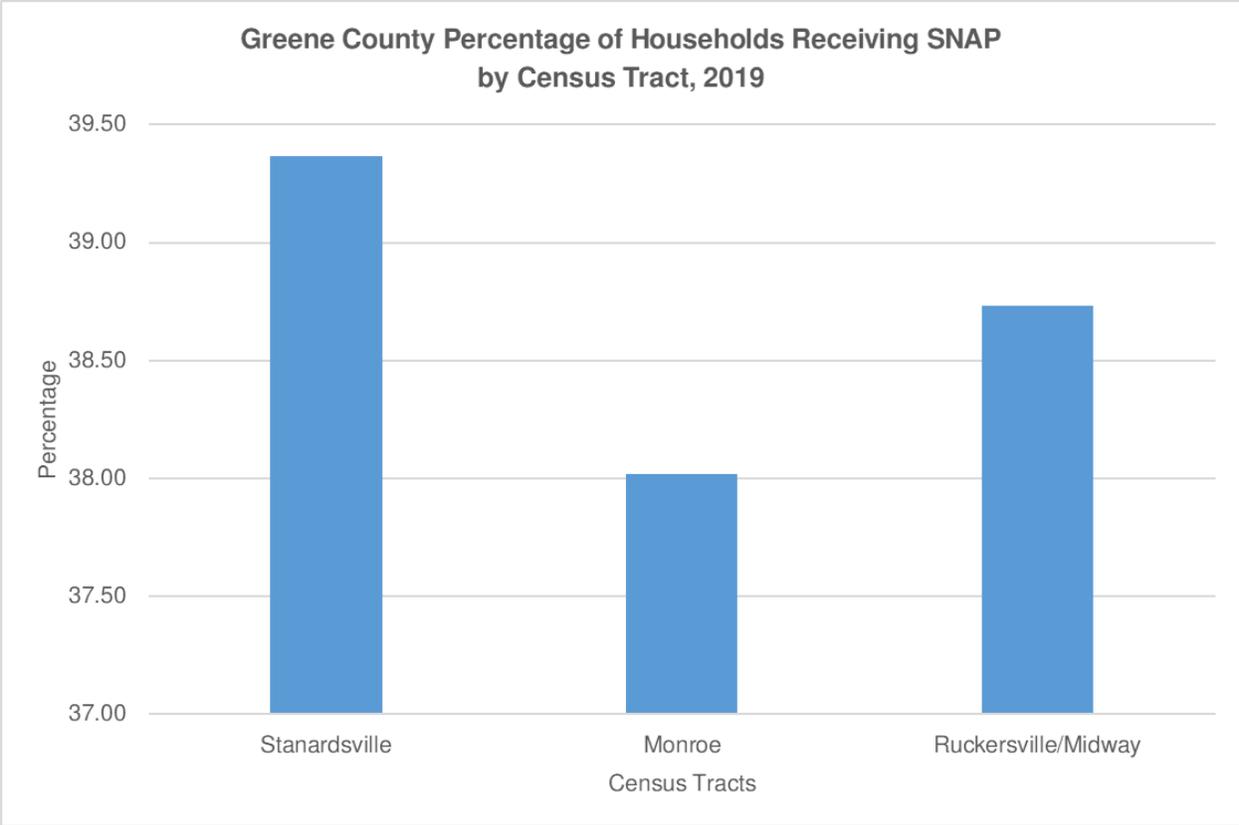


Figure G.x.9: Greene County Census Tracts. Map created by UVA Methods of Community Engagement cohort. (Source: American Community Survey, 5 Year Estimates).

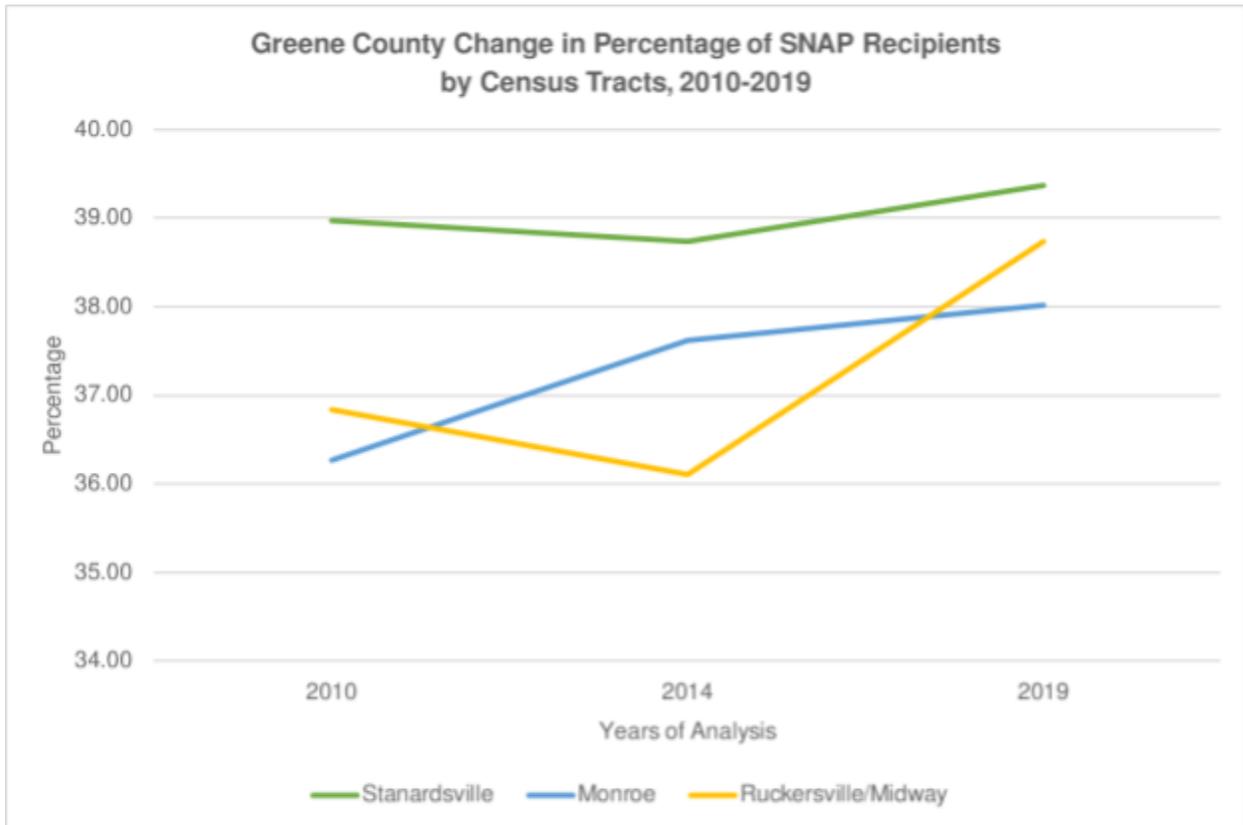


Figure G.x.10: Greene County Change in Percentage of SNAP Recipients by Census Tract, 2010-2019. (Source: American Community Survey, 5 Year Estimates).

3.3 Employment

Employment opportunities and statistics are often indicators that define the overall health of communities. Opportunities regarding employment within Greene County were talking points that were discussed often throughout the stakeholder interviewing process. Such concerns regarding barriers to equitable job accessibility ranged from outsourcing to lack of transit connection to decreased upward mobility due to low wages. These concerns are prevalent in rural Virginia but can be exacerbated in

counties like Greene due to Greene's close proximity to more urban development areas.

Stakeholders described how not many individuals that work in Greene County actually live in the county itself but commute from surrounding counties and towns. Often, the permanent residents are faced with competition in a labor market saturated with outsiders and do not have access to the jobs in their own communities. Low-income residents are hit the hardest in the job market due to lacking transit infrastructure connecting surrounding communities. Being short of transit mobility can confine many low-and middle-income residents of Greene to the county itself and withhold the opportunity to search for jobs in other larger markets with higher access to career mobility and diversity. One key stakeholder in the interviewing process observed, "sometimes the greatest opportunities that we can offer to our young people are sadly opportunities that end up relocating them to other places doing bigger things". When opportunities arise in Greene, particularly for younger residents, they often leave the area after receiving their training for larger job markets. Stakeholders emphasized the importance of retaining such individuals in the communities of Greene.

In our research we identified key statistics that highlight the overall health of employment statistics within the populations of Greene County. Disaggregating employment statistics further broke the data down by race and gender to identify the health and access to individual demographic groups. The data was obtained from the United States Census American Community Survey (ACS).

COUNTY WIDE EMPLOYMENT STATISTICS

Employment statistics can visually represent the overall economic and financial health of communities and larger regional areas. In our research of Greene County we focused on the unemployment rates and percentages at the county wide level. Over the 10-year period the employment rate varied slightly, reaching a low of 64% in 2014 and

high of 69.5% in 2019. One promising trend we observed on the countywide level was the steady decrease in unemployment rates. In the 10-year period from 2010 to 2019 the unemployment rate dropped four percentage points to a low value of 3.4% in 2019. As indicated by stakeholders, a threat to employment stability in Greene is the influx of out-of-county residents to in-county jobs. They voiced support for initiatives that provide educational and trade skills to residents.

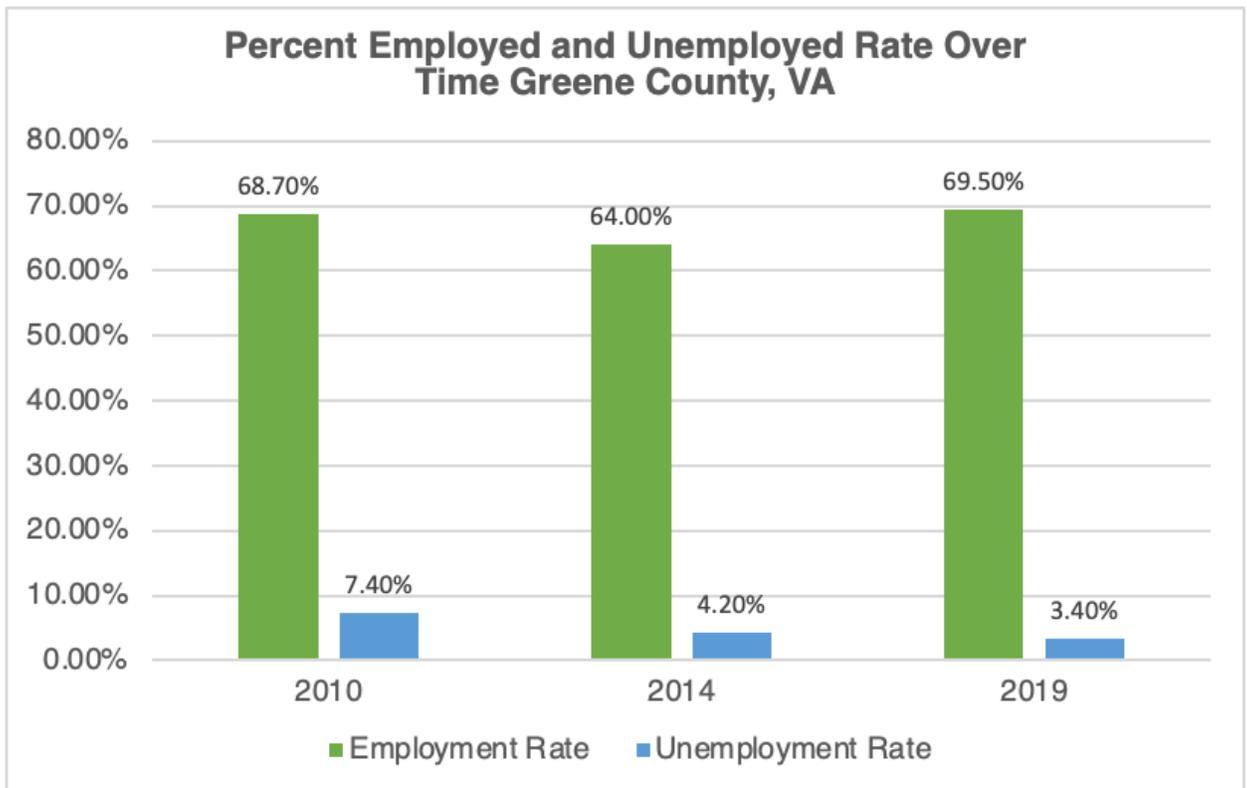


Figure G.x.11: Greene County Percent Employed and Unemployed Rate over time, 2010-2019. (Source: American Community Survey, 5 Year Estimates).

BY RACE

Throughout the county all but two categories had employment rates higher than the countywide average of 69.5%. The white alone population had an employment rate of 64.3% which is around four percentage points lower than the average. One area of concern was the unemployment rate of the Black population in Greene County. The Black demographic group of the county experienced an unemployment rate of 6.6% in

2019 which is over two percentage points more than the closest other group of white alone at 4.4% (Figure G.x.12).

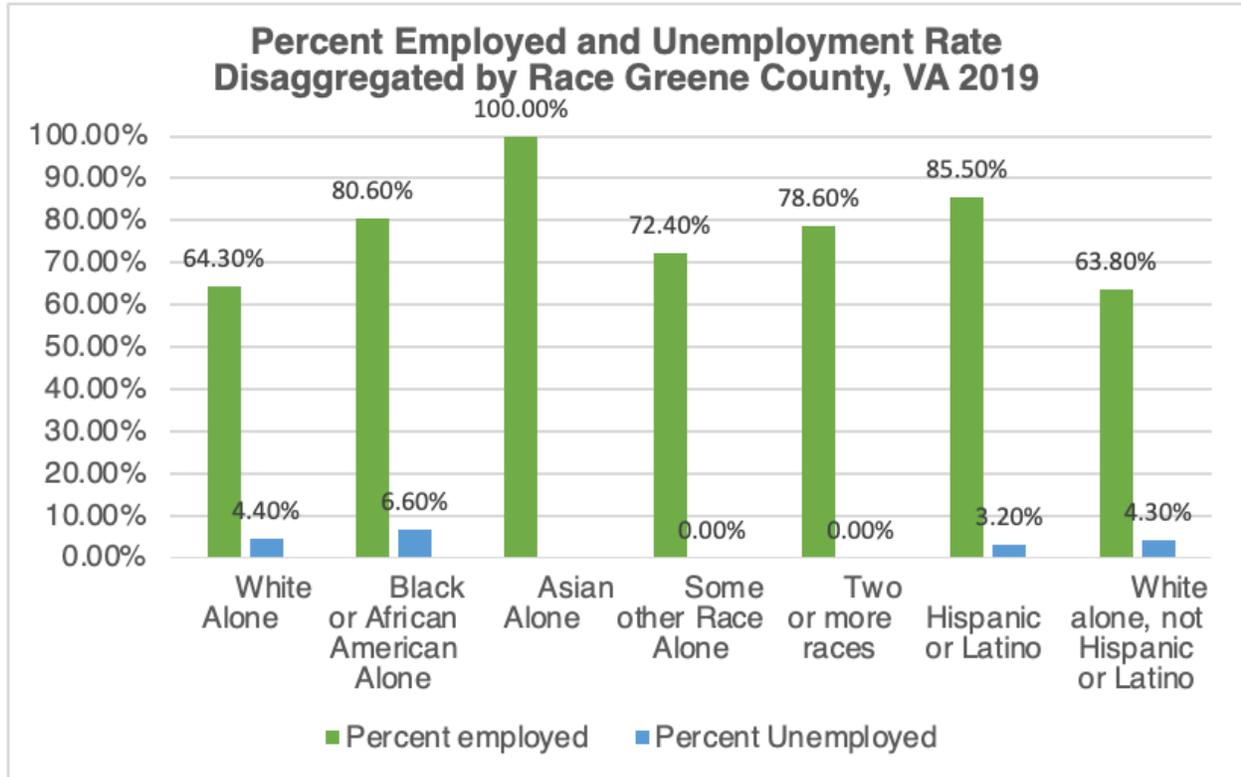


Figure G.x.12: Greene County Percent Employed and Unemployed Rate Disaggregated by Race, 2019. (Source: American Community Survey, 5 Year Estimates).

BY GENDER

In Greene County female employment rates at 70.3% are 17 percentage points less than the male employment rate of 87.2%. The female employment rate was also around two percentage points higher than the male employment rate. It is possible that the jobs offered within the county can create a barrier for female access.

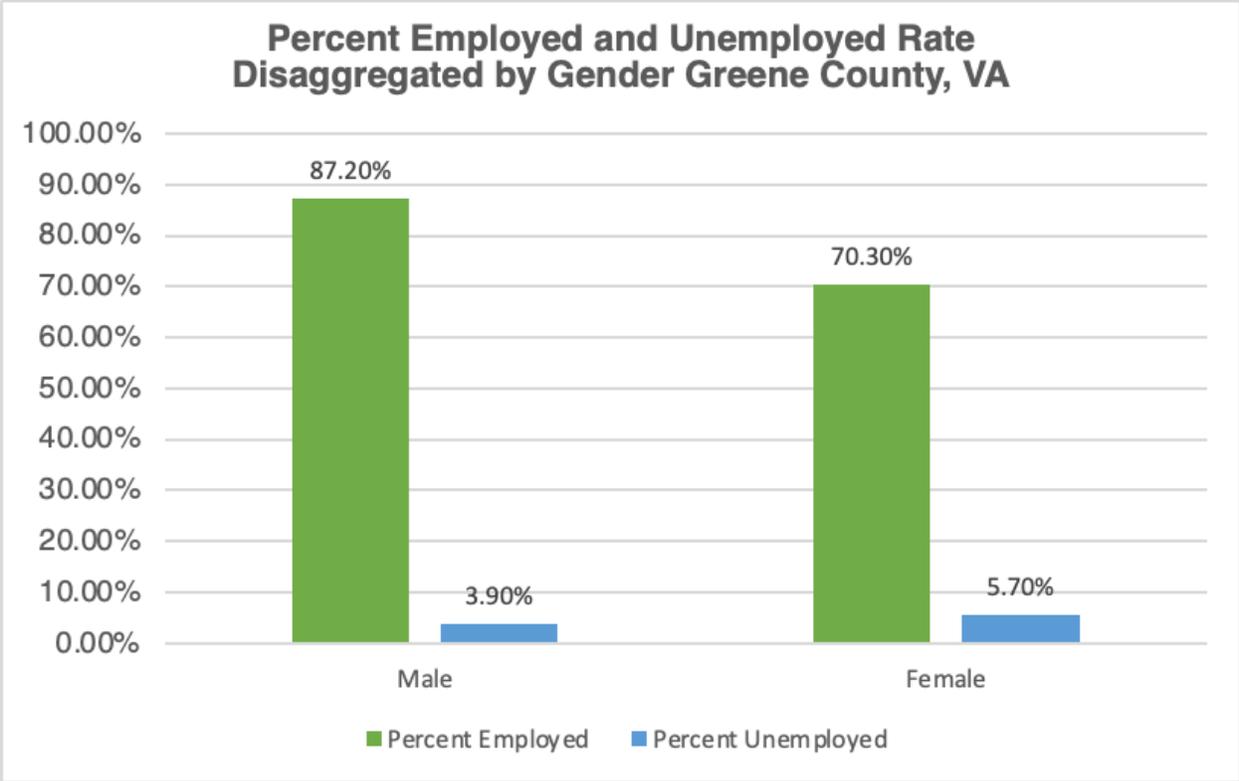


Figure G.x.13: Greene County Percent Employed and Unemployed Rate Disaggregated by Gender, 2019. (Source: American Community Survey, 5 Year Estimates).

3.4 Housing

Overall, there was much variation across the three localities in Greene County and no consistent pattern of housing characteristics. In Stanardsville, rent burdened households were extremely high and the lowest median home value in the county. In Ruckersville/Midway, the data revealed huge increases in median rent, but with a decrease in rent burdened households. In Monroe, housing characteristics were optimistic, with decreases in the percentage of rent burdened households and increased home value. While housing patterns may be inconsistent in Greene County, housing access is a vital indicator of quality of life. As a stakeholder said, "you can't

expect someone to live their life normally, thrive, and extend themselves when you have the constant worry about housing...you can't better yourself”.

In the Ruckersville/Midway area, median rent increased by 68.5% between 2014 and 2019, which was the largest jump in gross rent in the county. In both Monroe and Stanardsville, the median gross rent has decreased since 2014. The decrease in Stanardsville was inconsequential, at just about negative one percent. In Monroe, the decrease in rent was slightly higher at -14.67%. The median gross rent in 2019 ranged between \$867 and \$1316 a month.

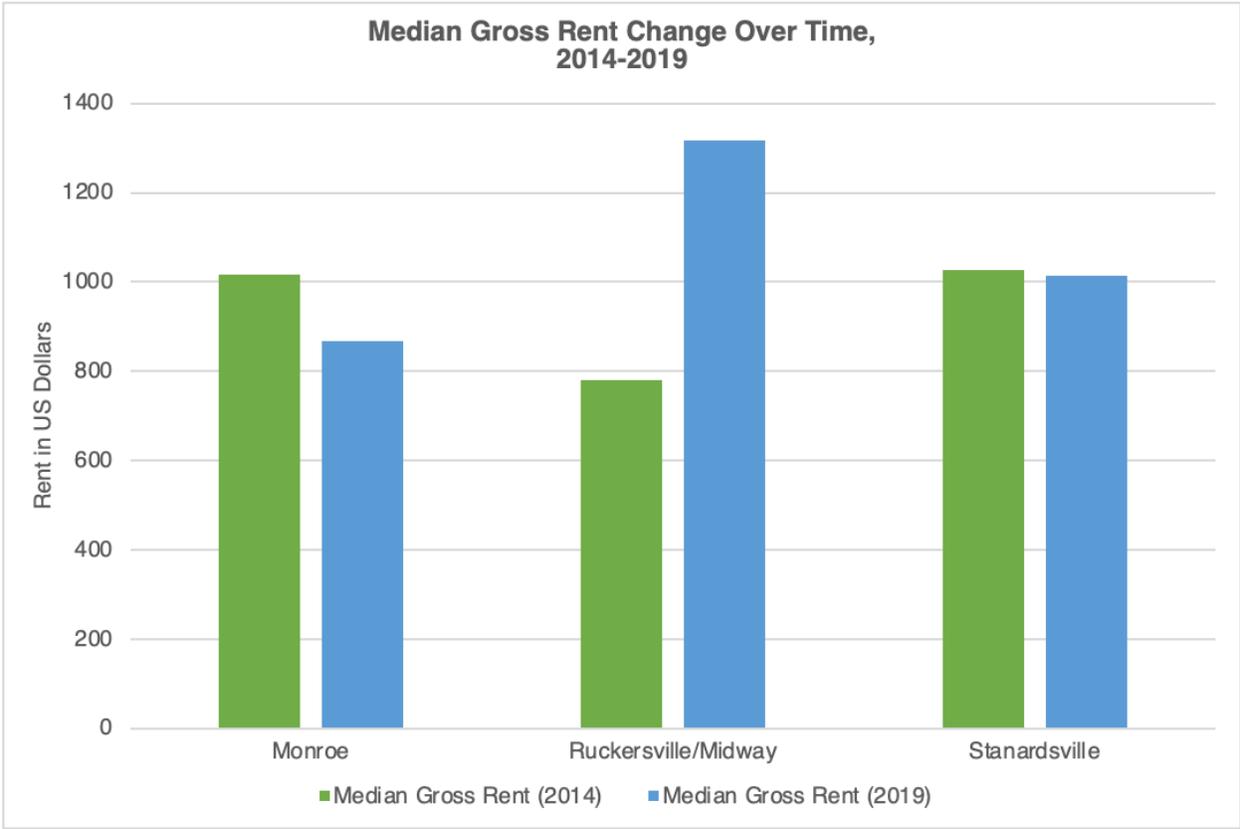


Figure G.x.14: Greene County Median Gross Rent Change Over Time, 2014-2019. (Source: American Community Survey, 5 Year Estimates).

Monroe is the only census tract that increased in median home value, with an 8.65% increase. Both Stanardsville and Ruckersville/Midway decreased in median home value by -12.17% and -2.4% respectively. Median home values in Monroe and Ruckersville/Midway were similar in 2019, valued at just around \$250,000. In 2019, Stanardsville had a median home value of \$175,400 (Figure G.x.15).

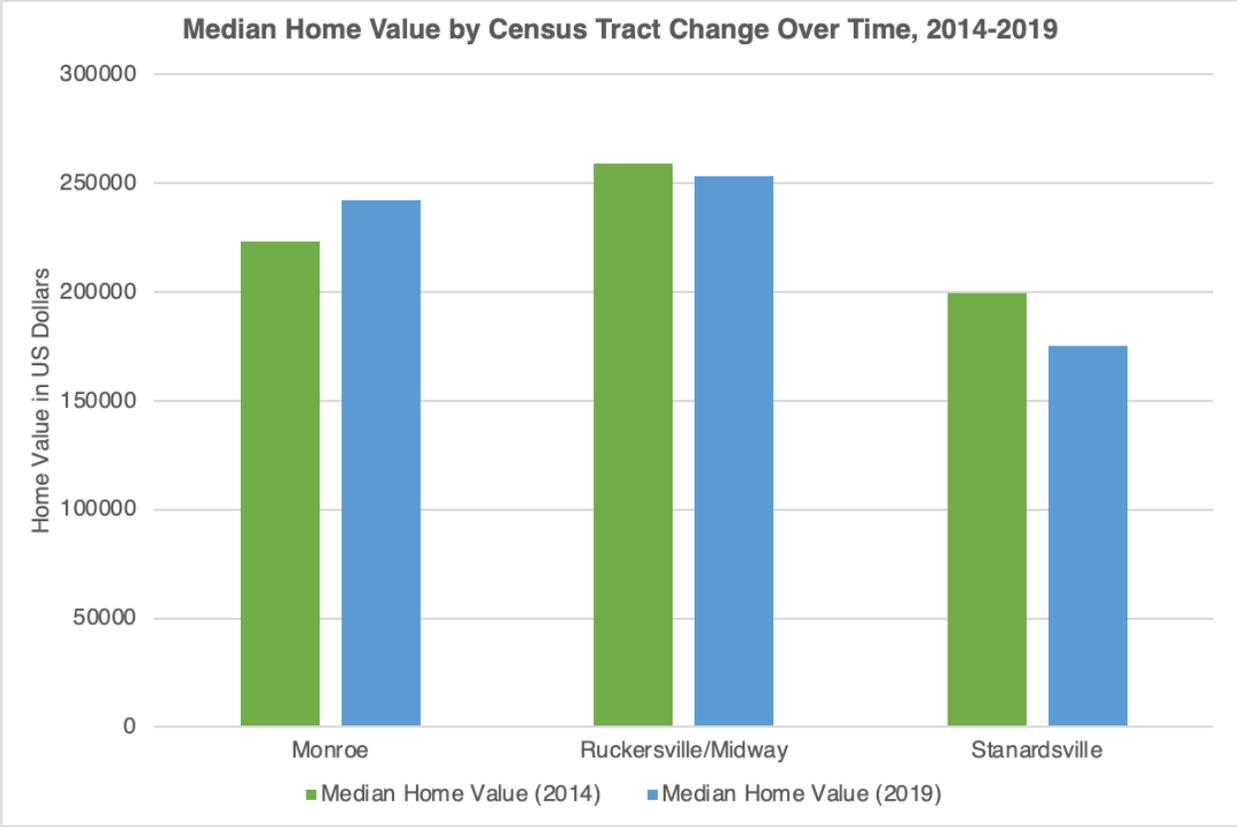


Figure G.x.15: Greene County Median Home Value by Census Tract Change Over Time, 2014-2019. (Source: American Community Survey, 5 Year Estimates).

Rent burden is defined as using more than one third of one’s total gross income on living expenses. Overall, 31.55% of the total households in Greene County are considered rent burdened. In Stanardsville, just a little under half of the households are rent burdened. This increased from 45% to 47% between 2014 and 2019. In Monroe and Ruckersville/Midway, the percentage of rent burdened households decreased to 23% and 28% in 2019 respectively. Generally, the percentage of rent burdened households decreased in 2019.

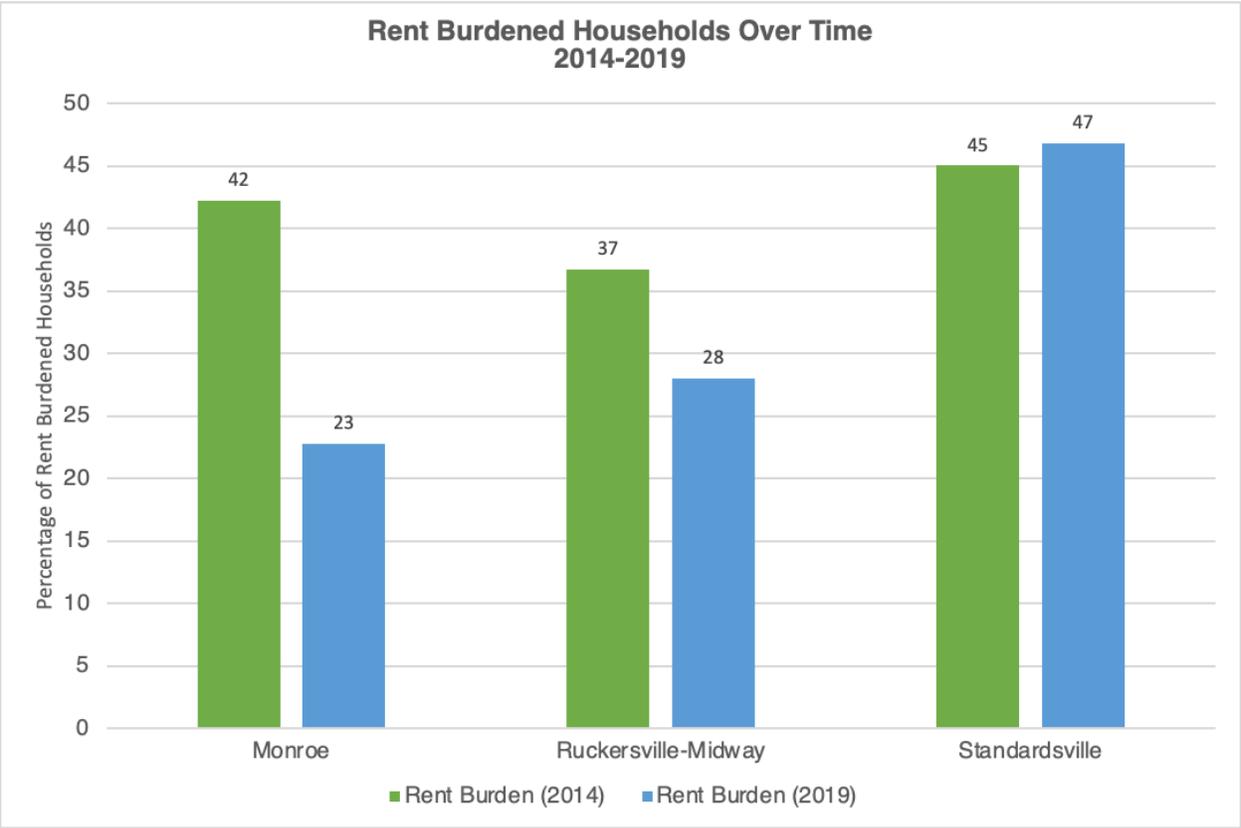


Figure G.x.16: Greene County Rent Burdened Households over time, 2014-2019. (Source: American Community Survey, 5 Year Estimates).

3.5 Education

Education and school outcomes often serve as the bedrock for future generations of communities regardless of county or region. The quality of education and opportunities

we offer our younger generations has a direct effect on counties due to the ability for young people to transition from eager students into the workforce. In this equity profile we used educational data from the State of Virginia School Quality Index and Virginia Department of Education to highlight key categories that serve as indicators for positive education outcomes.

We focused on graduation and dropout statistics as well as financial wellbeing. Stakeholders interviewed during the process voiced some concerns on Greene County students having access to quality post-high school education, whether it be technical training or college-level degree access. Overall, the main topic of discussion through our research and interviewing process was the concern of equitable access to education. Greene County could be classified as a busing district with central schools that serve school age residents ranging from kindergarten to high school countywide. Such a wide-ranging spatial distribution can take a toll on the ease of access for students living far from schools and those that lack adequate transportation access or services.

When school systems provide services to students outside of normal academic scheduled hours it can be difficult for many students to participate. This is why one stakeholder described how certain initiatives, especially health related, can often be tied into the end of the school day to promote higher participation and easier access. Below is an assessment of the statistical data representative of Greene County on a countywide basis.

GRADUATION DROPOUT RATES

In the 2018-19 school year, Greene County had a high school graduation rate of 91.3%. This value is 0.3% lower than the Virginia statewide average. The dropout rate for the same period in Greene County was 2.6%. Compared to the rest of the state, Greene does not have major issues with graduation and dropout rates (Figure [G.x.17](#))

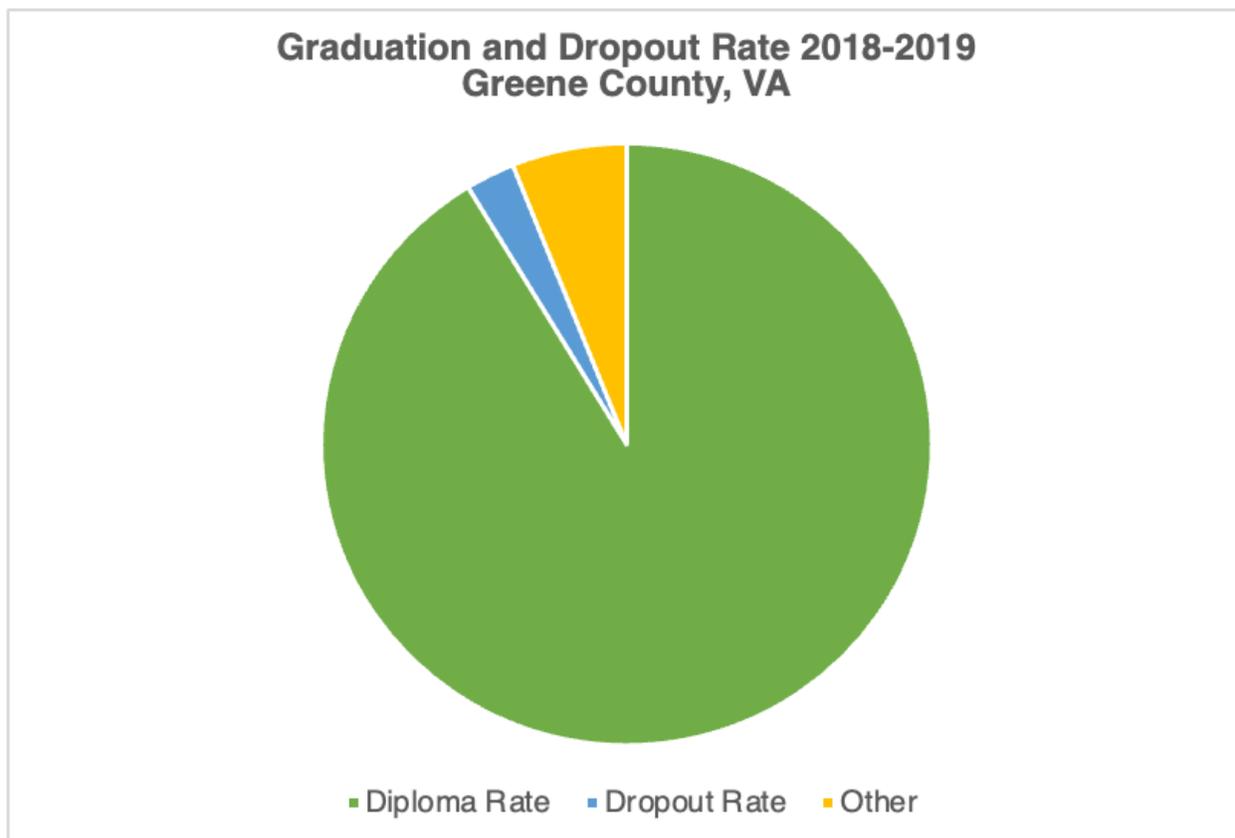


Figure G.x.17: Greene County Graduation and DropOut Rate, 2018-2019. (Source: American Community Survey, 5 Year Estimates).

RACE

The white population of Greene had the highest graduation rate and lowest relative dropout rate (Figure G.x.18). The data represents an alarming trend among the Black populations of the community. At 11.11%, the dropout rate of the Black demographic is around nine times higher than the closest other demographic and five times higher than the state average dropout rate. Such a high rate could highlight possible barriers within that particular demographic group to access proper educational opportunities within the county.

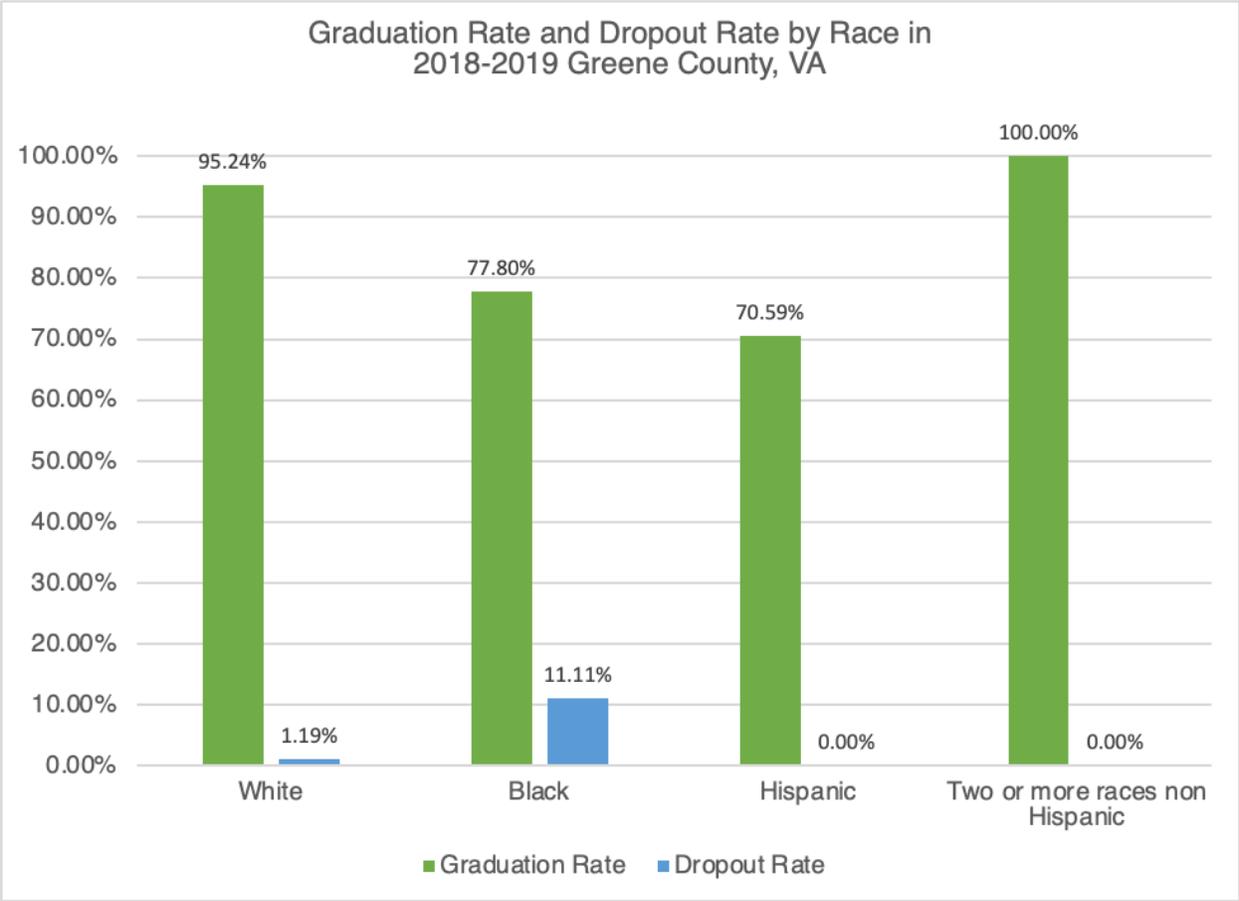


Figure G.x.18: Greene County Graduation and Dropout Rate by Race, 2018-2019. (Source: American Community Survey, 5 Year Estimates).

GENDER

Male students have lower graduation rates and higher dropout rates than females in both categories. Only 87.8% of males graduate compared to 98% of females (Figure G.x.19). Such a difference could highlight struggles or barriers experienced by high school aged male students within the countywide Greene public school network.

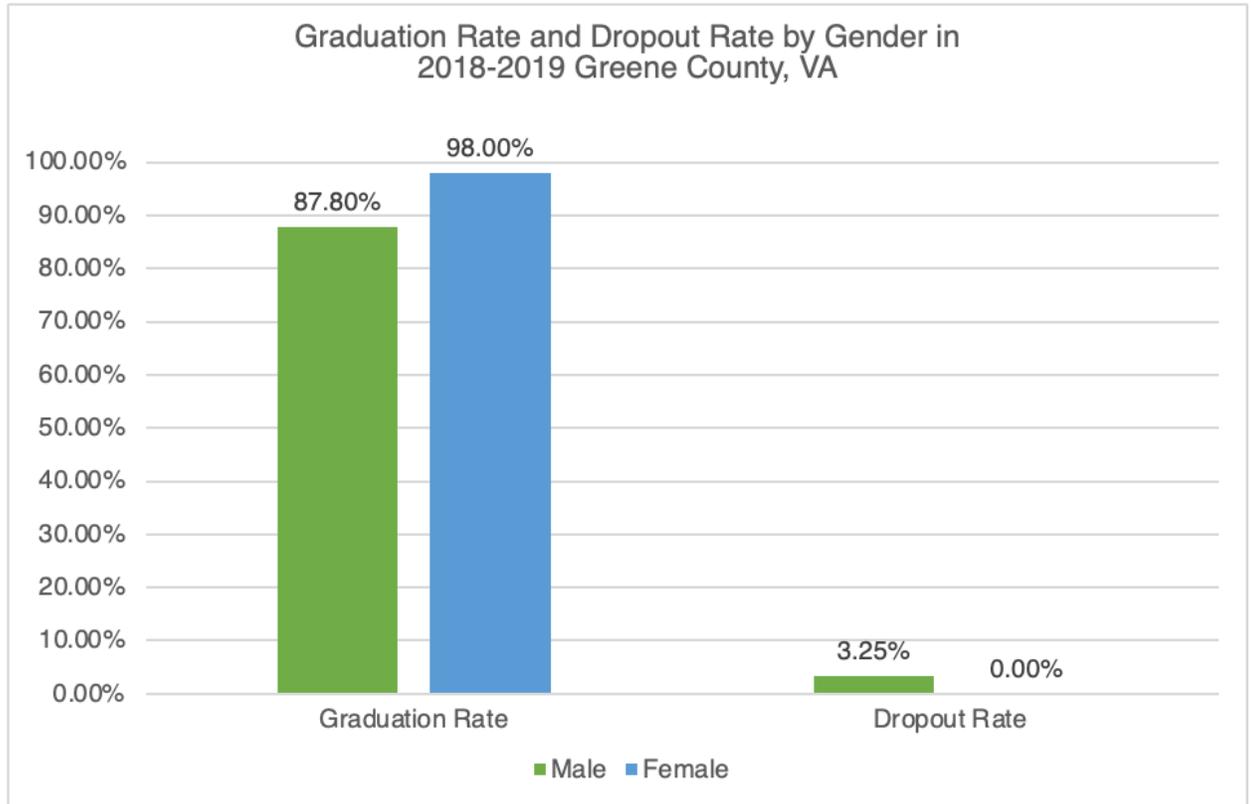


Figure G.x.19: Greene County Graduation and Dropout Rate by Gender, 2018-2019. (Source: American Community Survey, 5 Year Estimates).

FINANCIAL EQUITY

The issue of financing came up often in our interview process. This is not an issue only associated with education but virtually all county services. Being a small county, one key stakeholder described how it is usually difficult to apply and receive certain financial supplements, such as grants, due to Greene’s small population and relative stability in most community health indicators. On average, Greene Public Schools financial purchasing power per student is \$1,555 less than the state average over a 2-year period. One alarming trend was the decline in per-pupil funding per spending from 2018 to 2019 school years while the state average increased (Figure G.x.20). Such declines in funding or financial equity can have severe consequences on resources and services provided to students.

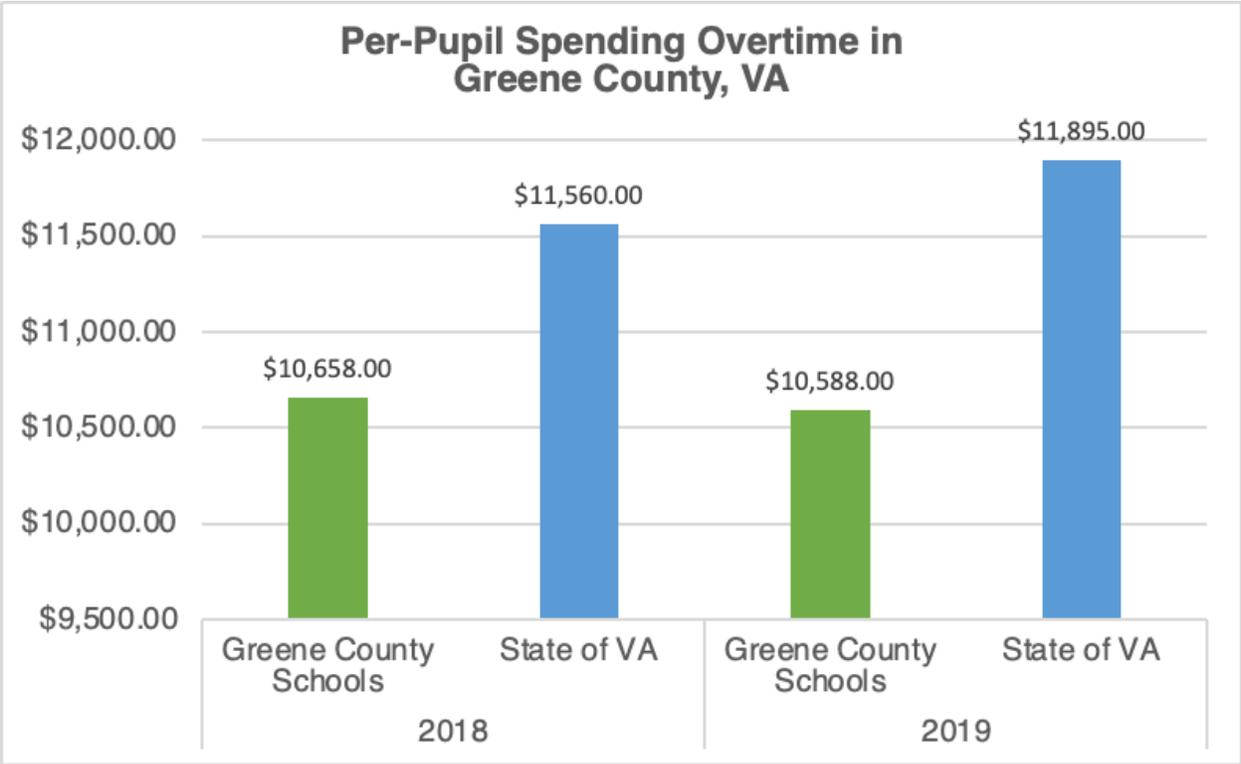


Figure G.x.20: Greene County Per-Pupil Spending over time, 2018-2019. (Source: American Community Survey, 5 Year Estimates).

Another indicator important to student wellbeing was the access and distribution of free and reduced lunches within the Greene County Public School system. Over the 9-year period a steady increase in the distribution of free and reduced lunch can be observed with an increase of around 3% for the relative time period (FigureG.x.21). The increase in participation could indicate greater issues with nutritional access and purchasing power of food resources for certain residents within Greene County. The free lunch and reduced lunch program can serve as a supplement to nutritional access for students who experience barriers and issues to adequate food access.

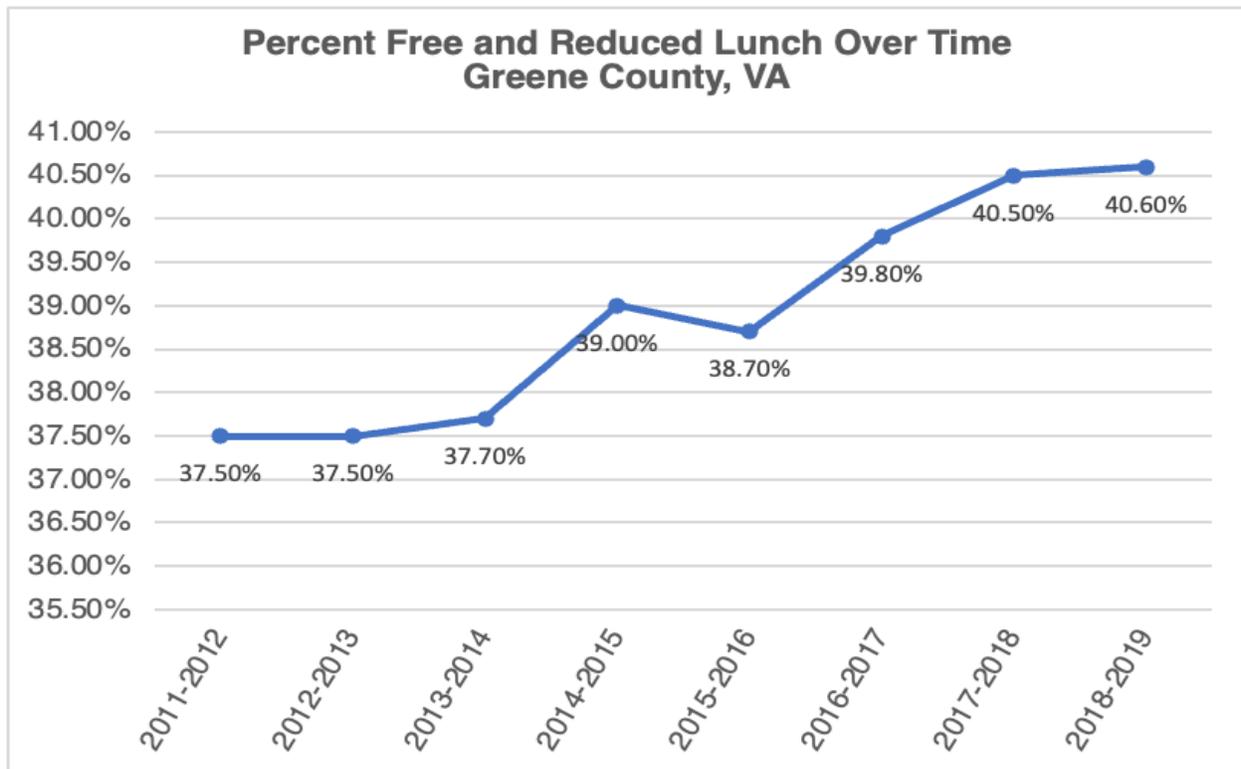


Figure G.x.21: Greene County Percent Free and Reduced Lunch over time, 2011-2019. (Source: American Community Survey, 5 Year Estimates).

3.6 Digital Divide

The digital divide underscores a host of other inequities in Greene County. A significant number of individuals in Greene do not own a computer or have proper internet and broadband services creating challenges when creating appointments, filling out forms, or accessing services such as telehealth. In Stanardsville, the percentage of households without access to a computer is as high as 26% (figure G.x.22) and in Monroe 21% (figure G.x.24) of white residents do not have access to the internet as shown by figure 1 and figure 3 respectively. Although there are computers present at the county library, individuals who are unfamiliar with the use of a computer have a hard time utilizing these services. Interviewees emphasize the need for internet literacy opportunities in addition to providing proper digital access in the region.

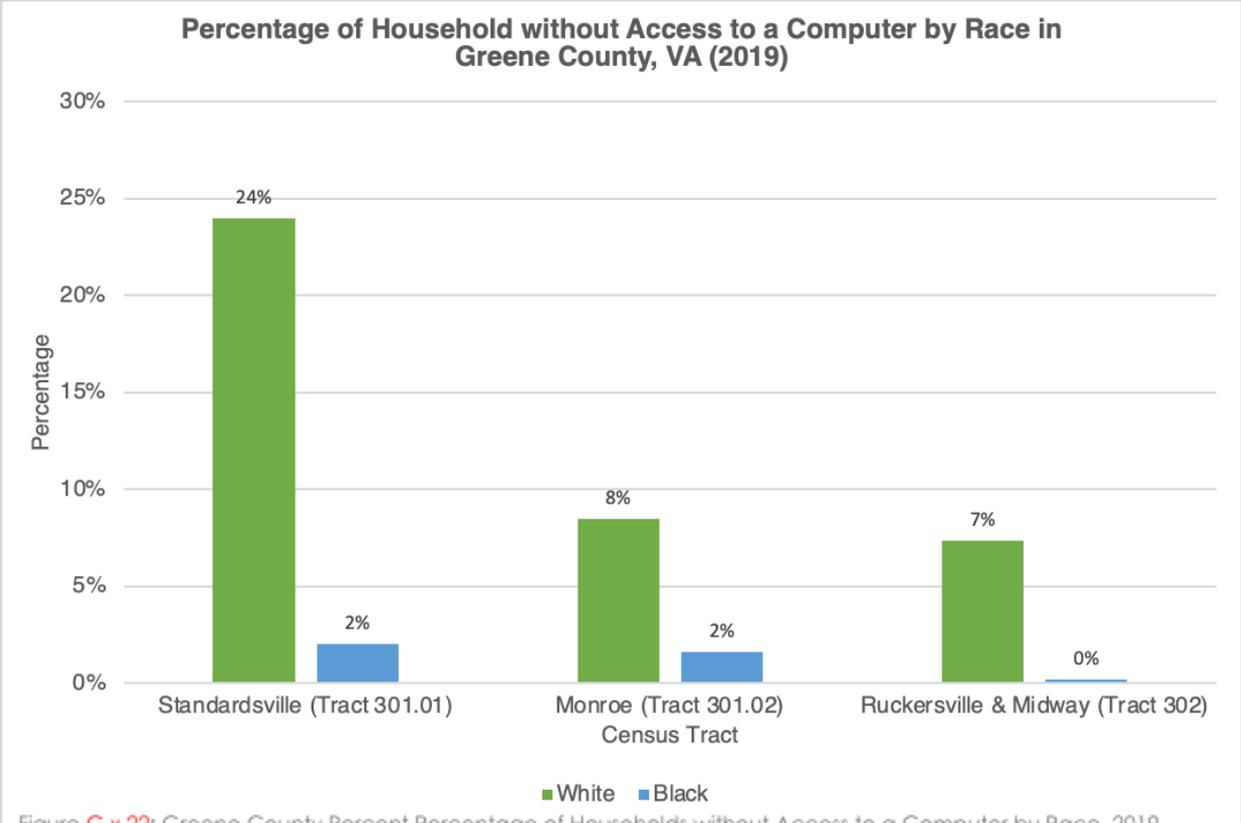


Figure G.x.22: Greene County Percent Percentage of Households without Access to a Computer by Race, 2019. (Source: American Community Survey, 5 Year Estimates).

Figure G.x.22: Greene County Percent Percentage of Households without Access to a Computer by Race, 2019. (Source: American Community Survey, 5 Year Estimates).

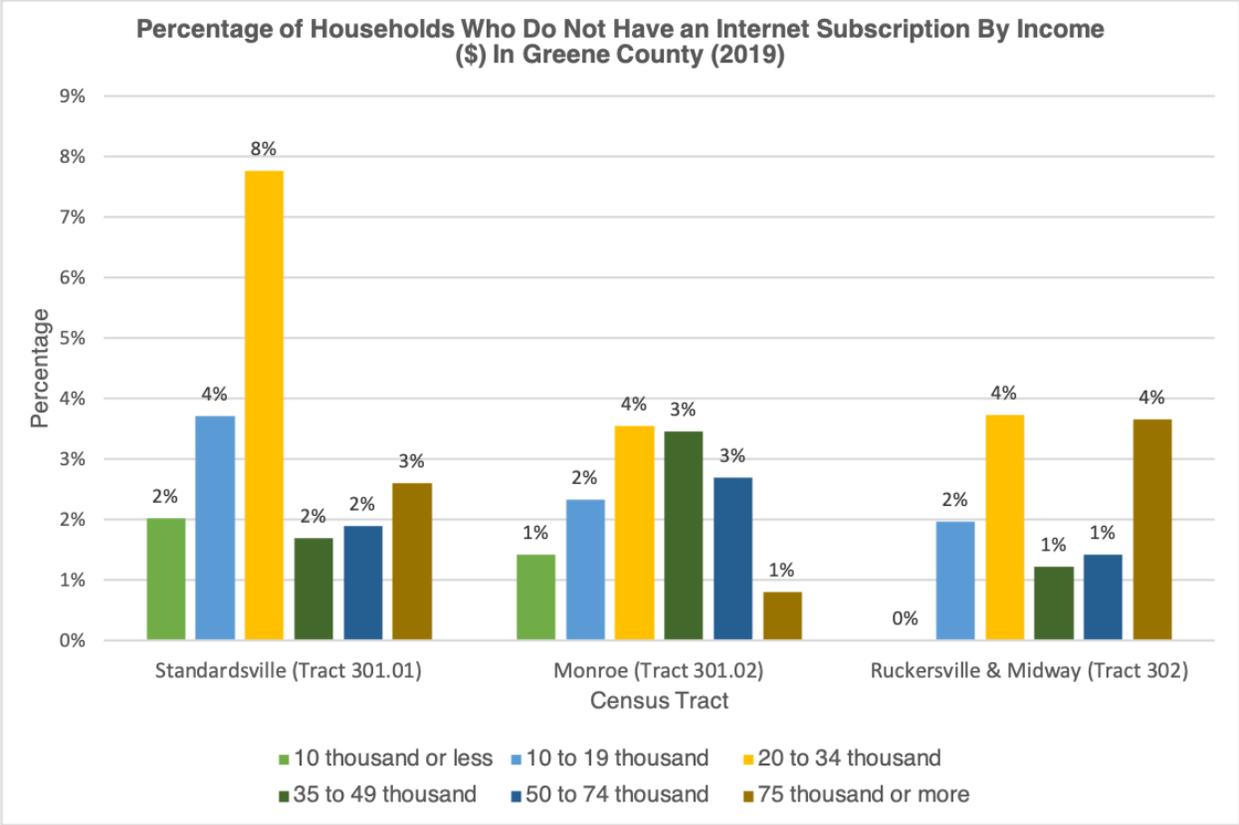


Figure G.x.23: Greene County Percent Percentage of Households without an Internet Subscription by Income, 2019. (Source: American Community Survey, 5 Year Estimates).

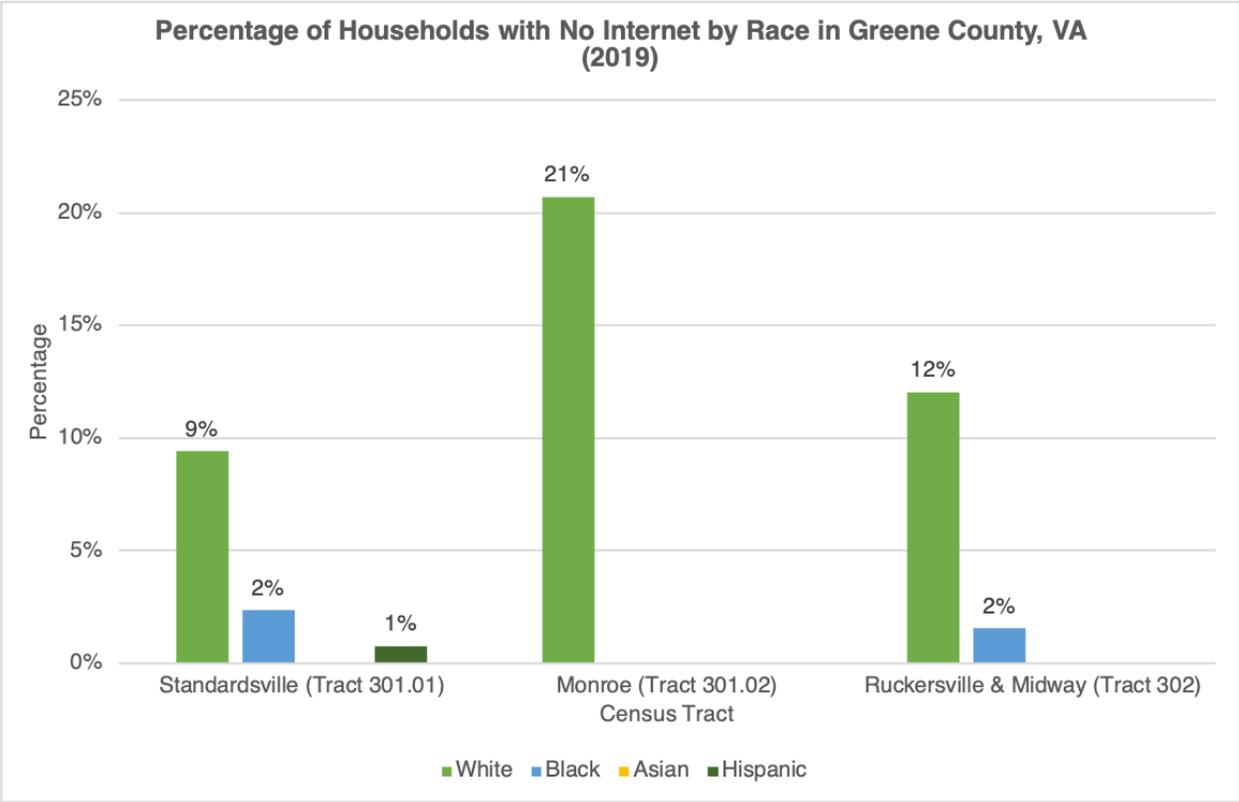


Figure G.x.24: Greene County Percent Percentage of Households without an Internet Subscription by Race, 2019. (Source: American Community Survey, 5 Year Estimates).

3.7 Mobility

An analysis of transportation related metrics from the U.S. Census Bureau’s 2019 American Community Survey (ACS) 5-year estimate reveals that residents of Greene County are deeply car dependent, and access to a vehicle reinforces other equity related issues such as access to healthcare services, employment opportunities, and the internet. For example, the opportunity cost of high travel times, often more than two hours one-way, using JAUNT from Ruckersville or more rural areas of Greene

County to Charlottesville to reach UVA Hospital or Sentara threatens patients' job security since they have to miss a full day of work. Overall, access to transportation, specifically private vehicle ownership, is a defining characteristic of daily life in Greene County.

Before exploring the quantitative measures of transportation and mobility in Greene County, it is important to acknowledge certain aspects and limitations of the U.S. Census Bureau data used to create the following charts. The census measures transportation and travel times solely in the context of employment, therefore some aspects of transportation and mobility in Greene County may elude this report. For the purposes of this report, the populations described in the following graphs represent 66% of Greene County's working age population (adults over 18 years old). This calculation was internally performed using ACS 5-year estimates. It would be a useful endeavor to further explore mobility issues surrounding those outside the working population such as the retired, unemployed, homebound, or homeless.

Figure G.x.32: Greene County Mode of Transportation by Census Tract, 2019. (Source: American Community Survey, 5 Year Estimates).

The vast majority of all workers across Greene County's Census tracts utilize a private vehicle to get to work (Figure G.x.32). This reinforces the inextricable relationship between car ownership and employment in Greene County.

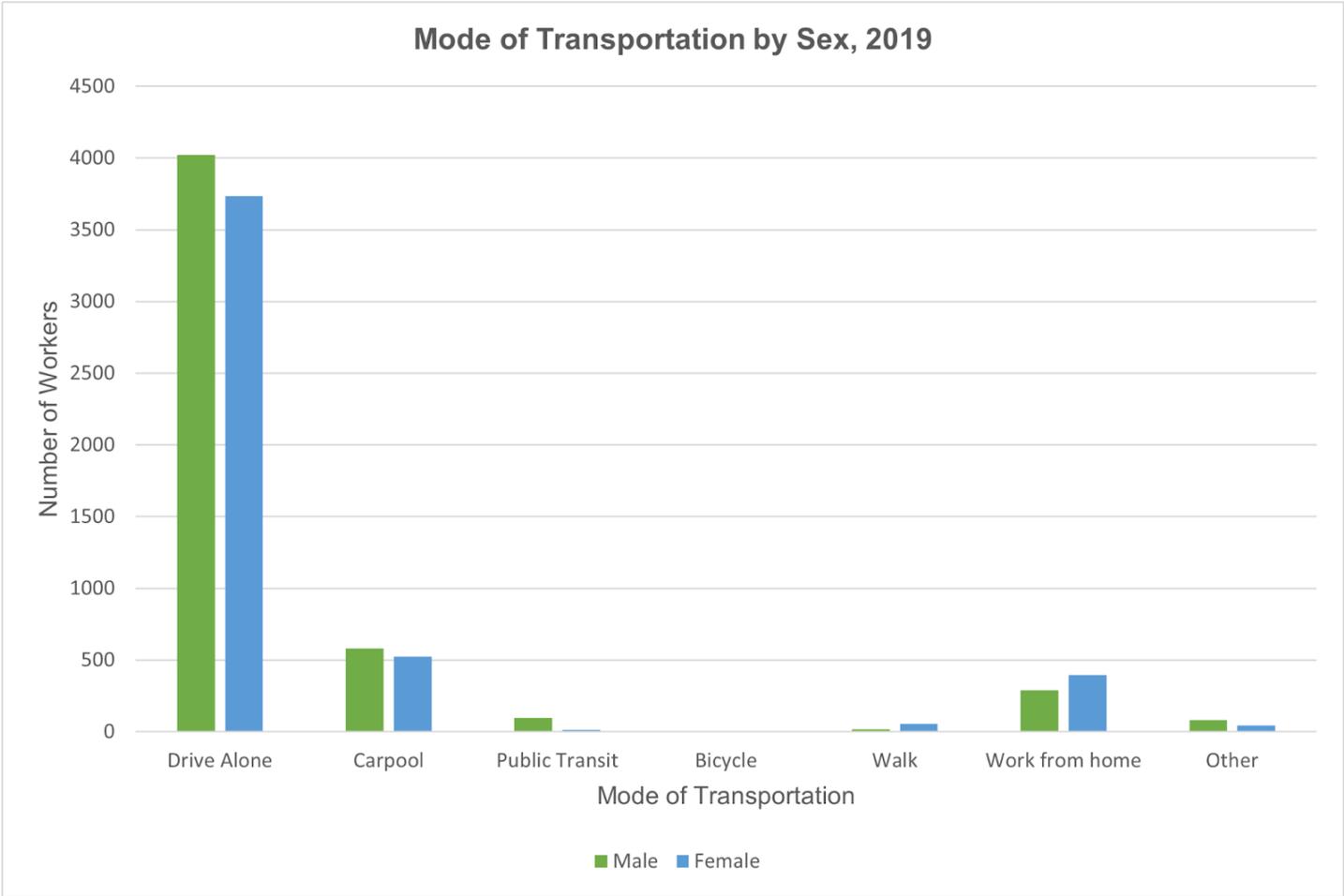


Figure G.x.33: Greene County Mode of Transportation by Sex, 2019. (Source: American Community Survey, 5 Year Estimates).

Of the 9,853 workers in Greene County, both men and women overwhelmingly drive alone to reach their places of employment. However, 1,105 workers are estimated to carpool, and 685 are estimated to work from home (Figure G.x.33). Although the average commute time statewide is 27.61 minutes, travel time to work across Greene County’s census tracts is slightly higher, and the Monroe tract had the highest commute time.

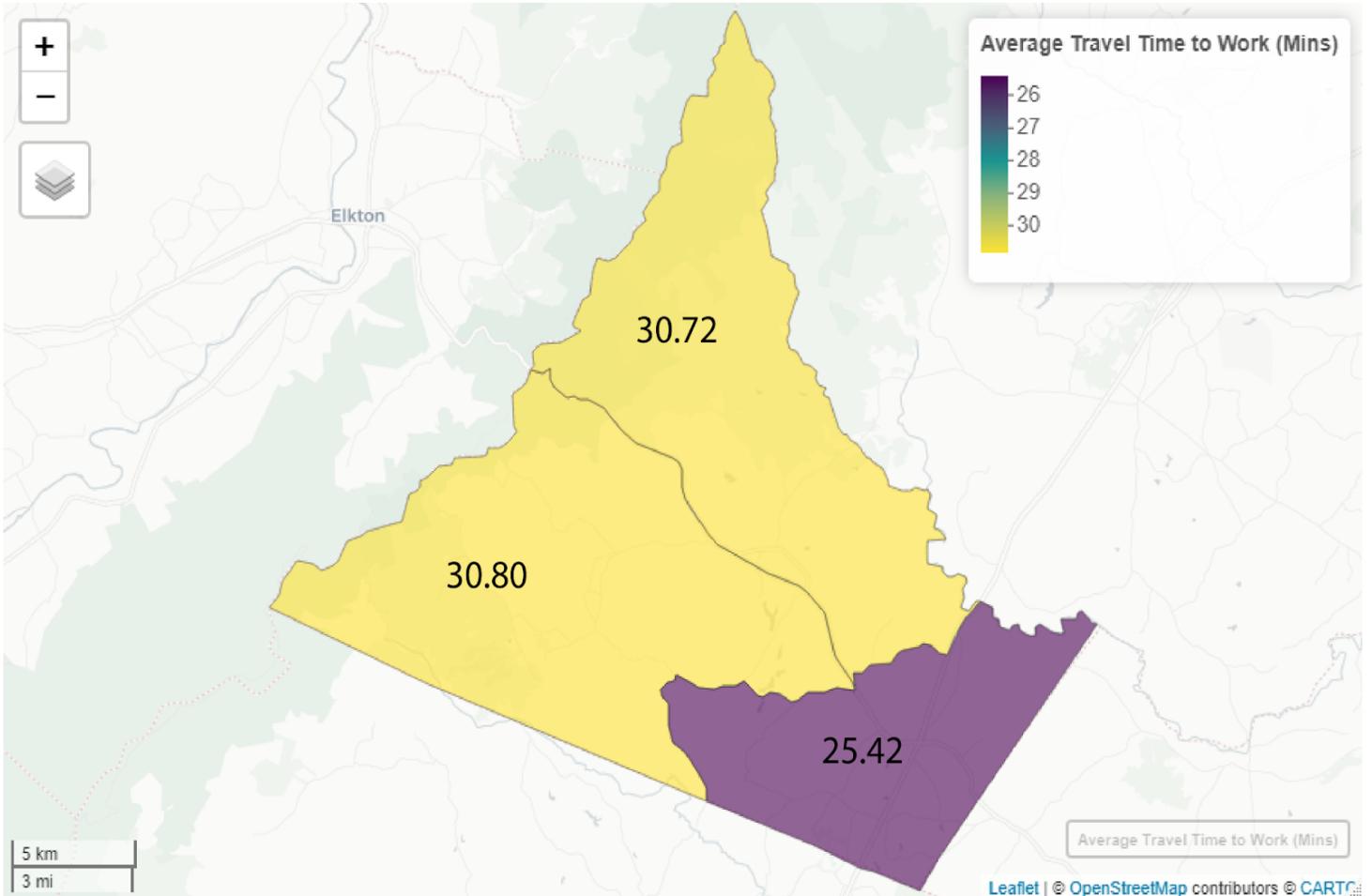


Figure G.x.34: Greene County Average Travel Time to Work (minutes), 2019. (Source: GIS, U.S. Census Data).

3.8 Land Use + Environment

The Multi-Resolution Land Characteristics (MRLC) Consortium’s National Land Classification Database (NLCD) was used to create land use maps of the total percentage of acreage for forested, developed, cultivated, and herbaceous land using 2019 data. Many key stakeholders pointed out that access to public space and the outdoors is a key indicator of quality of life. These spaces can be used for community gathering and service access. These four land use categories best consider access to these spaces. Greene County is majority forested land, making up 65.45% of the total

acreage in the county. Cultivated land is 22.86%, developed land is 9.44%, and herbaceous land is less than one percent of the total acreage (Figure G.x.25). All three localities of Stanardsville, Monroe, and Ruckersville/Midway in Greene County had similar distributions of land use (Figures G.x.26-8). The majority of Greene County is forested land, with Stanardsville having the largest percentage of total acreage as forested land. Cultivated land, which includes planted crops and pasture, is the second largest use of land, averaging between 19% and 26%. Developed land is areas of impervious surfaces, such as roads, sidewalks, and buildings. Looking at developed land in this analysis gives an indication of development in the region, as opposed to green or open space. Developed land makes up less than 15% of the total acreage in all three areas. Herbaceous land is by far the smallest category of land use, making up less than two percent of the total acreage in each county. This land use analysis concludes that Greene County is made up of a majority forested land, but in the words of key stakeholders, this does not ensure that the residents have equal access to this green space.

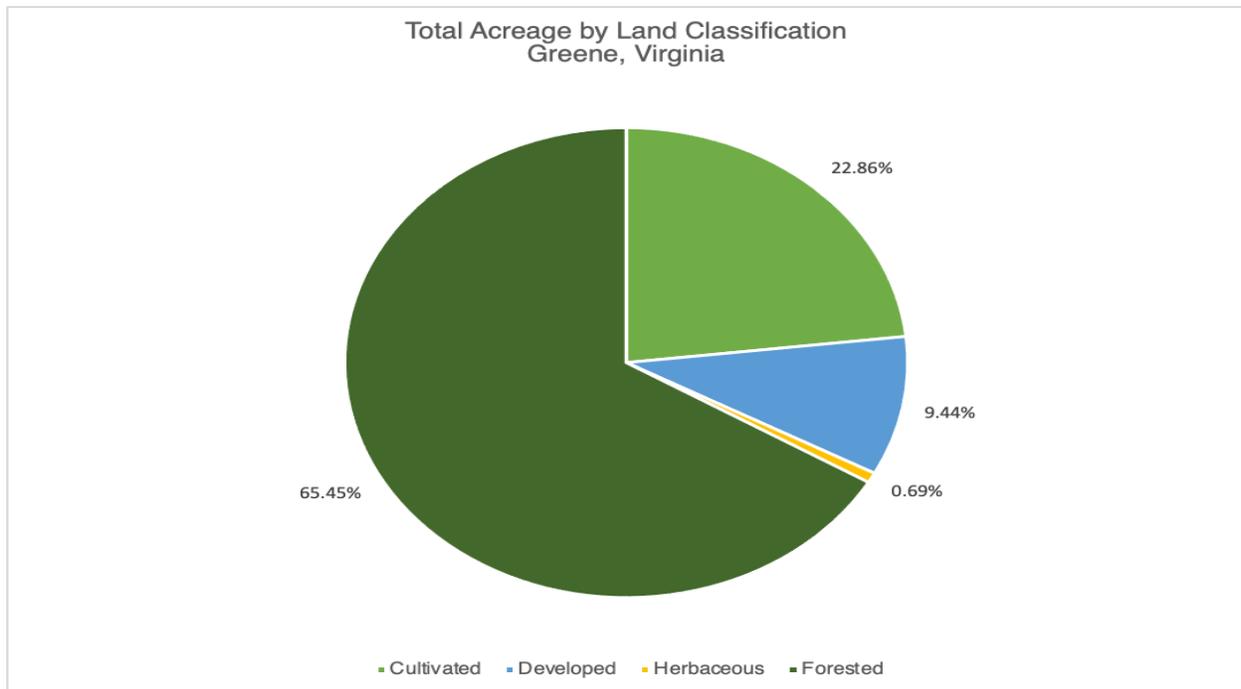


Figure G.x.25: Greene County Total Acreage by Land Classification, 2019. (Source: MRLC & National Land Cover Database).

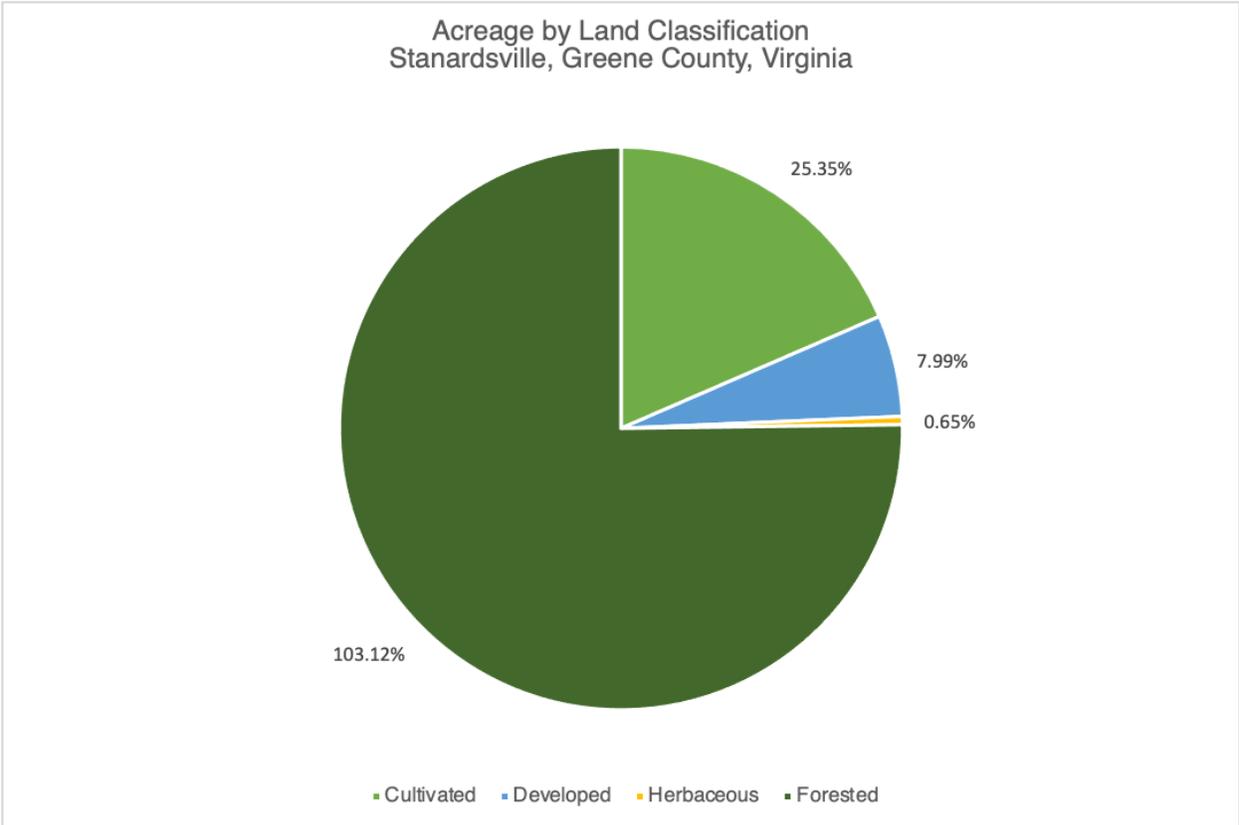


Figure G.x.26: Greene County Total Acreage by Land Classification, Stanardsville, 2019. (Source: MRLC & National Land Cover Database).

Acreage by Land Classification
Ruckersville-Midway, Greene County, Virginia

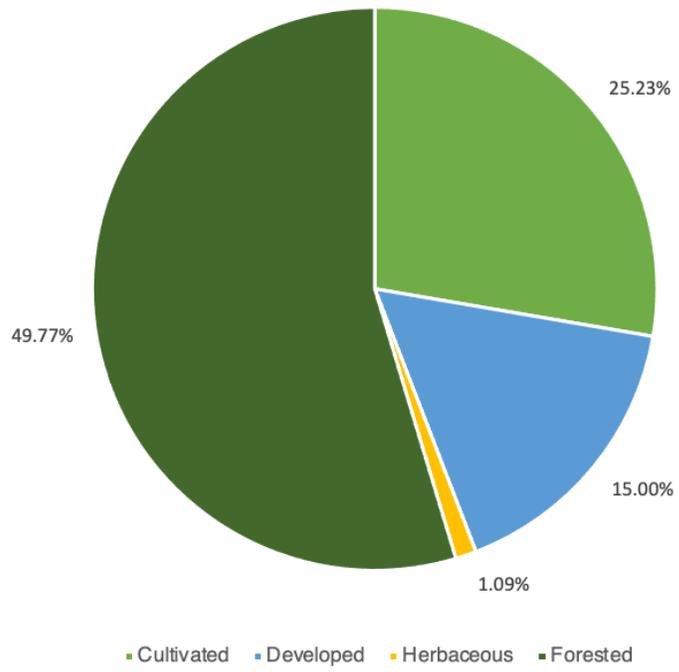


Figure G.x.29: Greene County Total Acreage by Land Classification, Ruckersville/Midway, 2019. (Source: MRLC & National Land Cover Database).

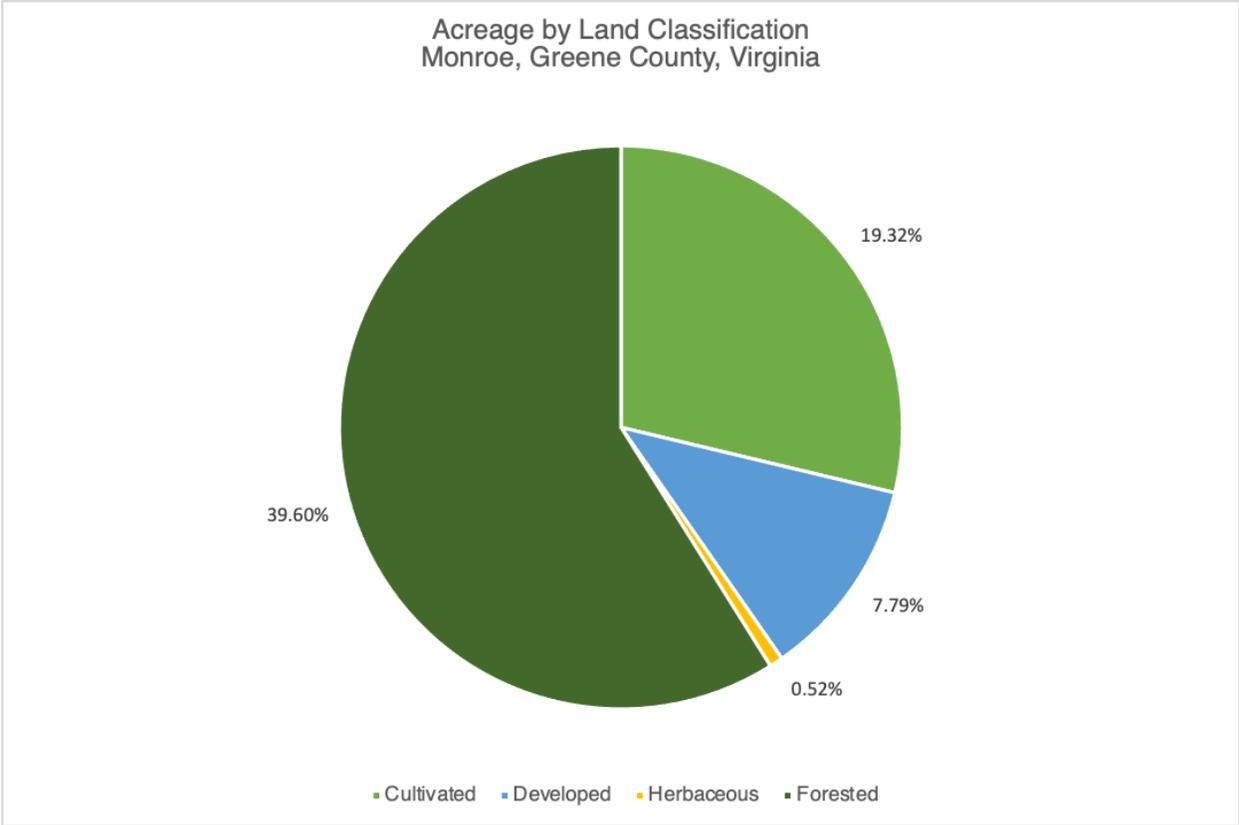


Figure G.x.29: Greene County Total Acreage by Land Classification, Monroe, 2019. (Source: MRLC & National Land Cover Database).

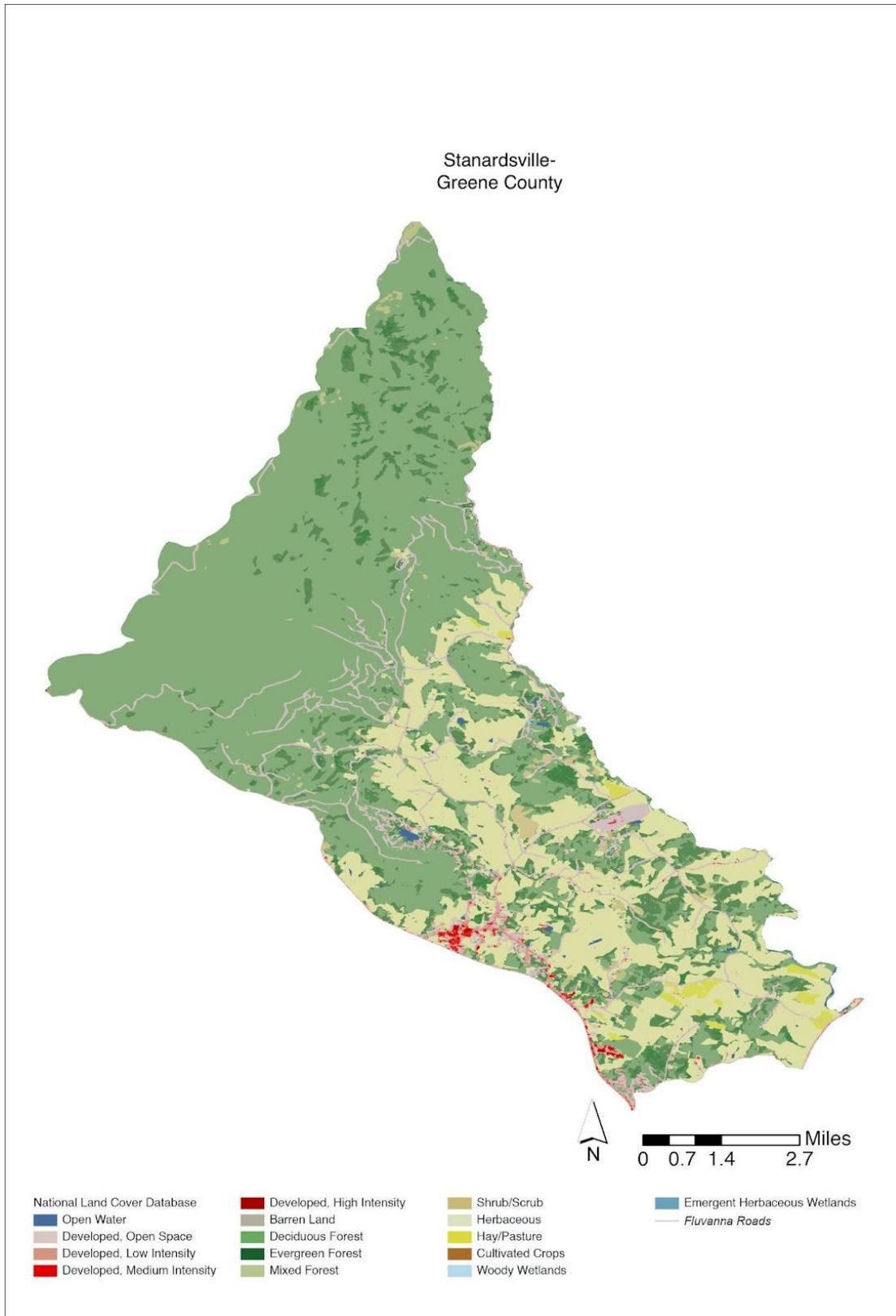


Figure G.x.30: Greene County Total Acreage by Land Classification, Stanardsville, 2019. (Source: MRLC & National Land Cover Database).

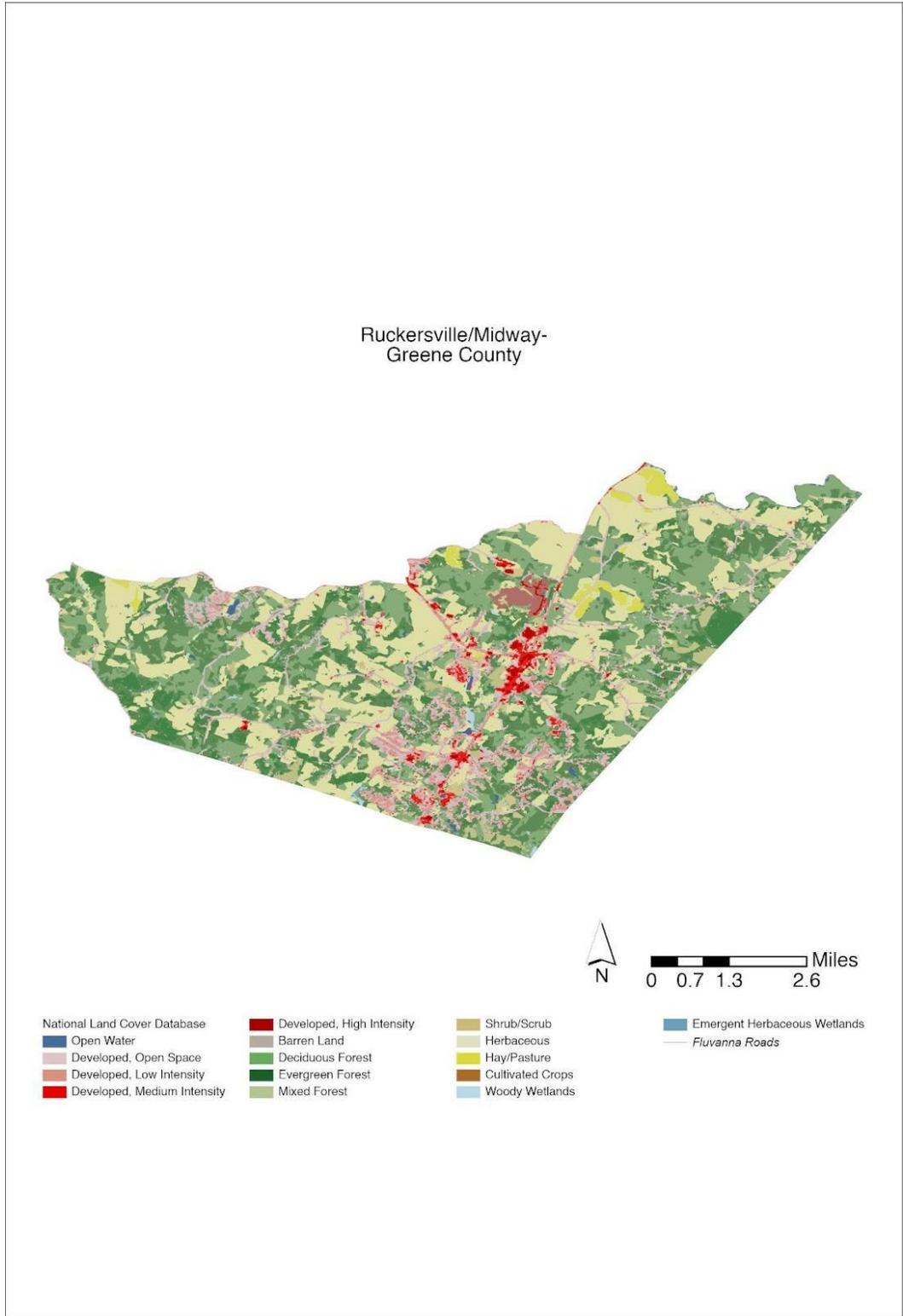


Figure G.x.31: Greene County Total Acreage by Land Classification, Ruckersville/Midway, 2019. (Source: MRLC & National Land Cover Database).

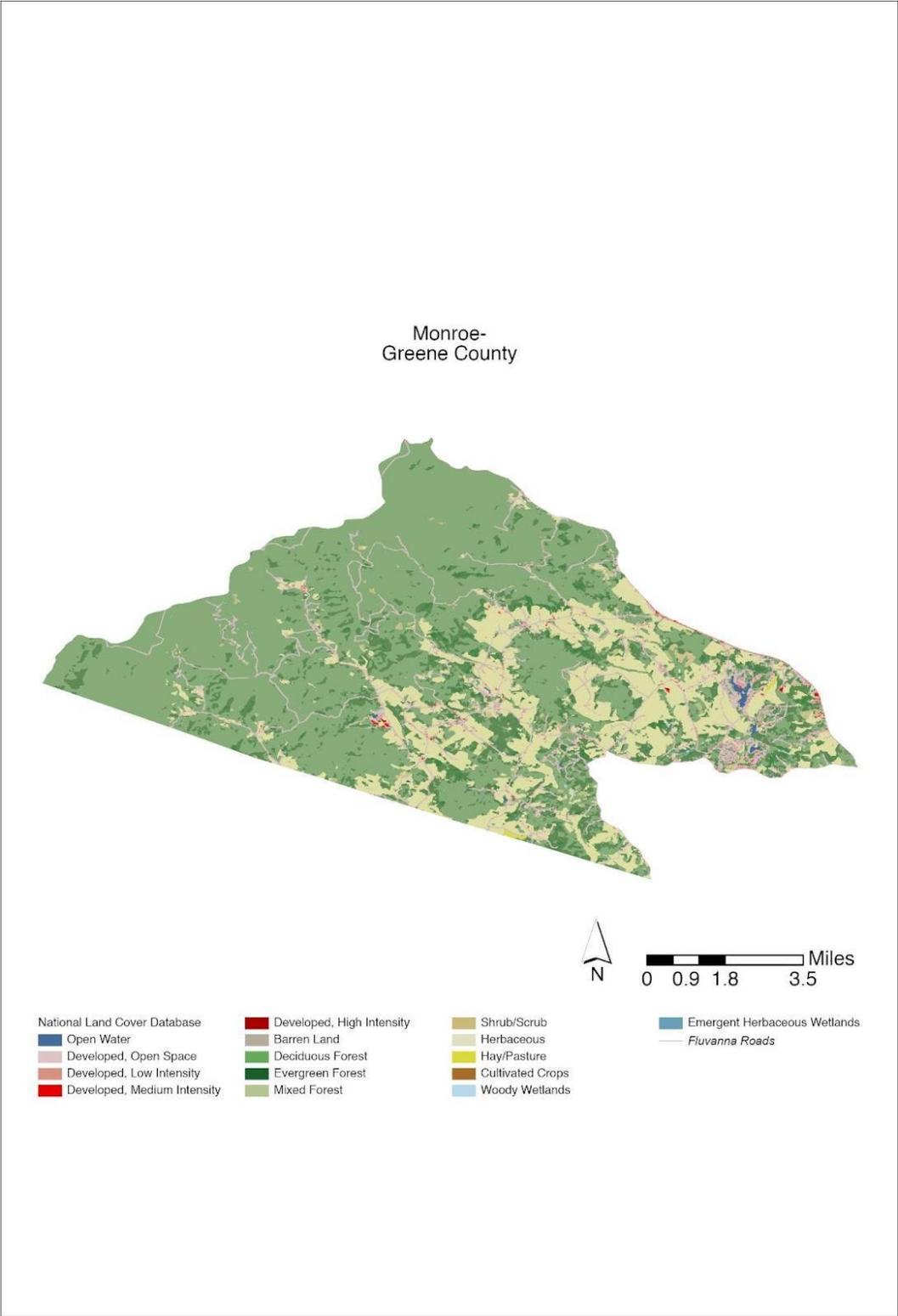


Figure G.x.31: Greene County Total Acreage by Land Classification, Monroe, 2019. (Source: MRLC & National Land Cover Database).

Conclusion

Given the proximity of Greene County to more metropolitan areas, there remains many challenges related to the access of services in the region. Greene County is proud of its rural heritage and independent lifestyle. However, closing the gap between the urban and rural could have a great impact on equity and equality in the region. As a key stakeholder pointed out during the interview process, “breaking down the geographical silos and recognizing people as citizens of the region, not just their individual county, will aid in the process.”

Providing resources to the community by way of transportation, digital, and healthcare accessibility are notably the top priorities per this analysis. Many stakeholders voiced support for initiatives that prioritize the individual needs of residents, including bringing the resources to Greene County, rather than requiring residents to commute to reach their needs. Each locality within Greene County is unique, and treating it as such will aid in giving communities agency over their future.

A few significant findings of this study illuminate the differences in income, the importance of digital availability, and automobile dependency within the county. The median household income for 2019 was \$67,398, which is higher than the U.S. median annual household income. However, there are significant income disparities between white and Black residents in the county, with the average household income difference in 2019 being around approximately 138%. Secondly, the digital divide in rural counties like Greene underscore other accessibility challenges. Many families do not own a computer, have access to the internet, or proper broadband services. In Monroe and Stanardsville, the percentage of households without access to a computer ranges between 21% and 26%. This is particularly important in the age of online or virtual healthcare services. And lastly, an analysis of transportation related metrics reveals residents are deeply car dependent and use of a vehicle reinforces other equity related issues such as access to many of the services referenced above.

In an effort to acknowledge the limitations of this work, a few key points must be addressed. In areas with a smaller sample size, some of the quantitative data analysis may appear to be more jarring than in reality. Considering the population size when interpreting this data is key in using it properly. Stakeholders noted that having more access to data in Greene County could aid the decision-making process and increase the county's likelihood of receiving grant funding due to more accurate and updated data. As part of this research, it was noted that the foundation of an equity task force in Greene County may be beneficial to encourage sustained practice in all future planning activities. Additionally, the county may benefit from the hiring of a data scientist to aid in the consistent tracking of these findings and ensuring their continued use and study in all future planning and grant writing activities.

In conclusion, we would like to thank all stakeholders and residents who contributed to this analysis, and we hope this profile may act as a resource enabling clearer planning efforts in the future through the use of the data visualizations and quality-of-life analysis. We look forward to observing how Greene County utilizes this data to develop and advocate for policy development and reform that will aid in equity, connection, and wellbeing across the region.

CHAPTER 4. LOUISA COUNTY

Introduction

Founded in 1742, Louisa County is a scenic agricultural county in central Virginia with a rich history.¹⁴ Louisa County was once known as the 'Sun-Cured Tobacco Capital' due to its role in the global tobacco market; tobacco leaf forms part of the county seal as remembrance. Due to its location, the county was the setting of several events during the American Revolution and Civil War. Today, Louisa County remains a mostly agricultural landscape with two major towns, the Town of Louisa and Mineral. The overall population of Louisa County is 37,596 people according to the 2020 Census. Louisa is made up of 511 square miles of land and water nestled between Charlottesville and Richmond and is intersected by US 250 and I-64.

Louisa faces a number of challenges to equity and well-being. As a largely rural landscape, transportation and vehicle access are major barriers to equity, along with access to affordable and quality housing. Childcare and accessible greenspace are also barriers within the community.

¹⁴ Louisa was named after Princess Louise of Great Britain (1724-1751), the youngest daughter of King George II and Queen of Denmark and Norway.



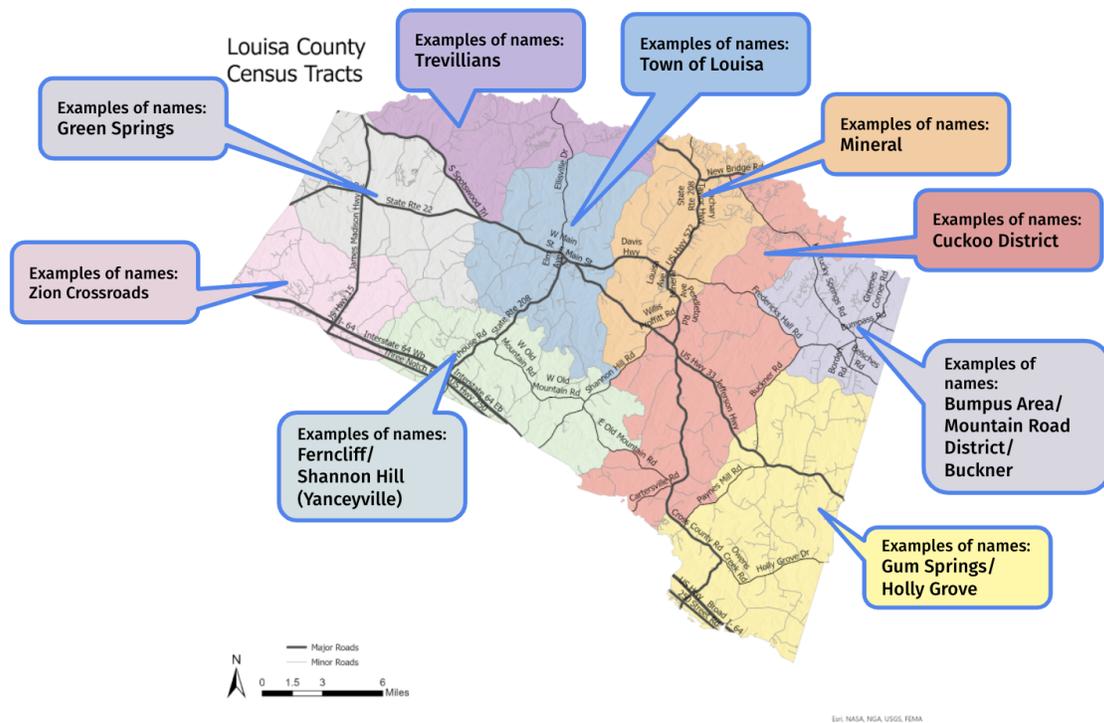
Source: "Tourism", n.d.



Source: "Tourism", n.d.

Community Mapping Exercise

In our focus group conversation, we relied on community input to assign names to nine census tracts in Louisa County. There are nine census tracts and roughly thirteen proposed community names. These titles were then synthesized to correlate with the U.S. Census Bureau naming conventions. The mapping exercise tracts come from 2020 census data in order to ascertain the most recent and up to date information from local residents. It is worth noting that data gathered for the report correspond to 2010 census tracts.



Focus Group Census Tract Naming Exercise

4.1 Demographics

4.1.a. Race

The racial makeup of Louisa County is approximately 80% white 15% Black, 1% Asian, and 4% identifying with another or two or more (*Figure L.1*). Different census tracts have varying amounts of racial diversity (*Figure L.2.A*). Ferncliff and the Town of Louisa have relatively more racial diversity than the other tracts, with just over 60% of the population identifying as white (*Figure L.2.B*). This is significant when compared to the county's overall population of 80% white. Clearly, racial demographics vary by tract.

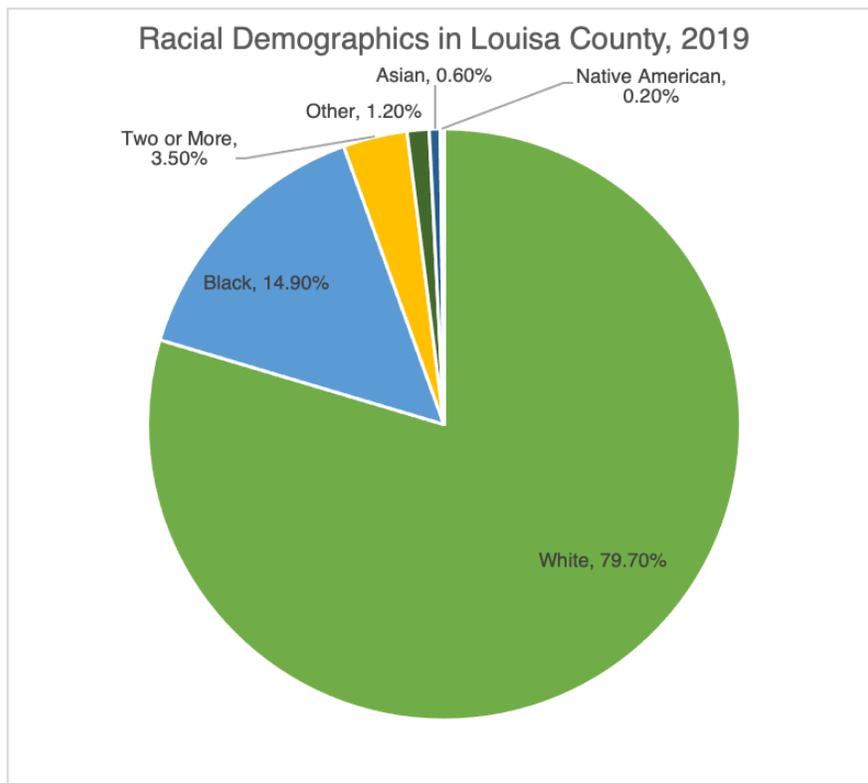


Figure L.1. Racial Demographics, Louisa County, 2019. (Source: ACS)

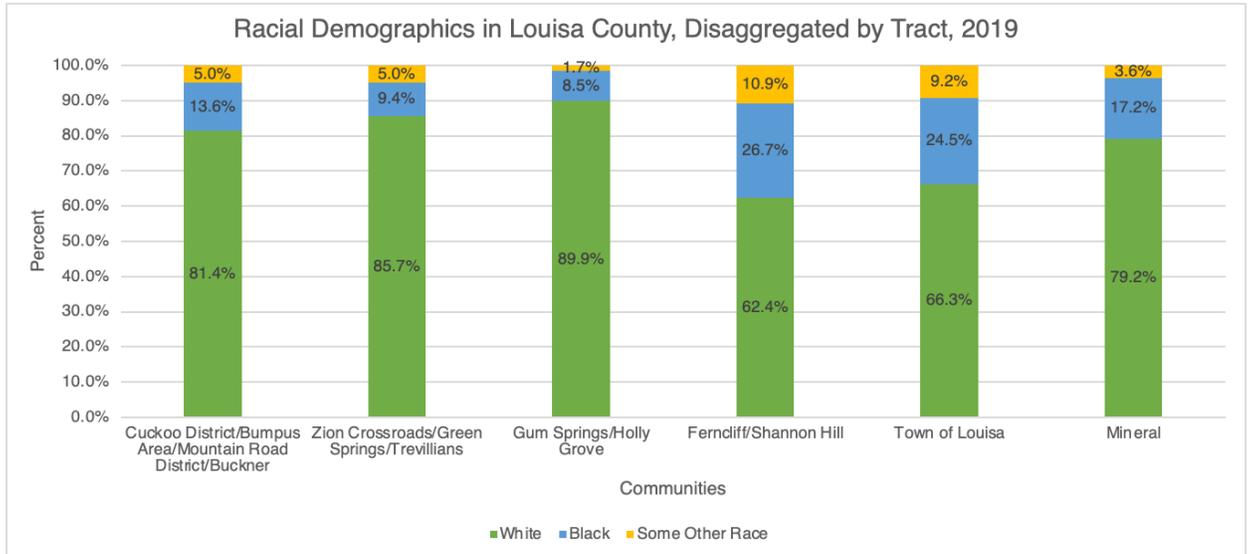


Figure L.2.A. Racial Demographics in Louisa County, 2019. (Source: ACS)

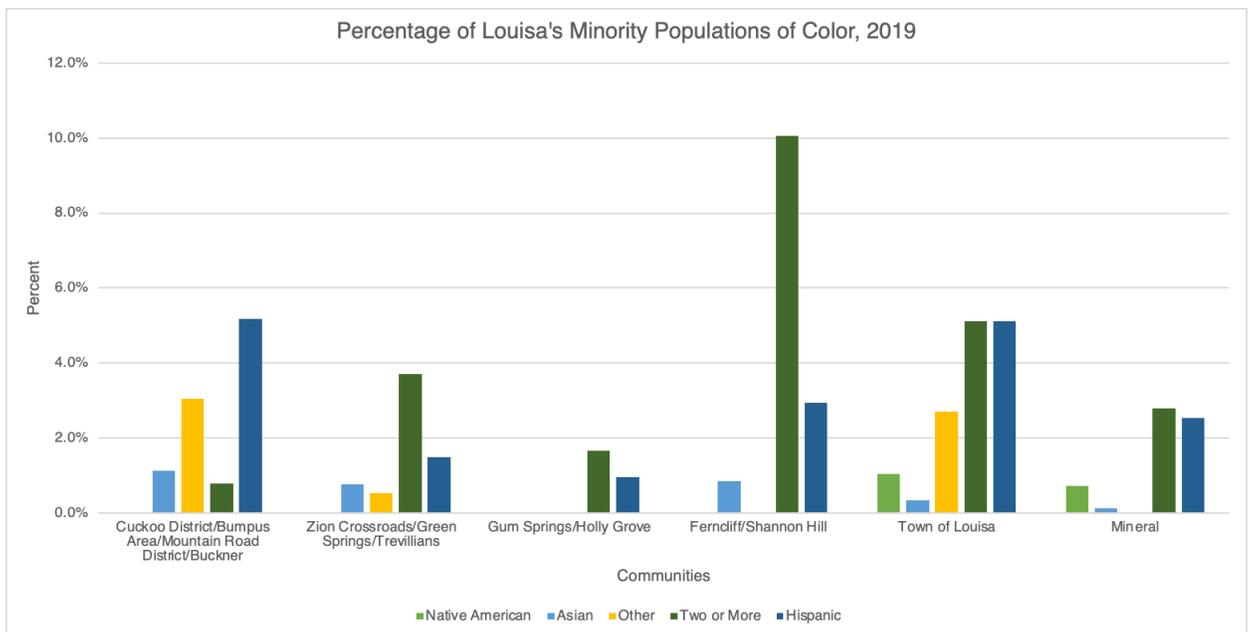


Figure L.2.B. Percentage of Louisa's Minority Populations of Color, 2019. (Source: ACS) Note: Hawaiian population reported as zero, and therefore was not included in this chart.

4.1.b. Income

According to the Census Bureau, Louisa County's median household income was \$60,975 in 2019. This value has increased since 2010 but is less than the median

household income in the state of Virginia, which is \$67,027. Median household income has increased since 2010 in most Louisa County neighborhoods with the exception of Green Springs/Holly Grove and the Town of Louisa (Figure L.3). Disaggregated by race, household income of Black residents is lower than white residents across all neighborhoods except for Gum Springs/Holly Grove (Figure L.4). The percentage of persons in poverty is 7.9% which may not be fully representative of the conditions within the County. Population growth and an influx of more affluent residents may account for the decreased poverty rate. *“Poverty in Louisa dropped to less than eight percent for the first time ever... [but] really very little has changed for the people that are in poverty. What changed was the number of people living here. I’m still dealing with the same four thousand people living in poverty that I was three years ago (Interview Participant from the Louisa Resource Council).”*

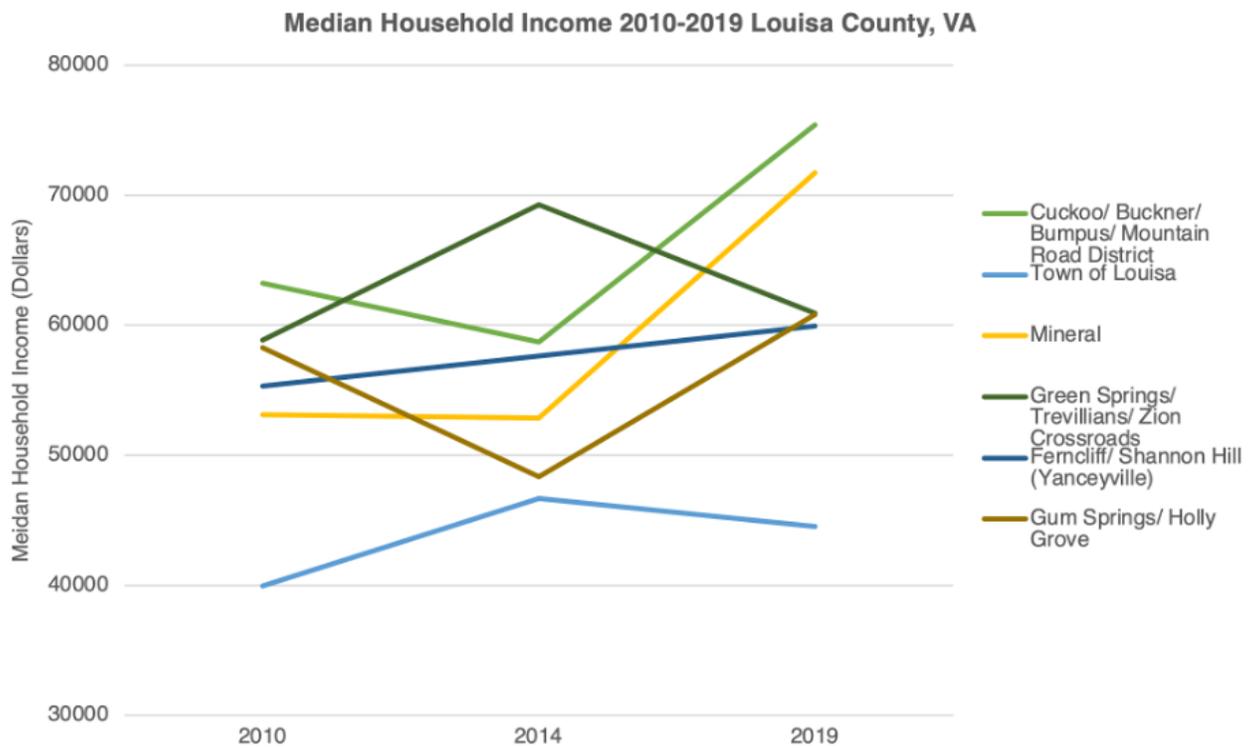


Figure L.3: Median Household Income between 2010-2019 in Louisa County, VA (Source: ACS)

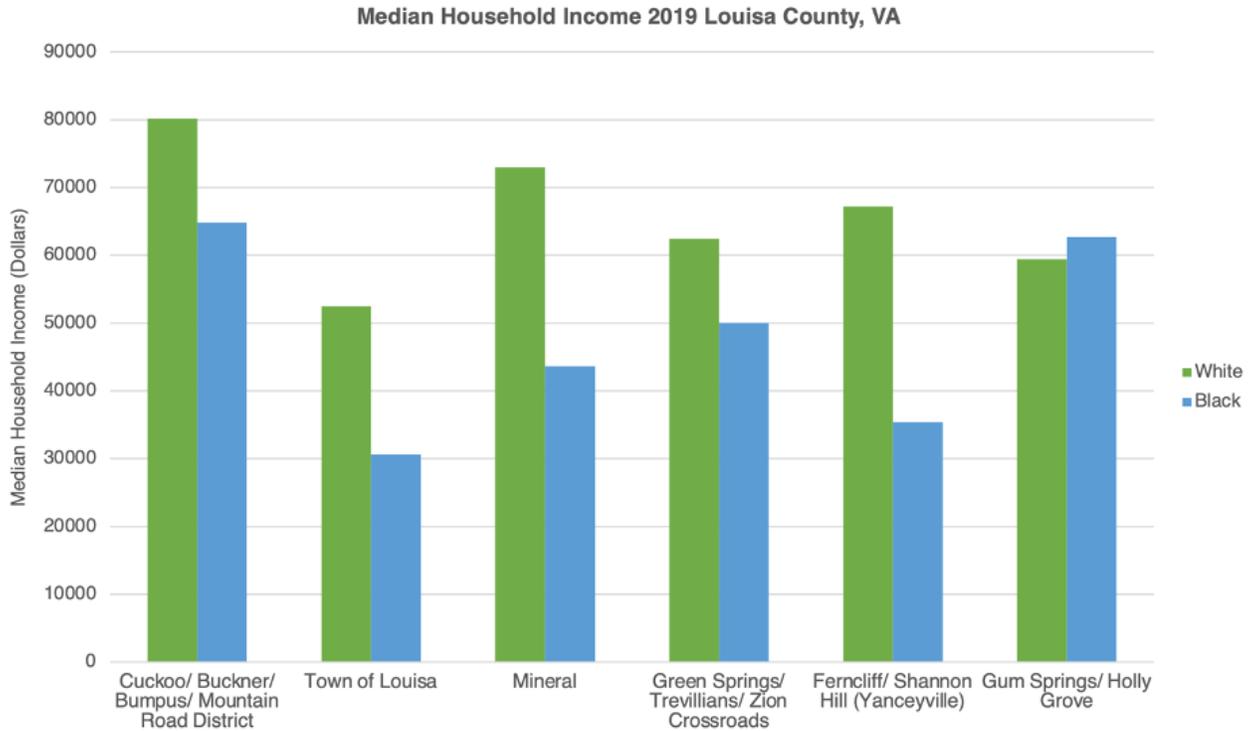


Figure L.4: Median Household Income in 2019 in Louisa County, VA, disaggregated by race (Source: ACS)

4.1.c. Age

In Louisa, the population is getting older (*Figure L.5*). Between 2010 and 2019, the percentage of the population aged 65 and older increased significantly, from nine percent to over 12 percent. Meanwhile, the population of youth under the age of 20 has decreased in the last 10 years. As the population ages, it is important to think more critically about services, transportation, housing, and lifestyle. There are few retirement homes located in Louisa, and even fewer means of public or scheduled transportation to different areas around the County or region.

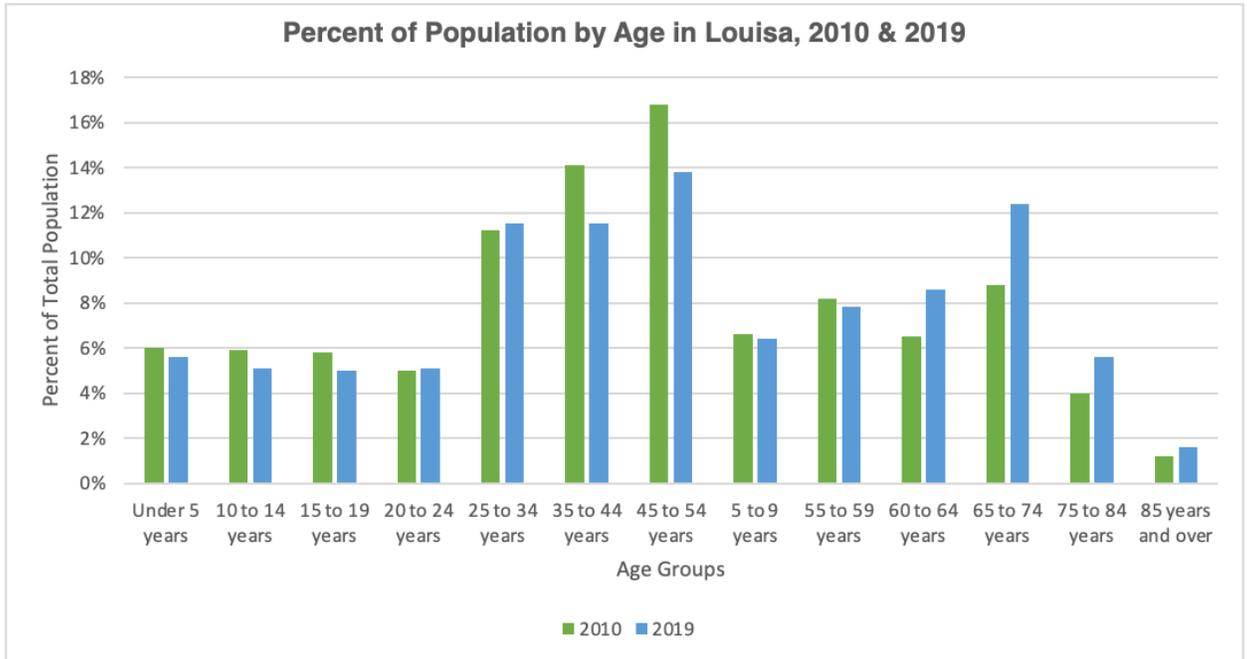


Figure L.5: Percent of population by age in Louisa, 2010 & 2019 (Source: ACS)

4.2 Food Insecurity

SNAP, or the Supplemental Nutrition Assistance Program, helps families in Louisa County supplement their food budget and purchase healthy food. In Louisa, 38.5% of families utilized SNAP benefits in 2019. The Gum Springs/Holly Grove neighborhood utilized SNAP benefits at a higher rate than other neighborhoods in the County (*Figure L.6*). This is in comparison to the statewide average of nine percent. According to Feeding America, in 2017, Louisa had a child food insecurity rate of 13.8%. *“Many of the children that I deal with daily have no idea what they’re having for dinner tonight or if they do it’s gonna be fast food. It’ll be something from McDonalds or Hardee’s or whatever. They have no clue about tomorrow or even what’s gonna happen on the weekend (Interview Participant, Louisa Resource Council).”* The percentage of households that received SNAP benefits decreased between 2010 and 2014 and then increased sharply in many neighborhoods between 2014 and 2019 (*Figure L.7*). Recent increases in food prices have posed a challenge for families. *“Food [prices] went up 7.3% in January alone. So that’s a huge burden on a family to buy food especially if it’s a large family. 7.3% in one month, 30 days, huge (Interview Participant, Louisa*

Resource Council).” There are multiple food programs that provide assistance to families including the Louisa County Resource Council, the Community Cupboard, Grocery Assistance Program, Emergency Food Pantry and others.

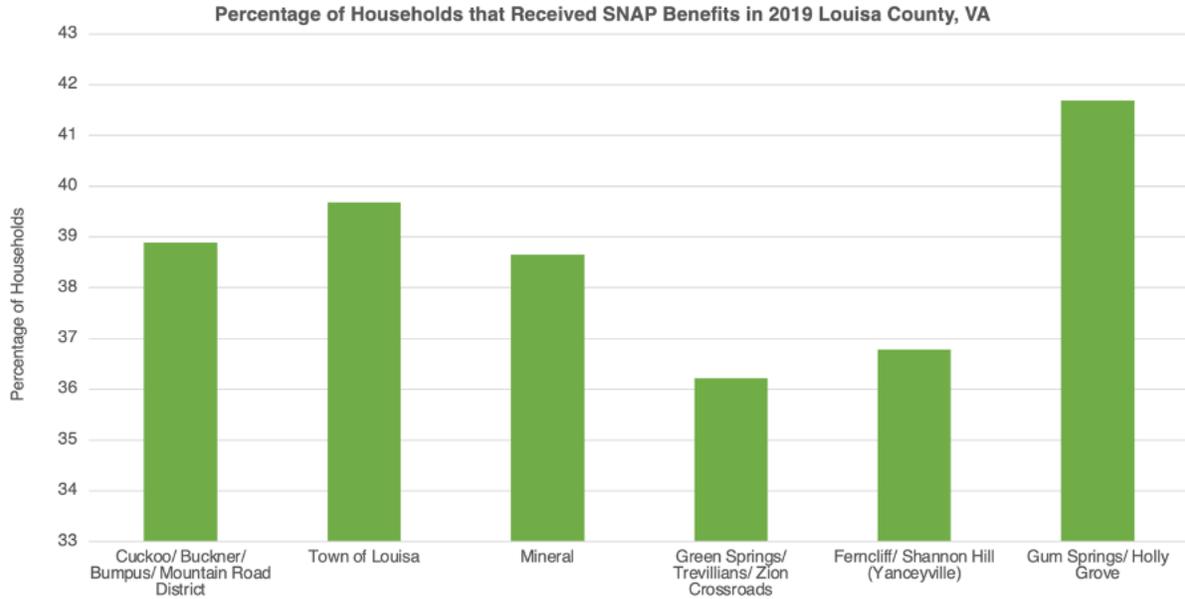


Figure L.6: Percentage of Households that Received SNAP Benefits in 2019 in Louisa County, VA

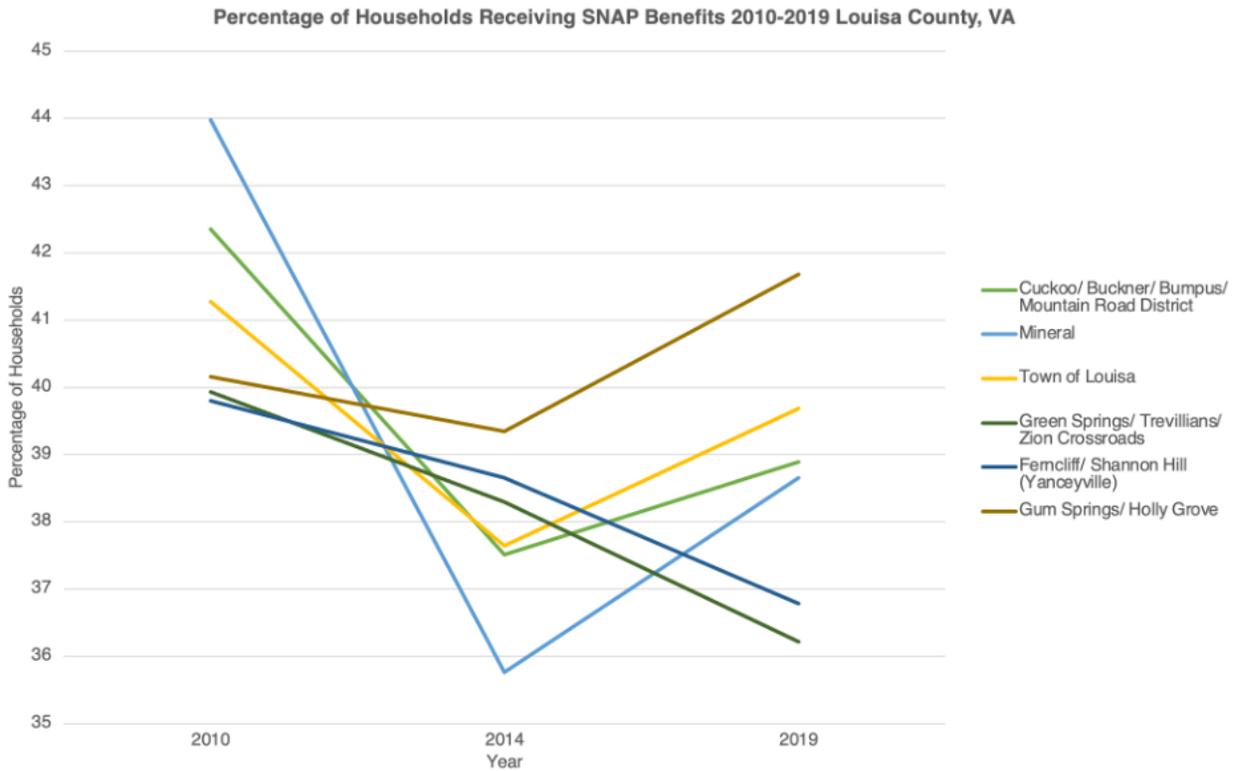


Figure L.7: Percentage of Households Receiving SNAP Benefits between 2010-2019 in each neighborhood in Louisa County, VA

4.3 Employment

Many instances of unemployment in Louisa are due to secondary factors like lack of childcare services or transportation to and from work. Community organizations like Sentara work to provide free classes and job placement to residents with barriers to employment such as lack of a high school diploma or a criminal background.

Figure L.8 shows that the general trend of percent employed in the population narrowly decreased from 2010 to 2019 (60.5% to 56.2%). Louisa is on par with the rest of the United States, which had a national average employment rate of 60.2% and unemployment rate of 4.5% in 2019.

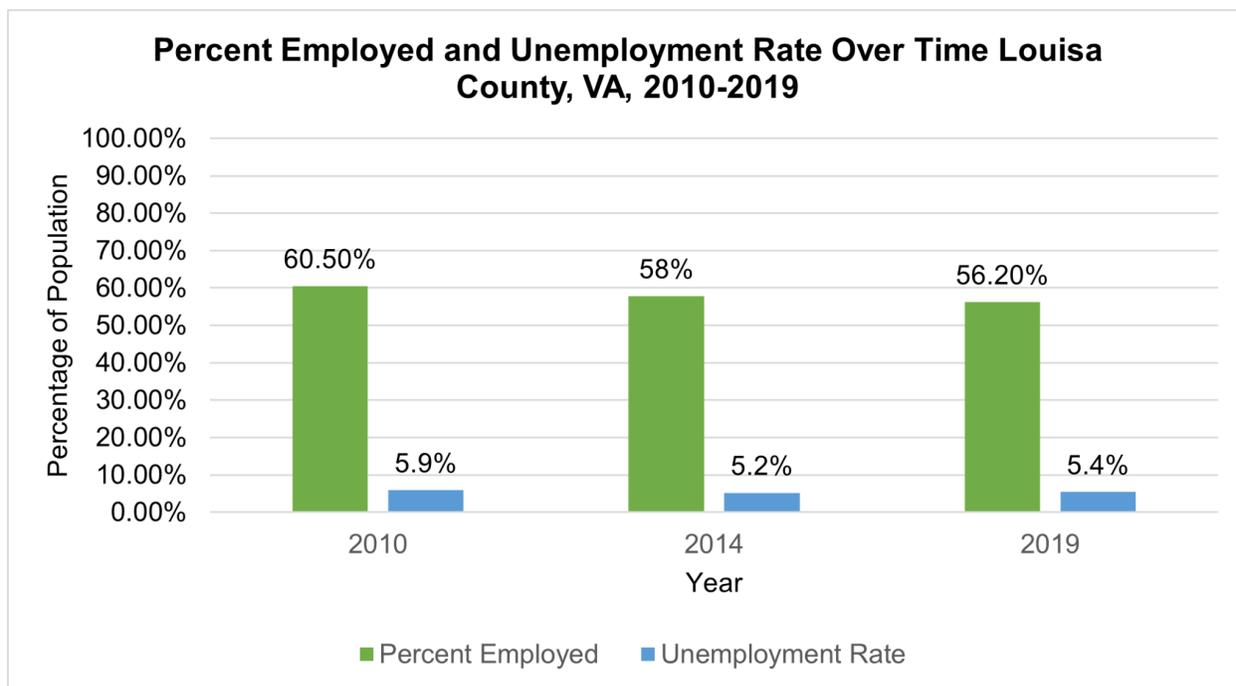


Figure L.8: Percent Employed and Unemployment Rate Over Time highlighting 2010, 2014, and 2019 in Louisa County, Virginia (Source: ACS)

Figures L.9 and L.10 show the percentage of Louisa’s population employed and the unemployment rate disaggregated by gender and race. In 2019, the percentage of the population that was employed ranged from 25.8% to 92.4%. Unemployment rate was lowest for citizens who are Asian alone, Hispanic or Latino origin (of any race), and some other race alone at 0%. Unemployment rate was highest in 2019 for citizens who identify as two or more races at 13.1%. Most employment rates fall between 40% to 75% employed while most unemployment rates are around five percent.

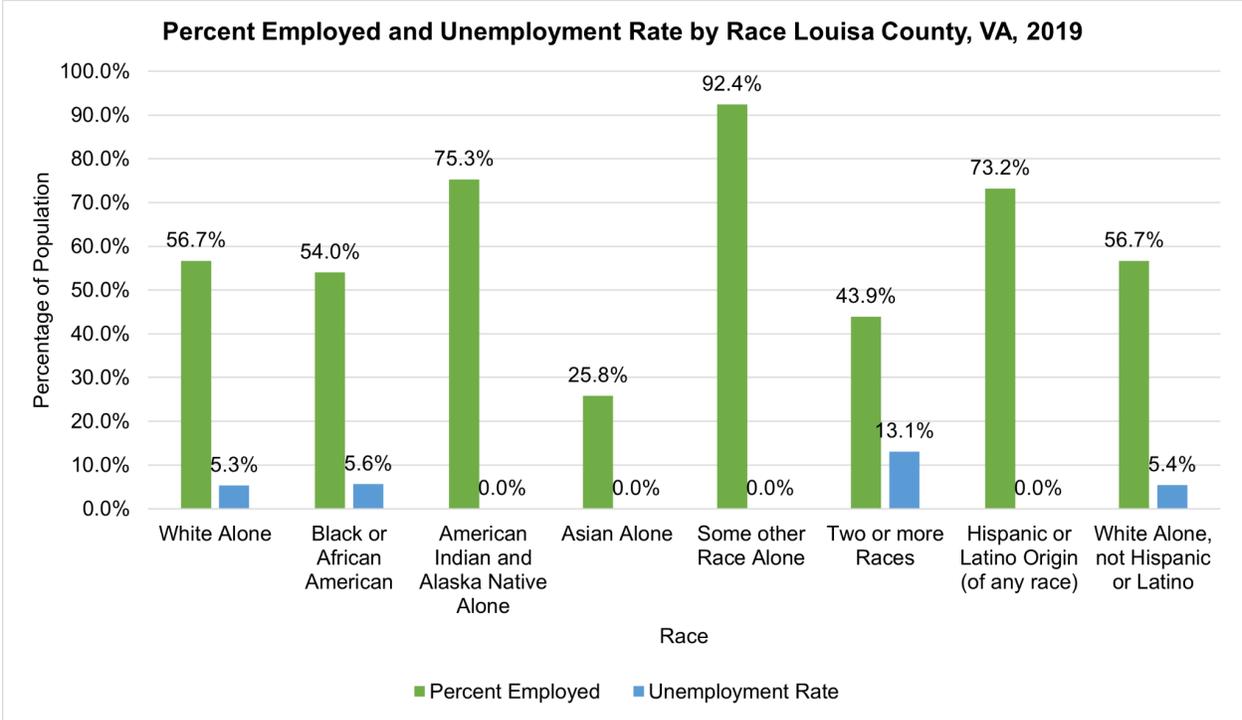


Figure L.9: Percent Employed and Unemployment Rate by Race in Louisa County, Virginia in 2019 (Source: ACS)

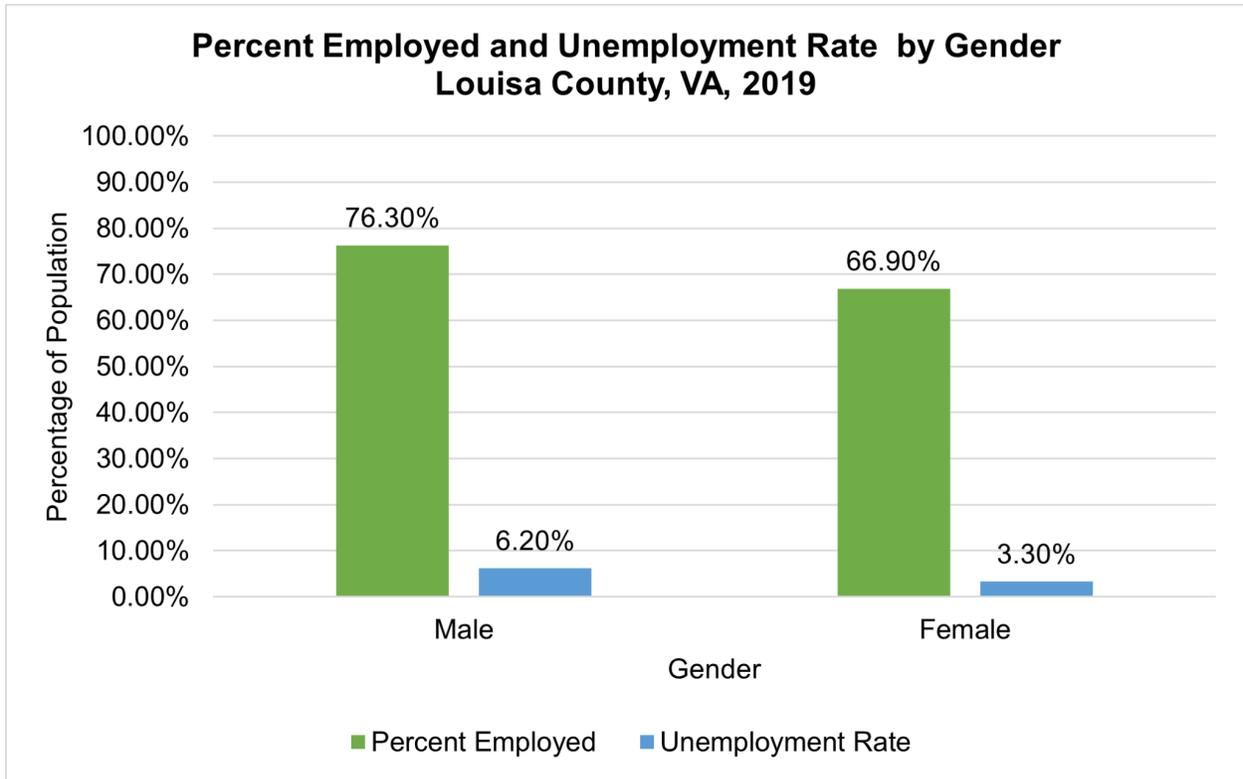


Figure L.10: Percent Employed and Unemployment Rate by Gender in Louisa County, Virginia in 2019
(Source: ACS)

The barriers to employment in Louisa County relate both to mobility and to childcare. Organizations in Louisa are putting significant effort into improving conditions and continue to provide services to those who need assistance with securing employment.

4.4 Housing

In order to better understand the relationship between residents and the housing market in Louisa County, we investigated housing through various metrics such as rent burden, median housing cost, as well as median home value. Through examining these factors we are better positioned to understand various forms of housing in Louisa County and how they play a role in and serve as an indicator for equity.

The 2014 and 2019 ACS data clearly show that the housing market in Louisa has evolved over time. The analysis looks at rent burden and median home value on the census tract level. These same metrics will also be considered for median housing cost (gross rent), and all will be analyzed longitudinally from 2014-2019. We will begin this analysis by taking into account rent burden statistics.

Figure L.11 shows the full picture of the housing market and the various financial ramifications. Here, we can clearly see that across three of the six census tracts the rent burden has increased between the years 2014 and 2019. The Cukoo District/ Bumpus Area/ Mountain Road District/ Buckner and the Town of Louisa had some of the sharpest increases in the overall percentage rate of rent burdened households. Meanwhile, Mineral had the sharpest decline in the percentage of rent burdened households. Based on the year 2019 alone, 48.11% of households in Louisa County were rent burdened; these households were spending more than 30% of their income on housing expenses.

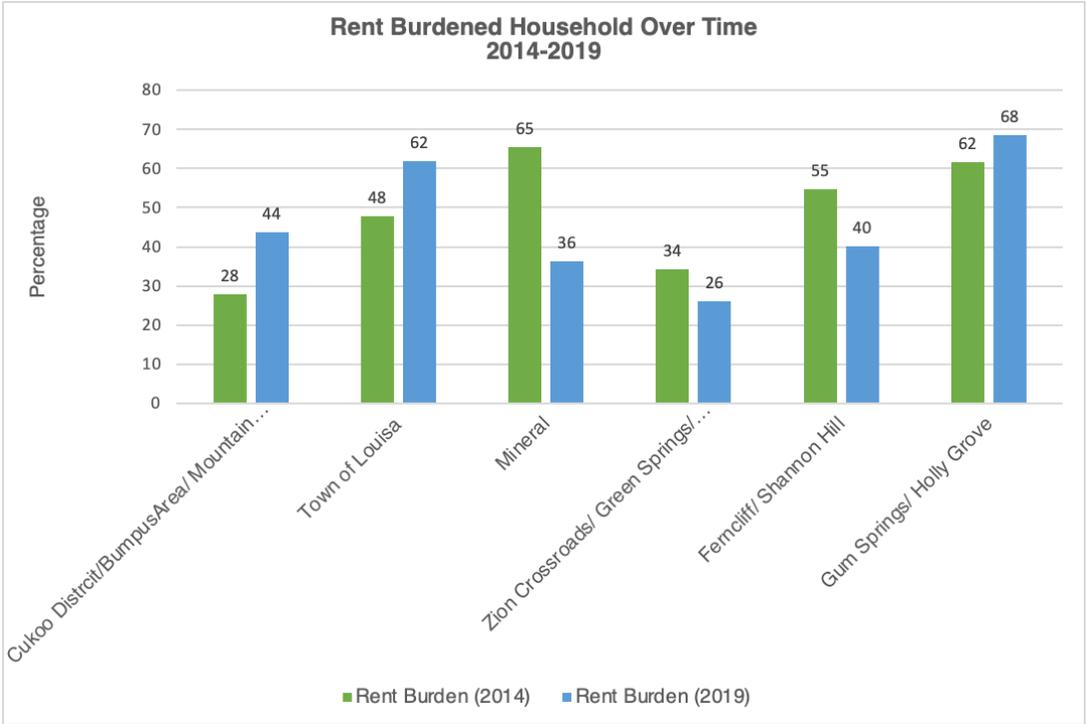


Figure L.11: Rent Burdened Households Over Time, 2014-2019 (Source: ACS)

Based on *Figure L.12*, in terms of the median home value, there has been an overall increase in five of the six census tracts in Louisa County from 2014 to 2019. The areas that reported a decrease in the overall median home value were Zion Crossroads/ Green Springs/ Trevillians. From 2014 to 2019, this tract reported a 9.9% decrease in the median home value. On the other hand, Ferncliff/ Shannon Hill reported the most significant increase of 32.35%. Rising home values can serve as a barrier to entry for those who might be looking to purchase a home.

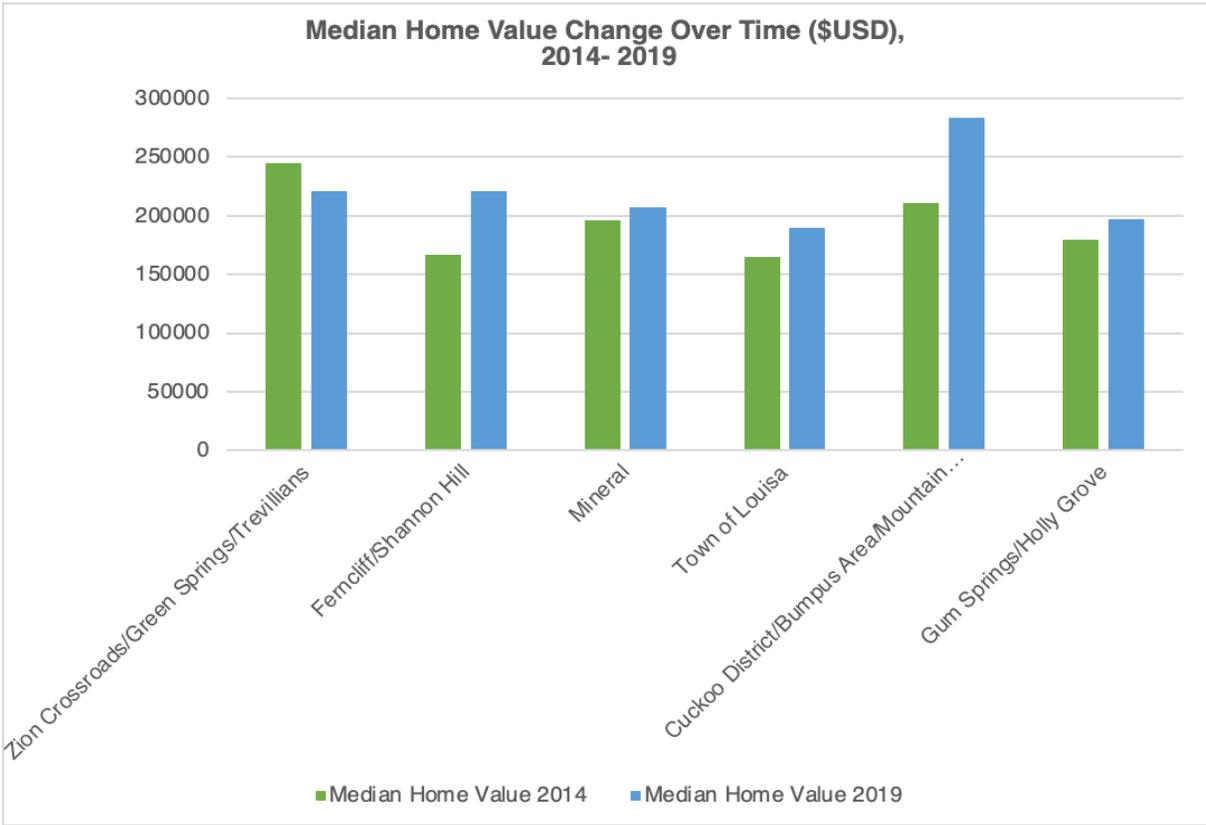


Figure L.12: Median Home Value Change Over Time (\$USD), 2014-2019 (Source: ACS)

Next, it is important to consider median gross rent and how it has evolved over time in Louisa County from 2014 to 2019. Based on *Figure L.13* below, it becomes increasingly clear that there is a divide in how rents have evolved across Louisa County. Zion Crossroads/ GreenSprings/ Trevillians reported a 10.25% decrease in median gross rent, while Ferncliff/ Shannon Hill reported a 23.98% decrease in median gross rent.

Other census tracts, like Mineral, soared with a 17.77% increase in the median gross rent. Roughly half of the census tracts within the county reported an increase in median gross rent while the other half reported a decrease.

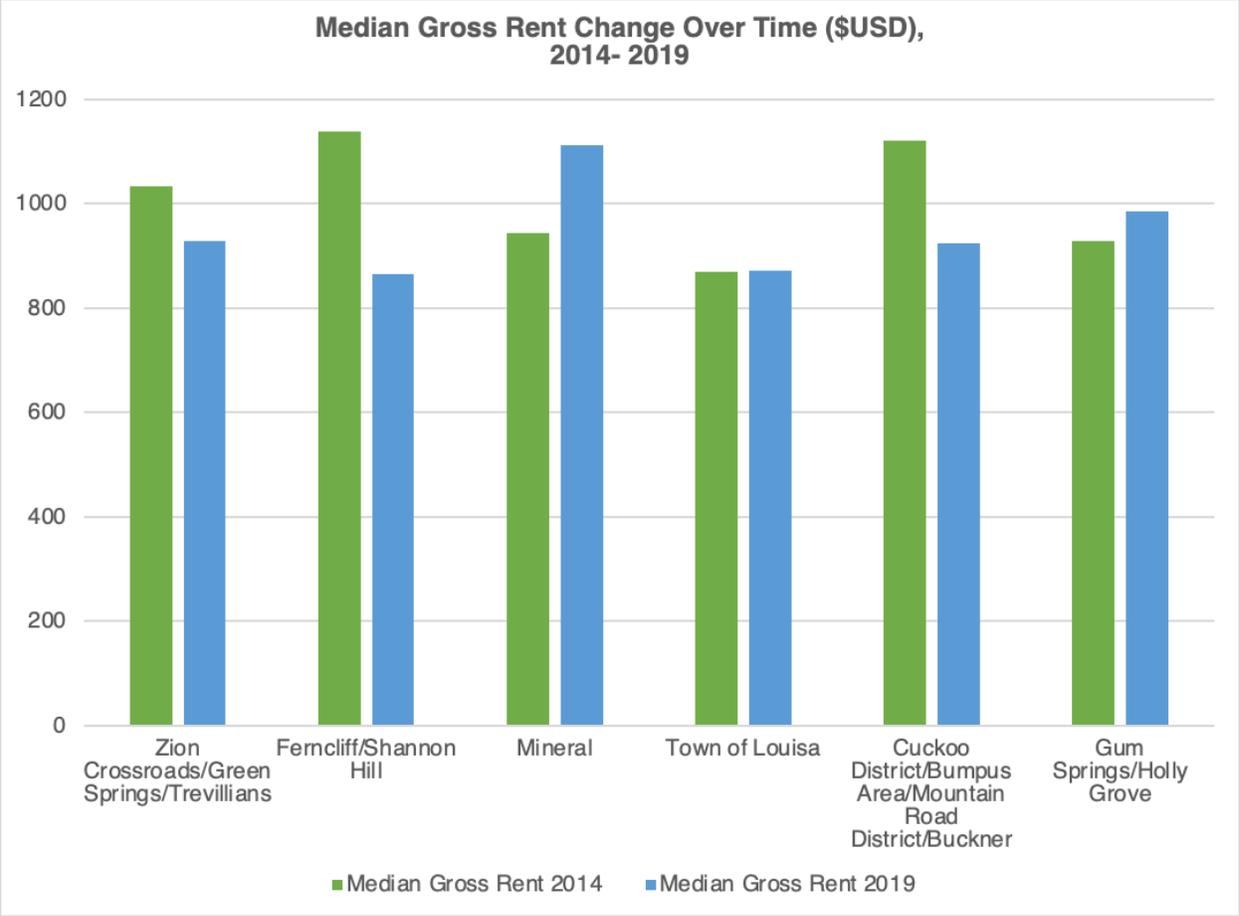


Figure L.13: Median Gross Rent Change Over Time (\$USD), 2014-2019 (Source: ACS)

4.5 Education

Access to education is an extremely important indicator of equity. Louisa County has four elementary schools, one middle school, and one high school located in between Mineral and the Town of Louisa. While Louisa doesn't have any colleges or universities within county boundaries, there are over a dozen colleges and universities within two hours driving distance, including the University of Virginia and College of William & Mary.

Figures L.14, L.15, and L.16, show that graduation rates exceed 80% for all populations. When broken down by race, students of two or more races, non-Hispanic had the highest graduation rate at 100% (Figure L.15), while students who are Hispanic had the lowest graduation rate, 81%, in 2019. The dropout rate was the highest, at 2.8%, among students who are white, while the overall average was two percent in 2019. Students who identify as female had a higher graduation rate and a lower dropout rate than students who identify as male, with a five percentage point difference for graduation rate and a three percentage point difference for dropout rate.

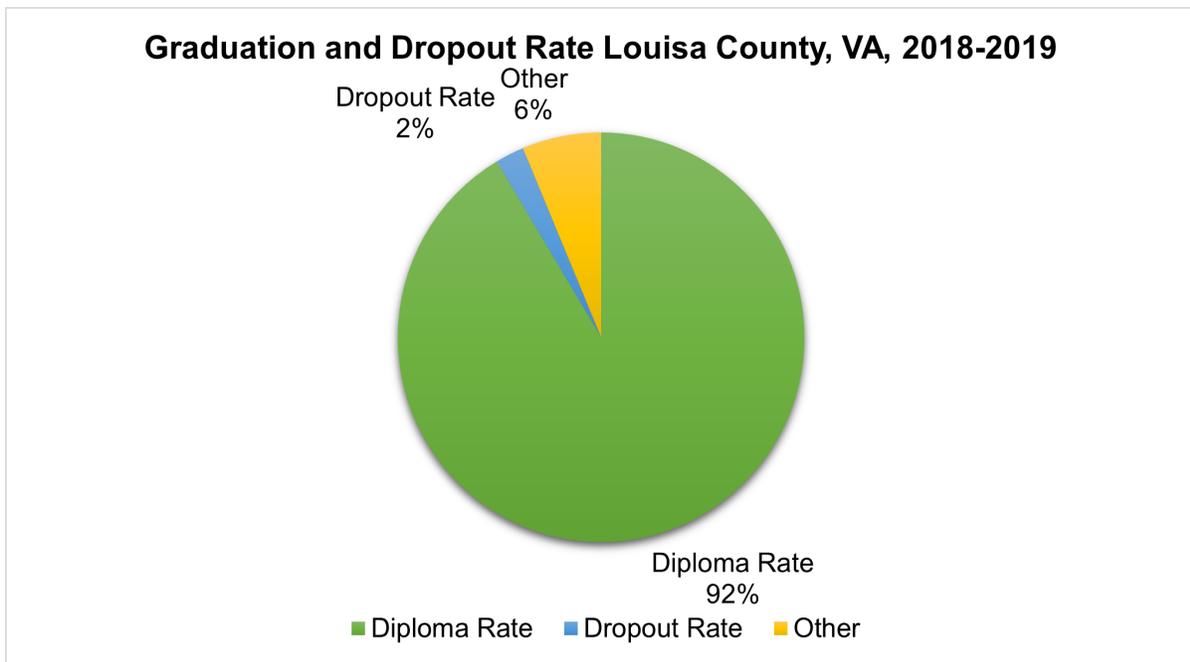


Figure L.14: Graduation and Dropout Rate 2018-2019 in Louisa County, Virginia (source: Virginia DOE)

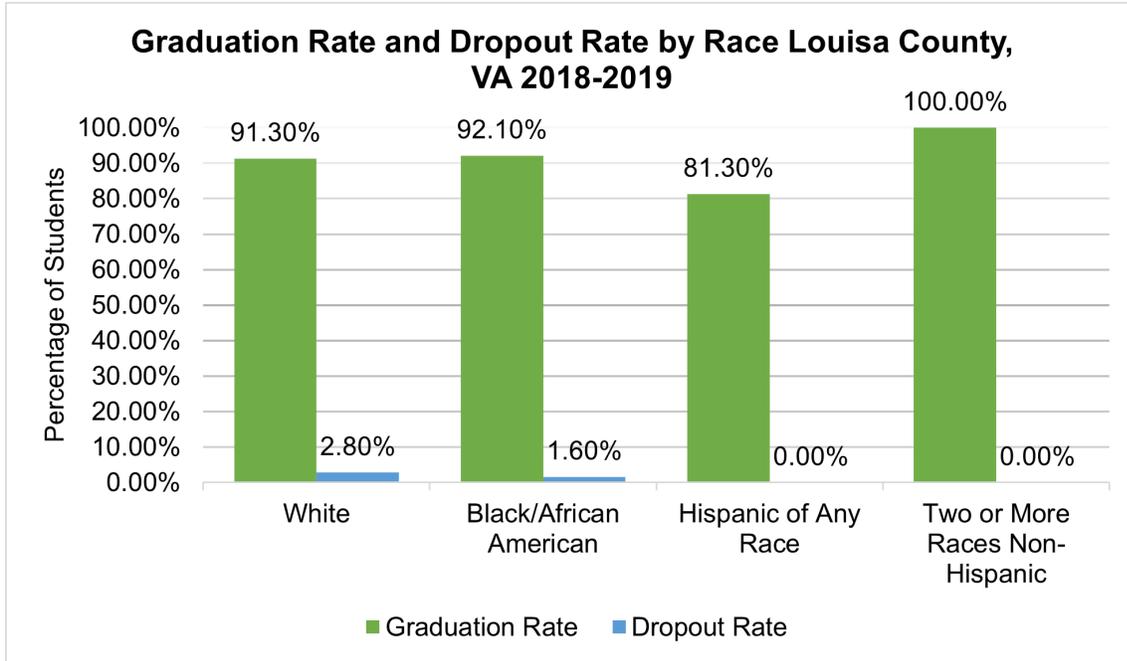


Figure L.15: Graduation and Dropout Rate by Race in 2018-2019 in Louisa County, Virginia (Source: Virginia DOE)

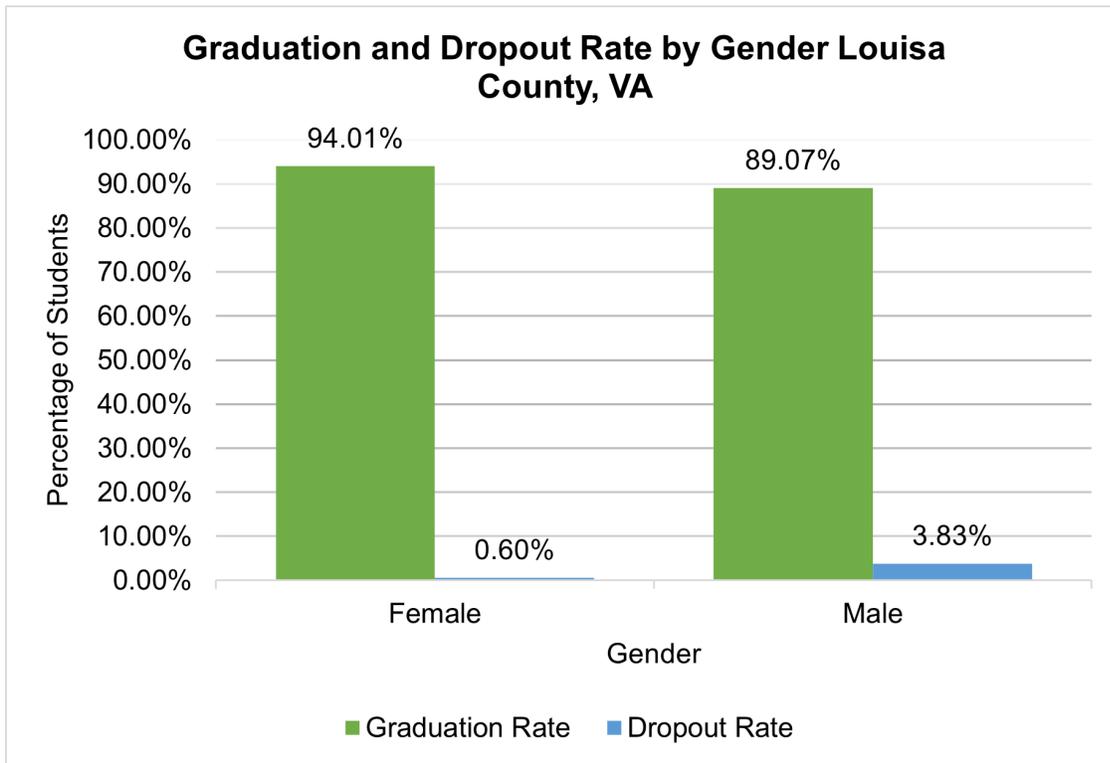


Figure L.16: Graduation and Dropout Rate by Gender in 2018-2019 in Louisa County, Virginia (Source: Virginia DOE)

Per-pupil spending in Louisa County for the 2017-2018 and 2018-2019 school years was less than the state average, but not considerably. Per-pupil spending is a great indicator if students are receiving the resources they need to succeed. In the 2018-2019, spending was about \$700 less than the state average. Finally, *Figure L.18* shows that students who received free and reduced lunch remained between 44-47% with a slight increase in the 2017-2018 school year and then a steady decrease since.

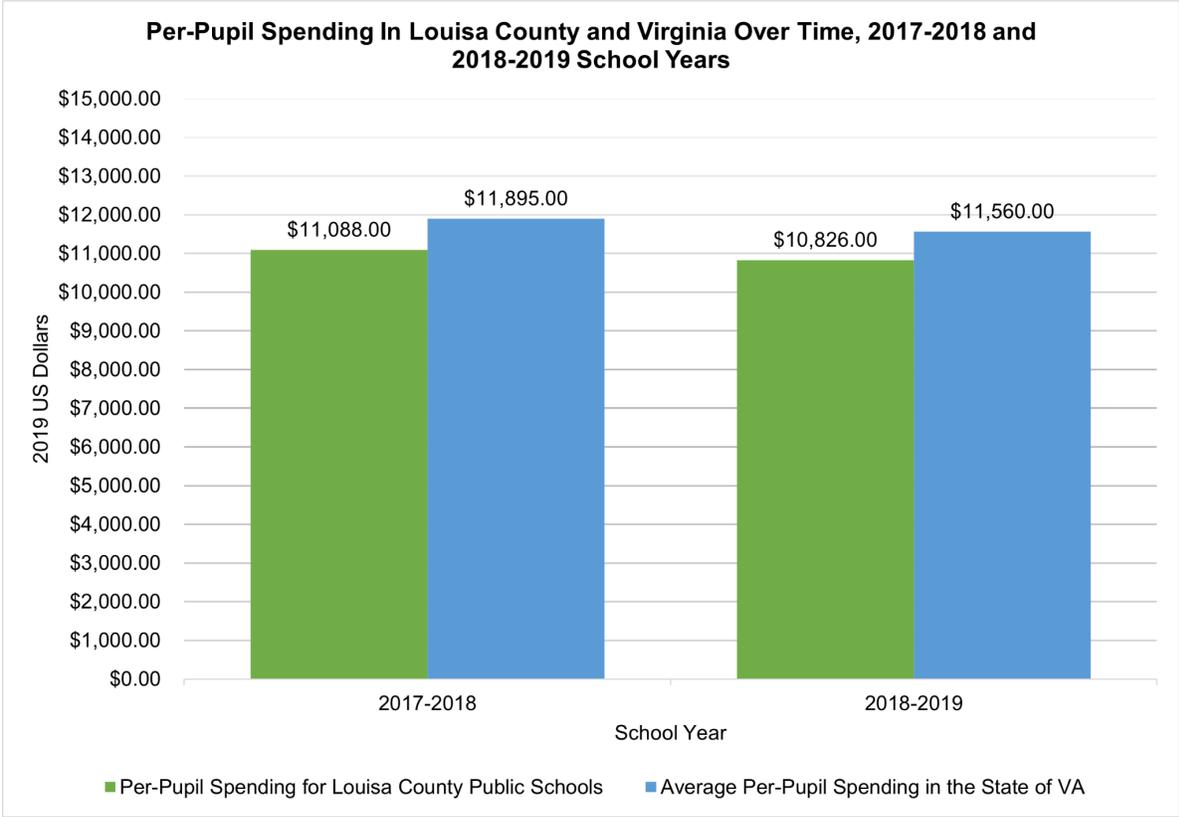


Figure L.17: Per-Pupil Spending in 2018-2019 School Year in Louisa County, Virginia (Source: Virginia DOE)

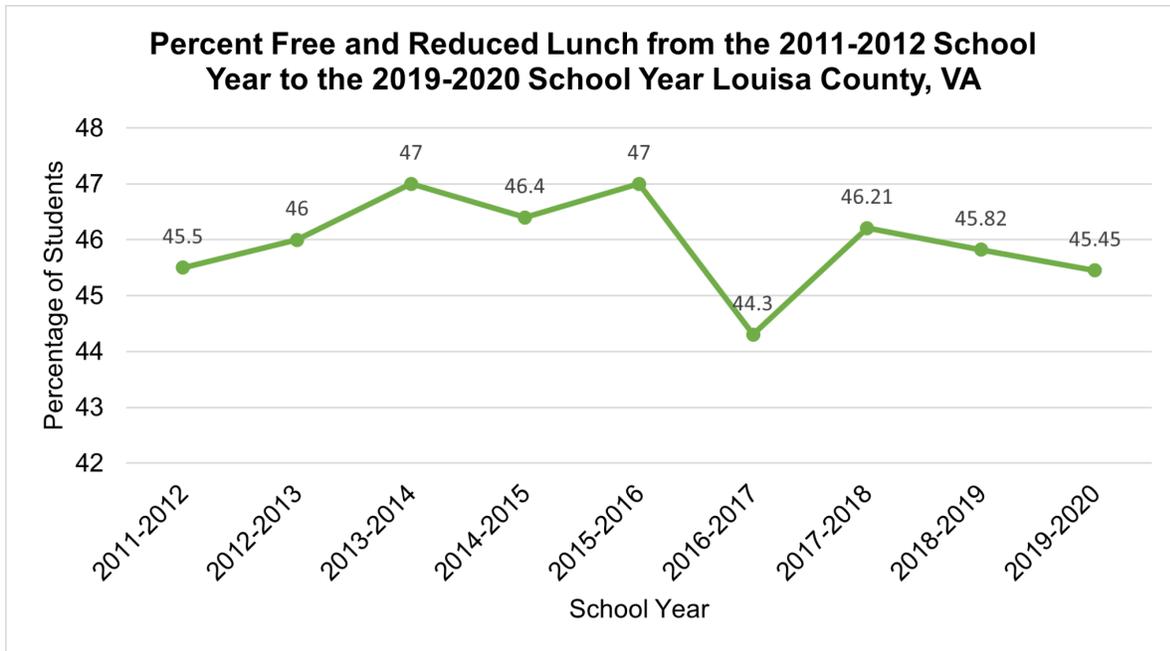


Figure L.18: Percent Free and Reduced Lunch From The 2011-2012 School Year to The 2019-2020 School Year (Source: The Annie E. Casey Foundation)

Education is one of the strengths in Louisa with mostly free options and an ample number of elementary schools. The main barriers to education involve transportation access since students don't live within walking distance and there isn't a reliable public transportation system. However, there is room for growth. *"I do see our community improving. I see our school system strengthening certain things in certain ways that's gonna help across the spectrum (Interview Participant from the Louisa Resource Council)."*

4.6 Digital Divide

Computer and internet access have become increasingly important for accessing crucial resources and opportunities. There is a significant digital divide between populations with and without access to these technologies. Digital access can serve as an indicator of inequity in other realms such as job access, healthcare, and educational opportunities. In Louisa County, approximately 78% of the population has access to the internet. The distribution of those who do not have an internet subscription varies

across census tracts. It appears that overall, the percentage of those without a computer and/or internet subscriptions is higher in Ferncliff and Gum Springs than in other tracts.

“COVID definitely left no one unaffected, but it impacted certain people more than others. And access to technology became such an essential resource when things were virtual (Louisa County Stakeholder Interview).”

One noticeable trend is the disproportionately high percentage of Black households without a computer in Ferncliff, the Town of Louisa, and Mineral. Almost 25% of Black households in Ferncliff do not have a computer in the house as compared to only six percent of white households in the same tract. This trend does not appear to extend to internet access (*Figure L.19*). This highlights an interesting pattern. In several tracts Black households are less likely to have a computer, but white households appear to have lower rates of internet access. There is a direct correlation between income and internet access. Surprisingly, it appears that the highest concentrations of households without internet access appear to be in the middle income bracket (*Figure L.21*).

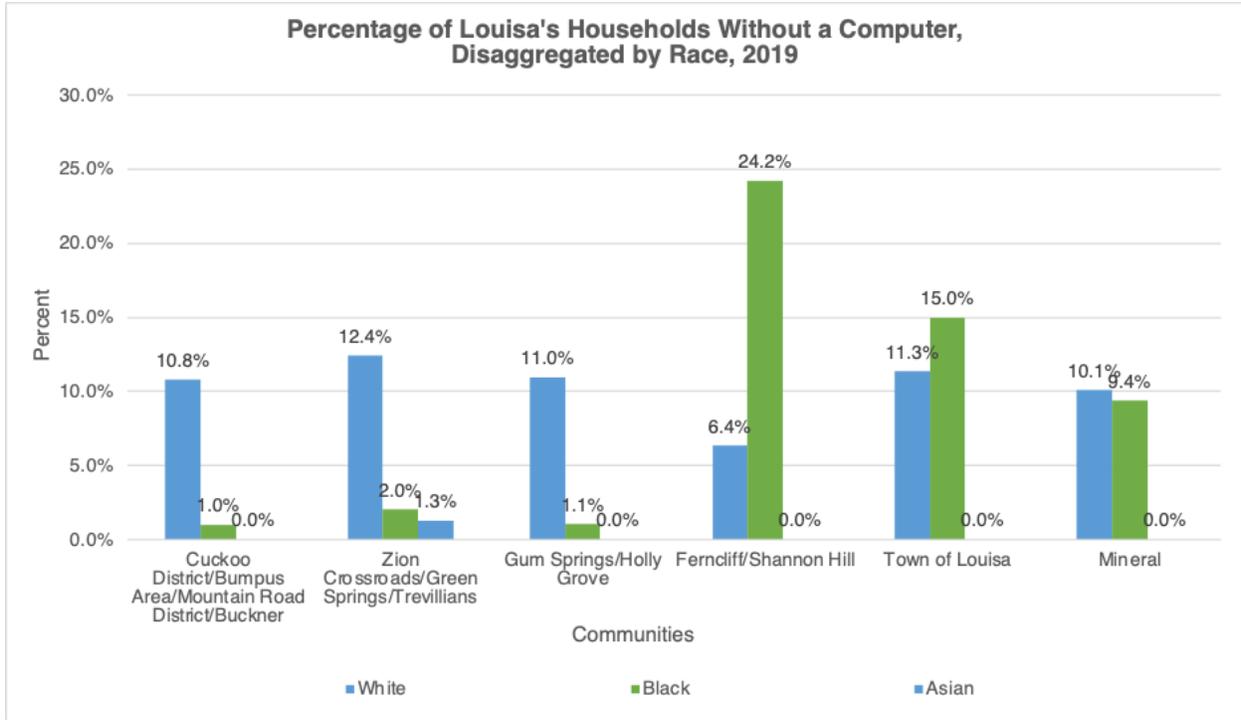


Figure L.19: Percentage of Louisa's Households Without a Computer, Disaggregated by Race, 2019. (Source: ACS) Note: Hawaiian, Native American, Other, and Two or More population were reported as zero, and therefore are not included in this chart.

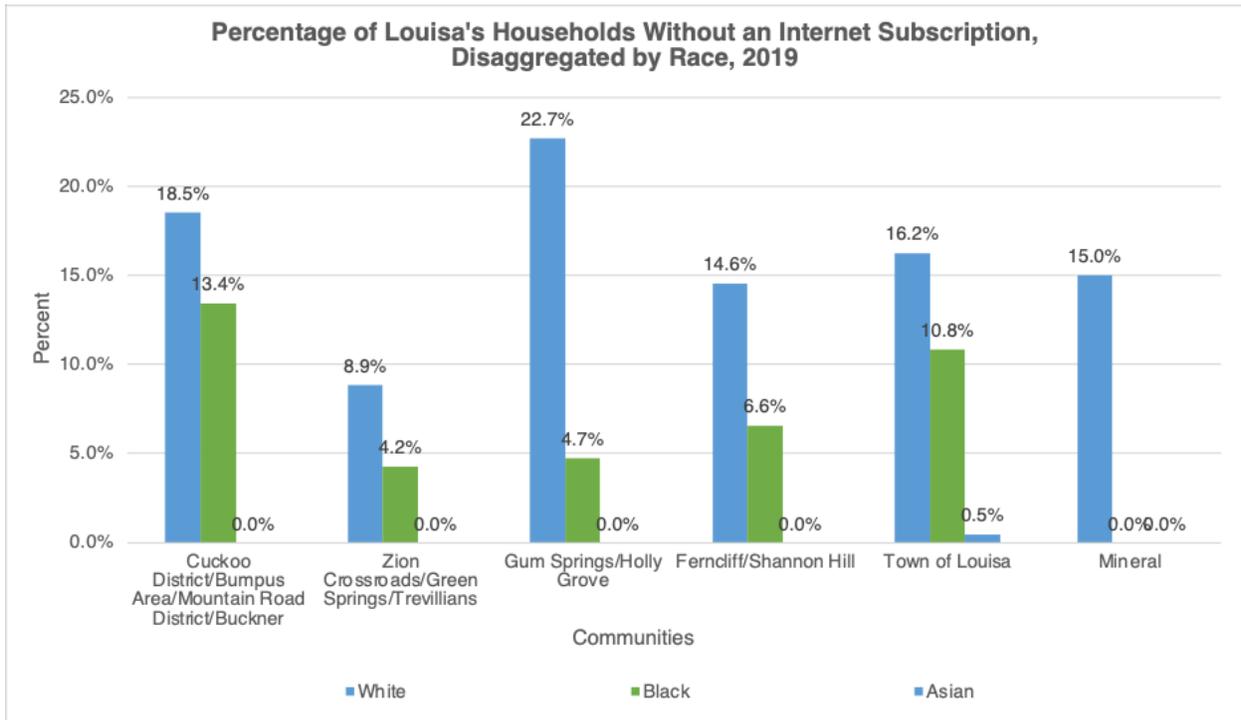


Figure L.20: Percentage of Louisa's Households Without an Internet Subscription, Disaggregated by Race, 2019. (Source: ACS) Note: Hawaiian, Native American, Other, and Two or More population were reported as zero, and therefore are not included in this chart.

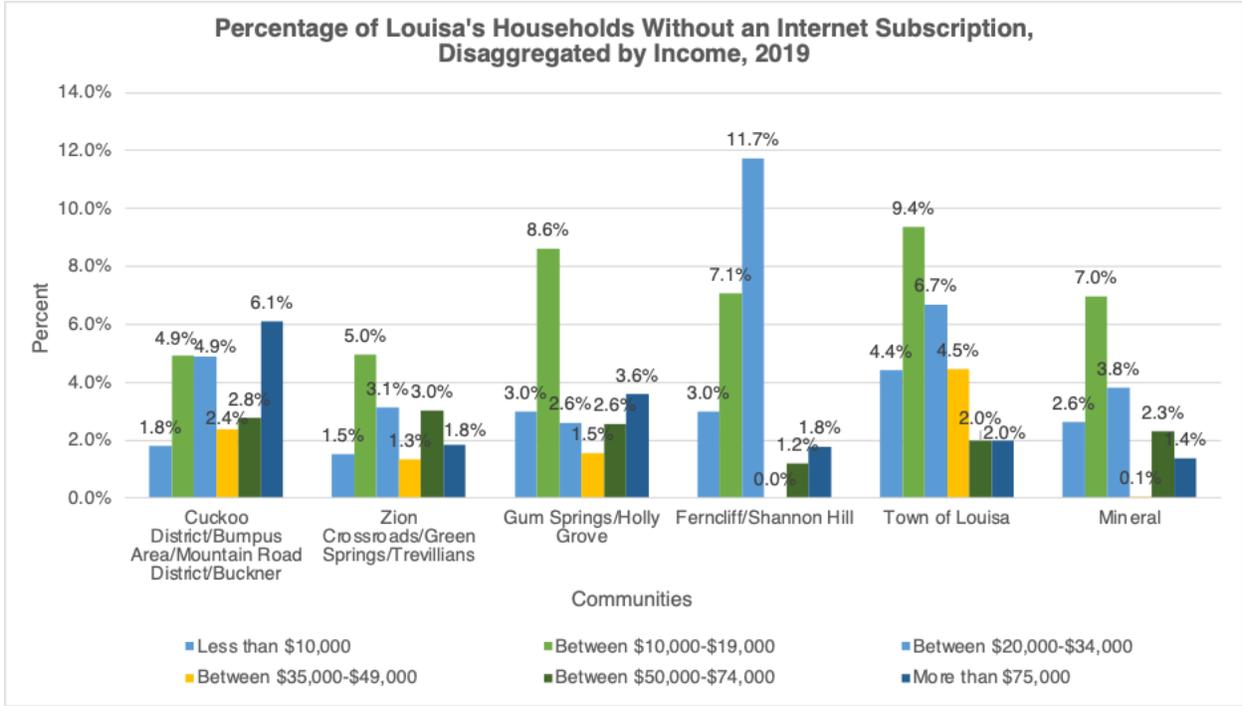


Figure L.21: Percentage of Louisa's Households Without an Internet Subscription, Disaggregated by Income, 2019 (Source: ACS)

4.7 Mobility

With an area of 511 square miles, Louisa is large and predominantly rural. Several major highways run through Louisa, including Route 22, Route 208, and I-64 to connect Louisa to major urban centers like Richmond and Hampton Roads. Mobility and access to transportation are therefore important parts of life in Louisa, and these factors have a huge influence on equity issues. Public transportation is limited, so most people rely on cars to commute and run errands. Any vehicle issue can therefore impact daily life for residents—from getting to work and buying groceries to taking children to school and going to the doctor.

To better understand vehicle ownership trends in Louisa, we analyzed how many workers did not own a car in 2019. The analysis below (*Figure L.35*) shows that more than 90% of workers in each census tract owned at least one car. Only the tracts around the towns of Louisa and Mineral and Gum Springs/ Holly Grove had measurable worker populations without cars. These were still a very small portion of the population, between three and seven percent of the overall workforce.

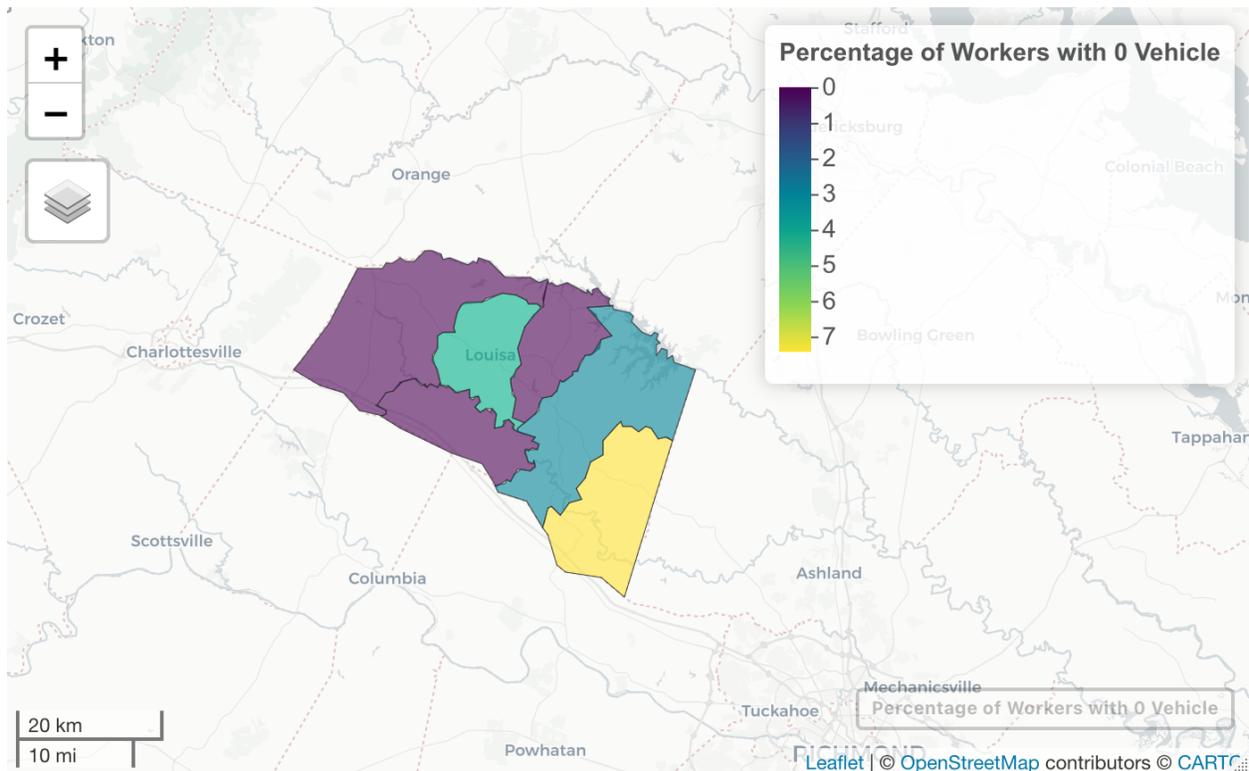


Figure L.35: Percentage of workers who do not own a vehicle in Louisa by census tract, 2019 (Source: ACS)

The census only measures vehicle ownership among workers, or those who are counted as *employed*. As a result, this analysis does not take into account the vehicle ownership status of other Louisa residents who are not included in this employment data. Internal calculations using ACS 5-year estimates confirm that this only accounts for roughly 70% percent of the working age population (residents 16 and older). Further research

should be done to consider vehicle ownership among all residents, including those who may be retired, unemployed, homeless, or homebound.

The travel time and modes of transportation to work data shows how workers in Louisa commute. *Figure L.36* below shows the average worker commute time across census tracts in Louisa, ranging from roughly 30 to 40 minutes each way. This is longer than average commute time in Virginia (27.6 minutes) in 2019 and the U.S. average commute (also 27.6 minutes) (Burd, Burrows, and McKenzie 2021). In other words, most workers in Louisa spend more time commuting than the average American or Virginian.

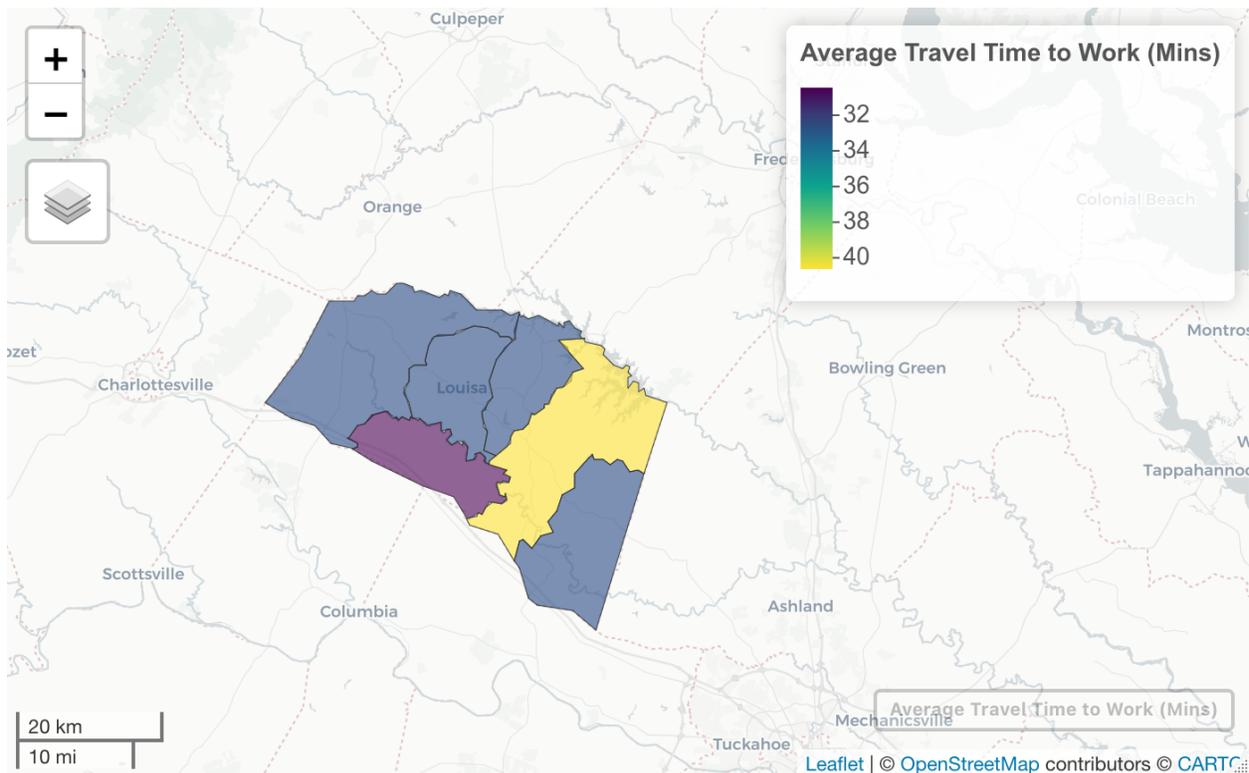


Figure L.36: Average worker commute in minutes per census tract in Louisa County, 2019 (Source: ACS)

Given Louisa’s rural location, most workers commute with cars. *Figure L.37* below shows the distribution of modes of transportation for workers, split out by sex. Of Louisa’s 21,251 workers in 2019, roughly 60 percent drove themselves to work. Another 10 percent carpoolled, indicating that approximately 70 percent used cars to commute

to work. A small number of commuters walked, and those that did tended to identify as male. Even fewer workers biked, took public transportation, or had some other form of transportation (taxis, motorcycles, etc.). The analysis shows that workers who identified as female were more likely to work from home compared to male workers. Female workers also made up a slightly smaller percentage of the overall workforce, at 48 percent of workers compared to 52 percent of workers who identified as male.

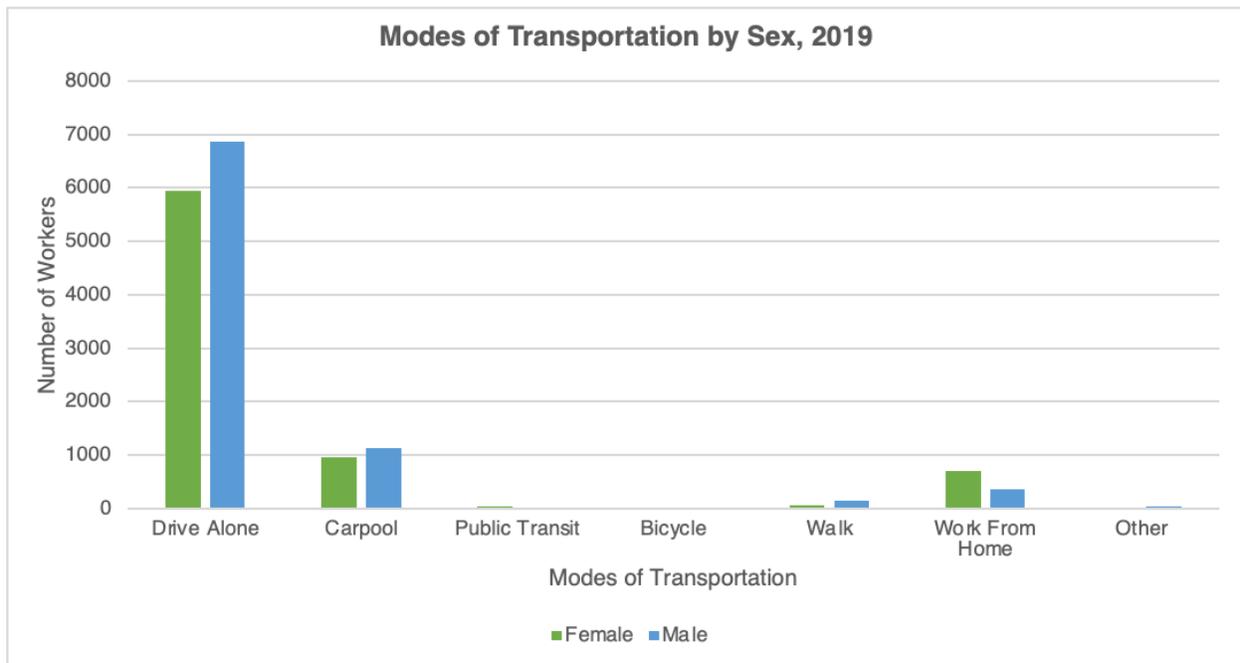


Figure L.37: Modes of Transportation by Sex in Louisa, 2019 (Source: ACS)

Conversations with local stakeholders revealed that rising gas prices, gaps in the supply chain for new cars, and a lack of repair parts have been affecting mobility for many Louisa residents each day. This is particularly challenging for low-income and fixed-income families and elderly residents.

“In Louisa, it is 511 square miles and you’re crippled if you don’t have a working car. You can’t get to your doctor’s appointment. You can’t get to the grocery store. You can’t get places because you don’t have transportation. It’s a huge problem (Louisa County Interview Participant).”

Stakeholders confirmed that access to transportation has ripple effects that in turn impacts children and youth. While Louisa has several organizations that provide preschool and after-school options intended to assist working parents and improve academic outcomes among children, many families cannot tap into these resources due to mobility issues. Access to childcare was another barrier that came up in our conversations with community leaders. While childcare and other youth services may be available to Louisa residents, transportation to these programs remains a challenge for many residents and can prevent them from participating.

“There may be preschool available for plenty of children who meet the eligibility criteria to access free preschool available through public schools or Head Start, but some families can’t access the preschool because transportation is not provided and they don’t have a way to get there. So even though they’re eligible for it, they can’t receive the service - which is unfair (Louisa County Focus Group Participant).”

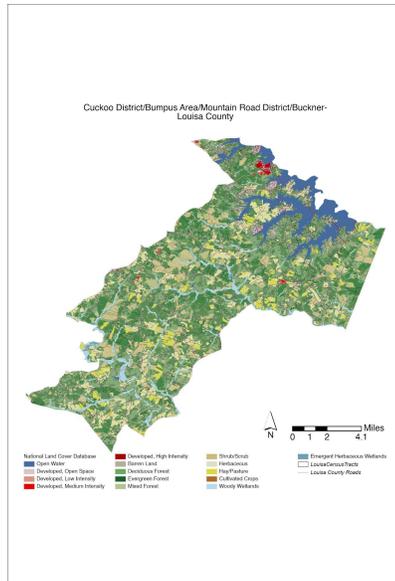
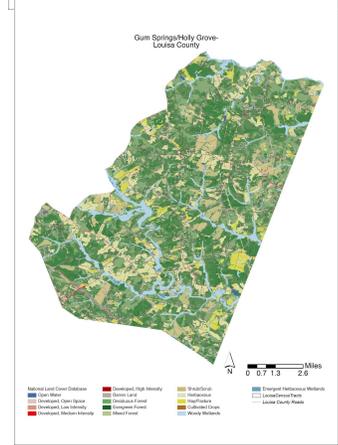
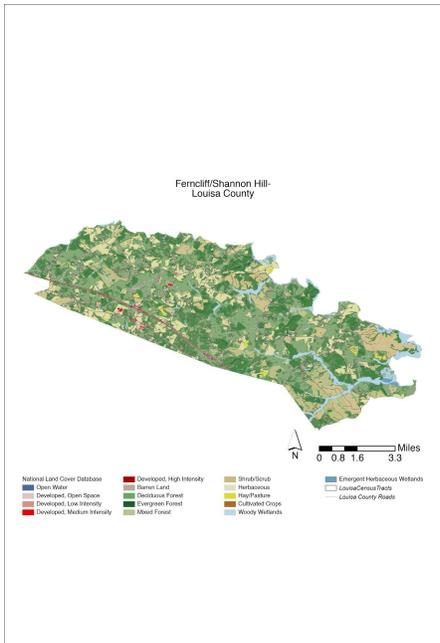
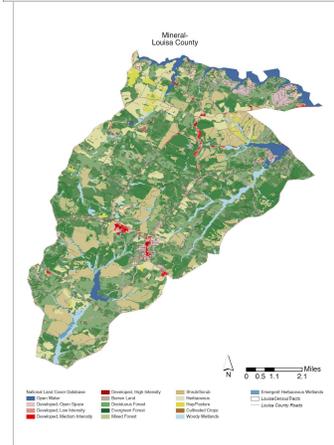
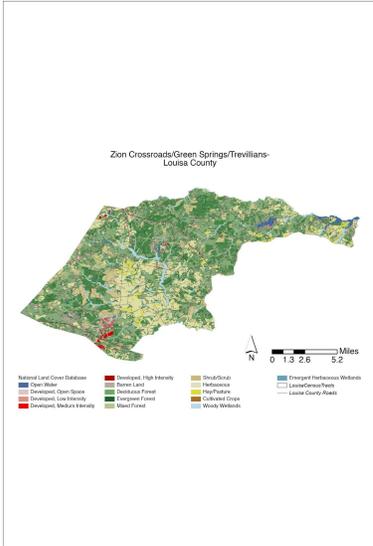
Looking forward, it is essential to address issues of transportation in order to work towards equity and improve the quality of life for residents in Louisa. Many of the opportunities that have been raised through this study, such as access to childcare and use of green space, require planning around mobility and transportation to ensure that all residents are able to take part in these activities and use these services. Therefore, no issue can be completely resolved without first considering mobility, vehicle ownership, and commuting throughout Louisa County.

4.8 Land Use + Environment

Through examining land cover data from Louisa County we are better positioned to see various elements such as tree canopy coverage and overall acreage at the tract and county level. The data was acquired from the MRLC & National Land cover database, it

was then examined in the context of four various categories: Developed, Herbaceous, Planted/Cultivated, and Forested. Through these four categories of land classification codes, zonal statistics were used to calculate total and percent acreage at the tract and county level.

In order to fully understand land use and the environment in Louisa County, it is important to visualize the makeup of each census tract and the various types of land cover that exist. Each census tract shown together exhibits spatial issues of equity and where specific areas for opportunity might be. Lastly, by examining the various percentages of acreage by land cover, key insights can be visualized in the context of spatial development (*Figures L.22-7*).



Figures L.22-7. Top to Bottom Left to Right: Land Cover Maps Zion Crossroads etc., Louisa, Mineral, Gum Springs/ Holly Grove, Ferncliff/ Shannon Hill, & Cuckoo District etc., 2019 (Source: MRLC & National Land Cover Database)

Next, we will take into account the overall acreage by land classification in the year 2019 for the various census tracts within Louisa County.

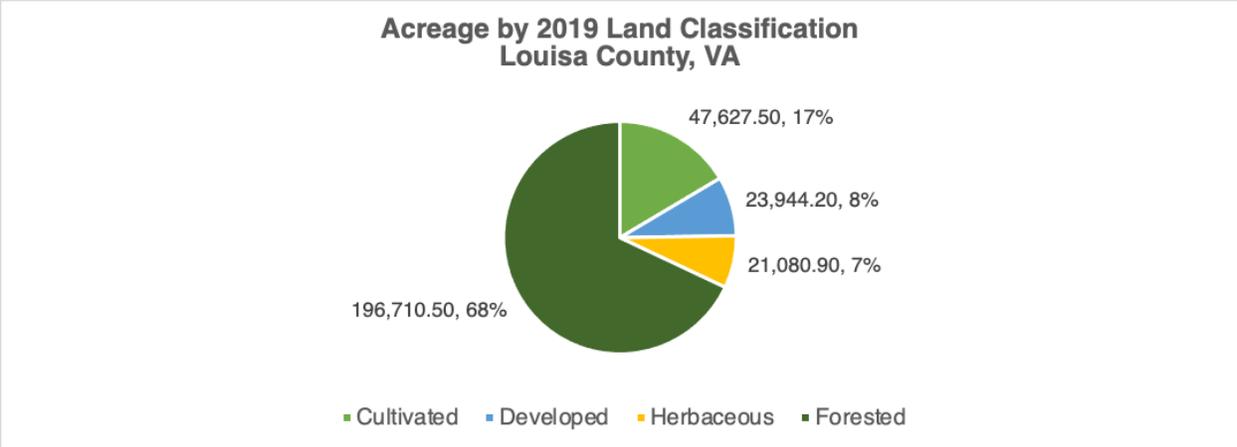


Figure L.28. Acreage by 2019 Land Classification, Louisa County, VA, 2019. (Source: MRLC & National Land Cover database)

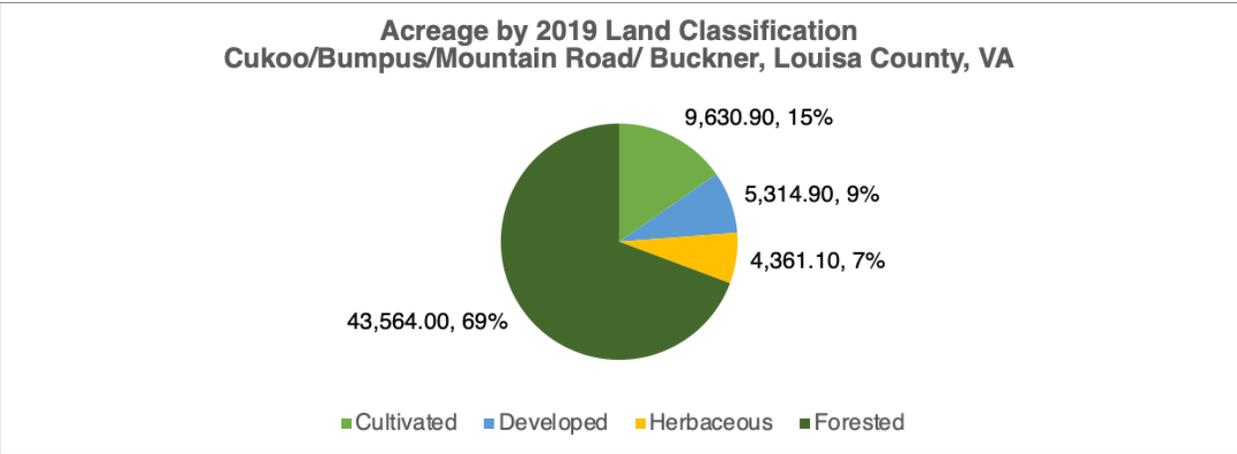


Figure L.29. Acreage by 2019 Land Classification Cukoo/ Bumpus/ MountainRoad/ Buckner, Louisa County, VA, 2019. (Source: MRLC & National Land Cover database)

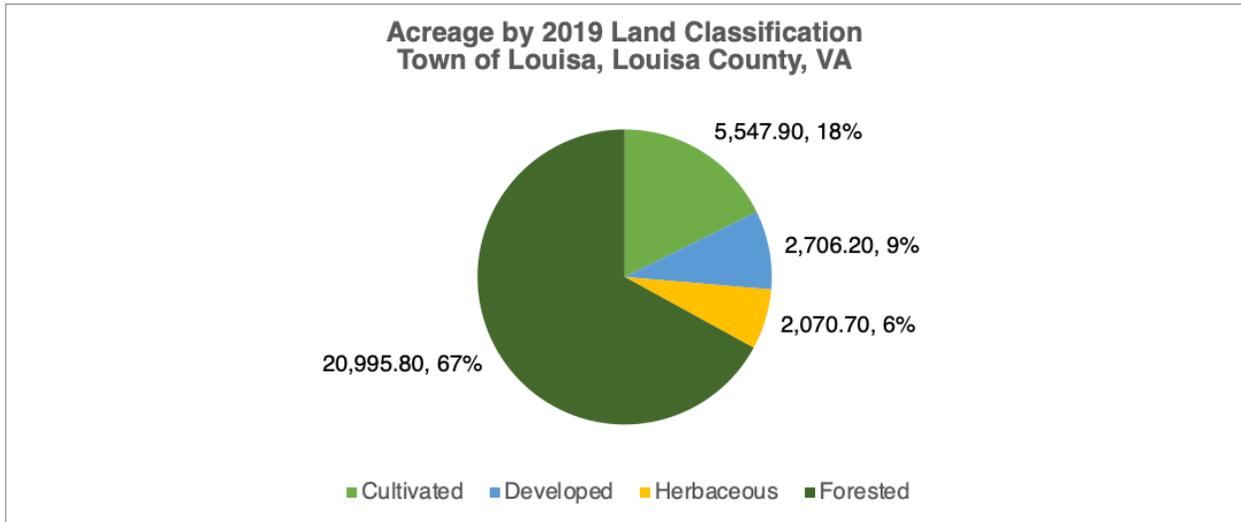


Figure L.30. Acreage by 2019 Land Classification Town of Louisa, Louisa County, VA, 2019. (Source: MRLC & National Land Cover database)

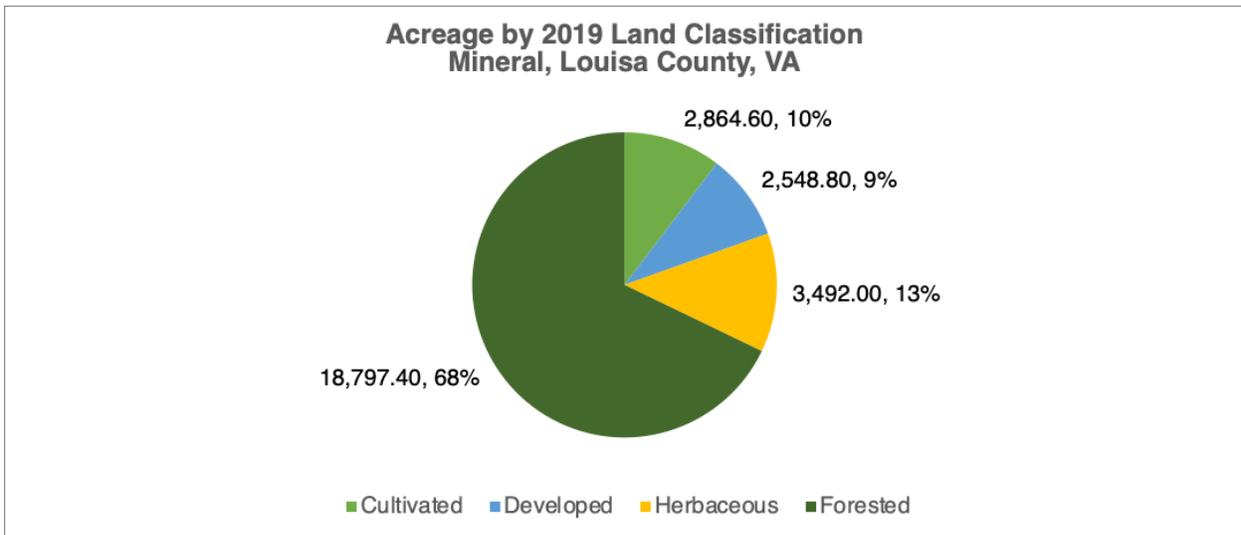


Figure L.31. Acreage by 2019 Land Classification Mineral, Louisa County, VA, 2019. (Source: MRLC & National Land Cover database)

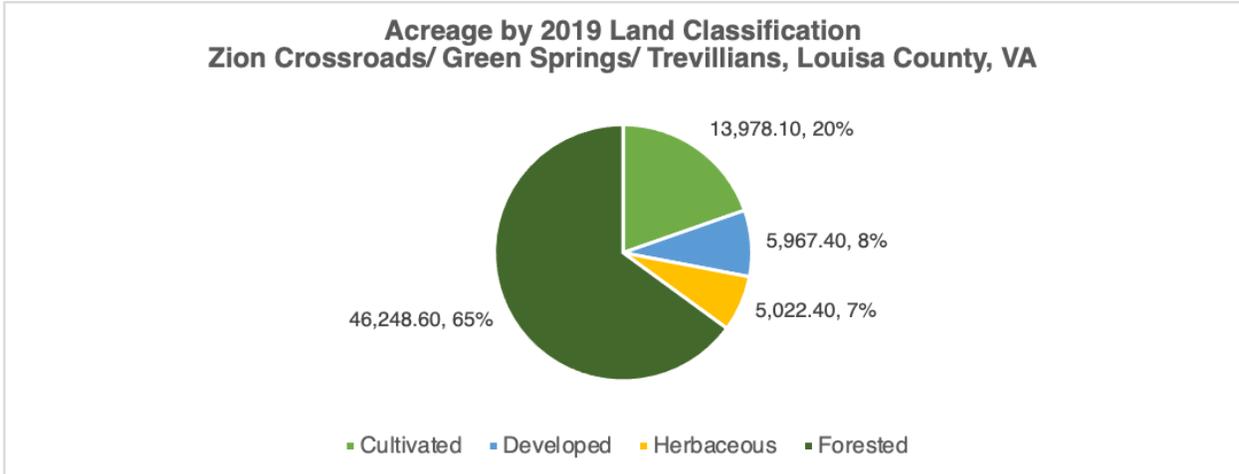


Figure L.32. Acreage by 2019 Land Classification Zion Crossroads/ Green Springs/ Trevillians, Louisa County, VA, 2019. (Source: MRLC & National Land Cover database)

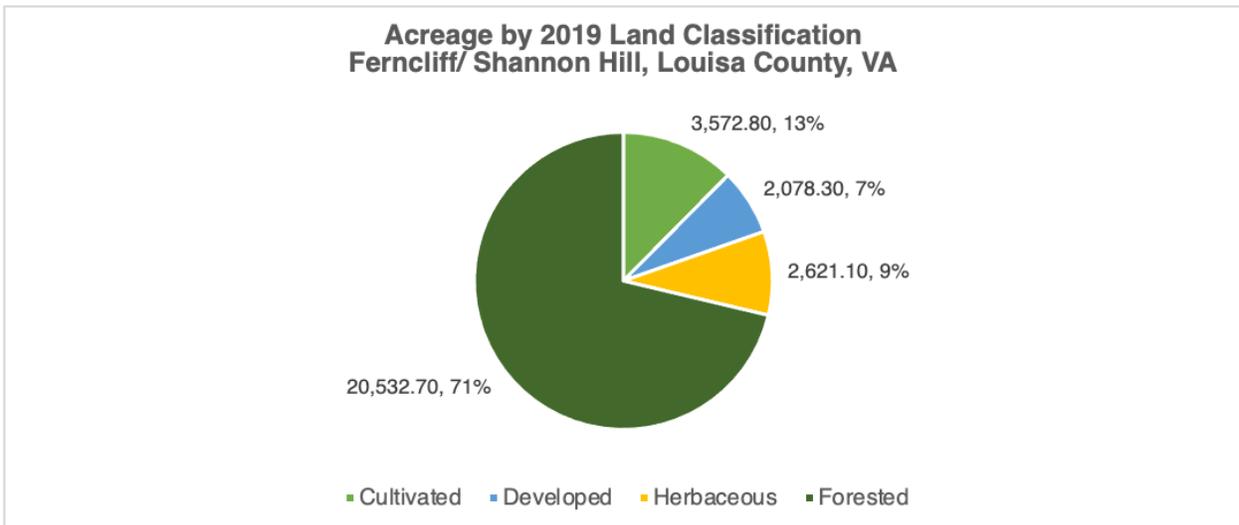


Figure L.33. Acreage by 2019 Land Classification Ferncliff/ Shannon Hill, Louisa County, VA, 2019. (Source: MRLC & National Land Cover database)

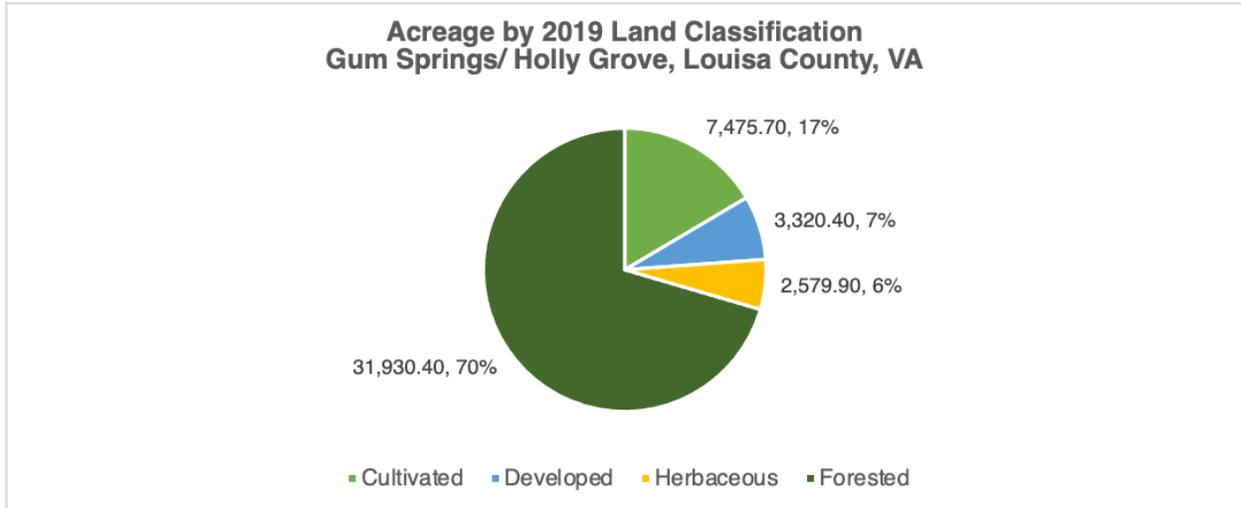


Figure L.34. Acreage by 2019 Land Classification Ferncliff/ Shannon Hill, Louisa County, VA, 2019. (Source: MRLC & National Land Cover database)

Clearly, forested land makes up the most significant type of land cover in the county of Louisa, accounting for 68% of all acreage in the town, or a total of 196,710,50 acres. While developed land only accounts for roughly 8% of all acreage county wide. The Cukoo/Bumpus, etc. area has a higher percentage of developed land as it is near Lake Anna and serves as a popular spot for tourism. The Town of Louisa also has a high percentage of developed land as well as cultivated land.

“Okay, we have parks but how many people are utilizing the parks? Is there an organization that could donate a van that could go to different neighborhoods or underserved communities and pick up children and bring them to the park and have a kickball game or whatever may happen at the park. Just a healthy, fun space. Maybe just get some kids or some families together to start a community garden. Something like that (Louisa County Focus Group Participant).”

Although these are some of the highlights of land cover and overall acreage, the clear message is that for Louisa County, the vast majority of land is classified as forested. Through comparing the land cover maps against the overall acreage land classification,

one is better positioned to examine Louisa County and its various census tracts in terms of spatial development as well as overall land cover types.

Conclusion

Through quantitative analysis and qualitative research, Louisa County has proven to be a vibrant community with ample strengths and areas of opportunity. The opportunities for growth include transportation/mobility, access to services, collaboration between community organizations, access to green space, youth activities, childcare, internet access, and housing access and affordability. Strengths of the community include steady employment percentages, low unemployment rates, educational opportunities, and strong leadership and passion for the community.

Our focus group participants and interviewees emphasized the need for collaboration across organizations rather than trying to solve issues independently. Many accessibility issues are a result of lack of transportation. While Louisa County has ample forest cover, there is a need for further green space development for community-engaged uses. While there are adequate employment opportunities, many families can't access them because of their lack of childcare. While education is a strength, lack of public transportation creates hurdles for students to reach their place of learning.

One of the biggest opportunities noted by our focus group participants was that Louisa is fortunate to have a number of great organizations and strong community leaders who are passionate about the county and the people who live there. One of the best ways to begin to tackle the hurdles that Louisa faces is through community partnerships and collaboration. Rather than having individual organizations attempting to tackle issues themselves, Louisa organizations should continue working together to address challenges and develop innovative solutions.

"I'm hoping that the various organizations can come together to address one issue at a time. I don't feel like we're working together. It feels like everyone is trying to do everything all at once and we're not mastering anything. We know the issues so I feel we just need to come together and focus... if we're working on transportation, then all of the organizations can work on transportation together instead of everyone working individually (Louisa County Focus Group)."

We would like to thank our interviewees and focus group participants for their insightful comments and feedback. It was a pleasure to speak with them and learn more about Louisa's resources, assets, and programs. While this analysis is only the starting point, we look forward to continuing to work with our community partners and stakeholders in Louisa to identify and address equity and quality of life indicators.

CHAPTER 5. NELSON COUNTY

Introduction

Originally the home of the Monocan tribe, Nelson County, founded in 1807, is a rural community situated in the heart of Central Virginia.¹⁵ Encompassing a section of the Blue Ridge Mountains and the foothills to the east, Nelson County offers acres of untouched natural areas and farm land. Many visitors utilize the area for hiking, fishing and exploring award-winning wineries and breweries. Others come for the skiing at the largest ski resort in Virginia, Wintergreen Resort, which is on the eastern slopes of the Blue Ridge Mountains.

Named for Thomas Nelson Jr, the third Governor and a signer of the Declaration of Independence, the county flourished in the heyday of the 19th century river economy with its apple crop, logging mills, chestnut wood and nuts but declined dramatically when the river business succumbed to the construction of roads and the popularity of the automobile.¹⁶ Currently, with the growth of its apple industry and the development of new wineries,¹⁷ tourism has been a driver for Nelson County's economy with it earning about \$217.8 million in tourism revenue in 2019.¹⁸

With a land area of 470.86 square miles, Nelson County comprises three U.S. Census Tracts with a total population of 14,831 according to 2019 Census data.¹⁹ The community of Nelson County is driven and forward thinking. Residents strive for connectivity through transportation, cellular and internet services, and economic partnerships. They are eager to see collaborative efforts between county partners and organizations to address these challenges equitably.

¹⁵ Visit Nelson County, "About Nelson County".

¹⁶ Nelson County Historical Society, (29 April 2022).

¹⁷ Visit Nelson County, "About Nelson County".

¹⁸ Michael Caldwell, "Nelson County earned about \$217.8 million in tourism revenue in 2019", *CBS19*, (29 April 2022).

¹⁹ U.S. Census Bureau; American Community Survey, 2010 and 2019 American Community Survey 5-Year Estimates, QuickFacts; using data.census.gov; (29 April 2022).



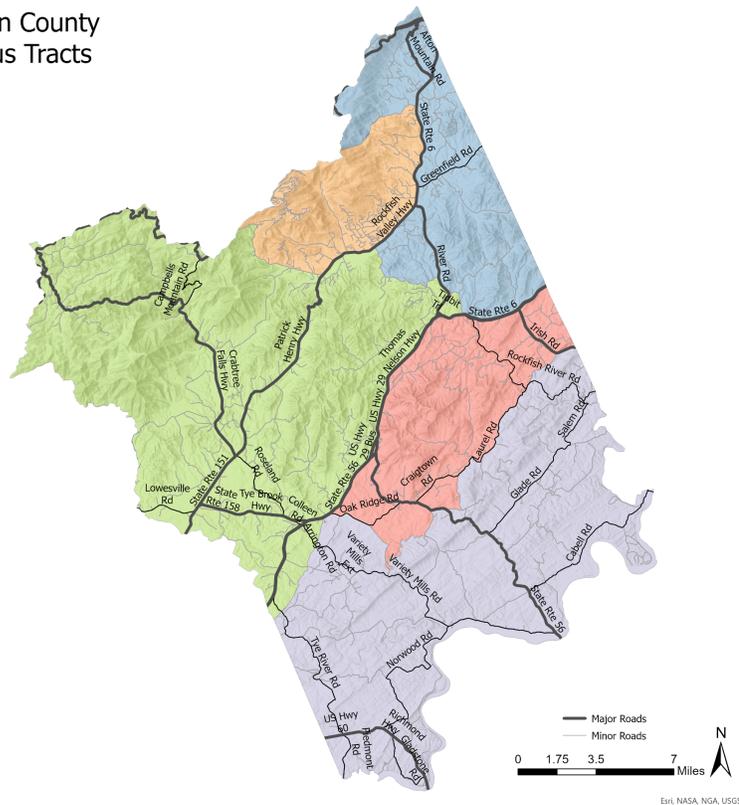
Picture 1: Aerial View of Nelson County, Virginia.²⁰

²⁰ Sotheby's International Realty. "4303 JAMES RIVER Road Wingina, Virginia 24599 États-Unis."

Mapping Exercise

The focus group that took place on April 14, 2022 did placemaking exercises for Nelson County's 2021 census tracts (Map 1). For consistency in time frames for the analysis of this report, 2019 census tracts were used. Nelson County has 5 Census tracts in 2021, as seen in Map 1, and in 2019 there are 3 Census tracts. Therefore, names generated in the placemaking exercise were redistributed based on location for 2019 data. To fit the needs of the 2019 tracts, 2021 census tracts which were labeled Afton-Schuyler (blue area in Map 1) and Wintergreen-Rockfish Valley (orange area in Map 1), were combined to create Wintergreen-Schuyler. Additionally, to more appropriately label another 2019 tract, the two tracts labeled Lovingston (red area in Map 1) and Wingina-Gladstone (purple area in Map 1) in 2021, were joined to create Gladstone-Lovingston. The names created for the 2021 Census tracts by focus group attendees will be used in future reports.

Nelson County
Census Tracts



Map 1: Current Census Tracts, Nelson County. Data sourced from the United States Census Bureau for Nelson County, VA, 2021.

2.1 Demographics

2.1.a. Race

The racial composition of the population has been disaggregated at the census tract level. The data show that Nelson County has a majority presence of white households, and a much lower percentage of Black and Latinx residents by comparison, as shown in Figure N.2.

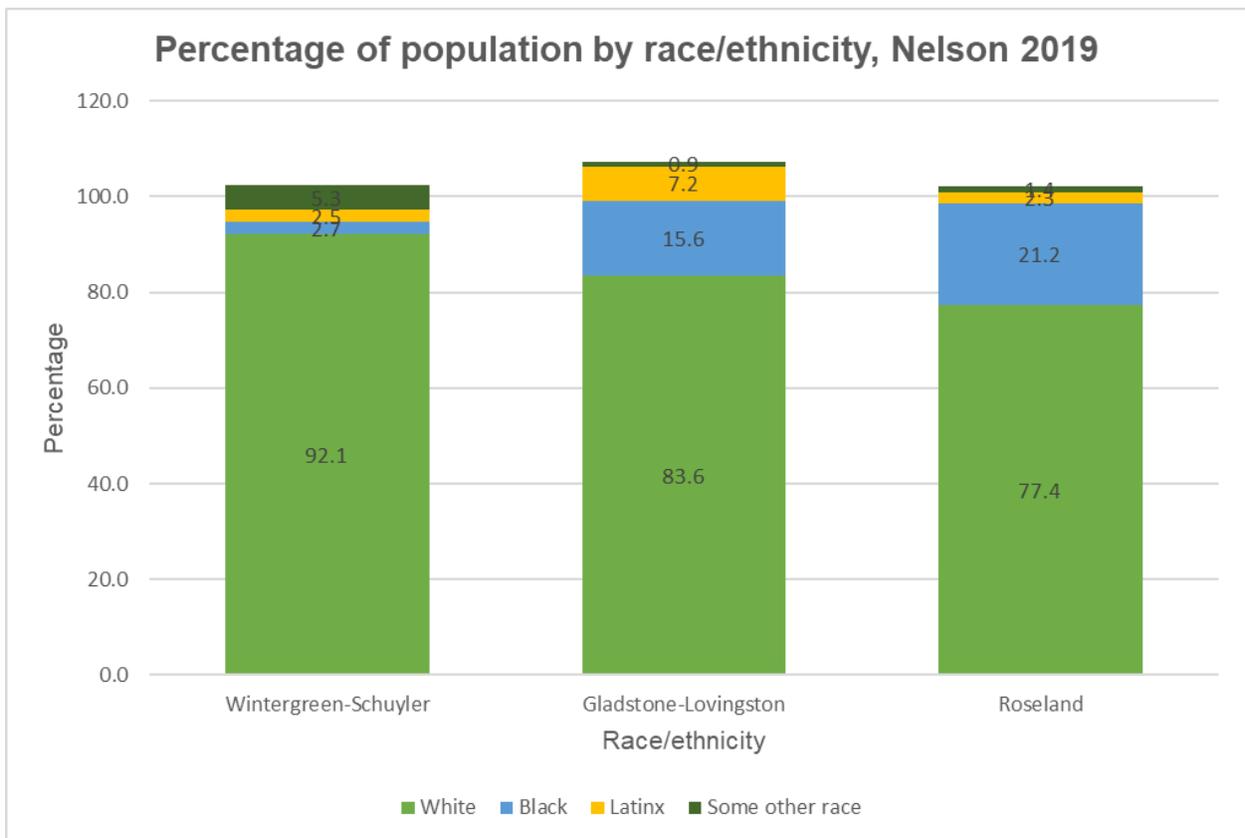


Figure N.1: Population by Race and Ethnicity, Nelson County, VA. Data Source: 2019 American Community Survey 5-year estimates.

The county has negligible percentages of Native American, Asian, Native Hawaiian and other races as shown in Figure 2. When compared to the qualitative data collected for this project, it is evident that the observations made by interview respondents are borne out by these statistics, particularly with regard to the white population in the county. Additionally, while the data by themselves do not reflect transient groups of individuals, interview respondents emphasized the significance of hispanic migrants to the local economy, many of whom may not

be captured by the reference datasets. Given the context, local associations such as the Central Farmworkers Initiative have been instituted to serve the needs of migrant farm workers who are employed in vineyards and orchards across the county (Heise, 14 March 2022). Ken Heise, president of the Nelson County Community Fund, emphasized in his interview the significance of funding to the improvement of social services: “Through this [Central Farmworkers] initiative which we’ve funded, we were able, for example, to help over 95% of the workers who came last year to get one or two covid vaccines. There’s an initiative to help provide health education for them in areas that are most likely to affect them. Things like diabetes and hypertension for example. We’re funding an effort to improve access to the internet and improve digital literacy among these migrant workers. This will help them access other social services, banking, things of that nature that right now they are excluded from” (Heise, 14 March 2022).²¹

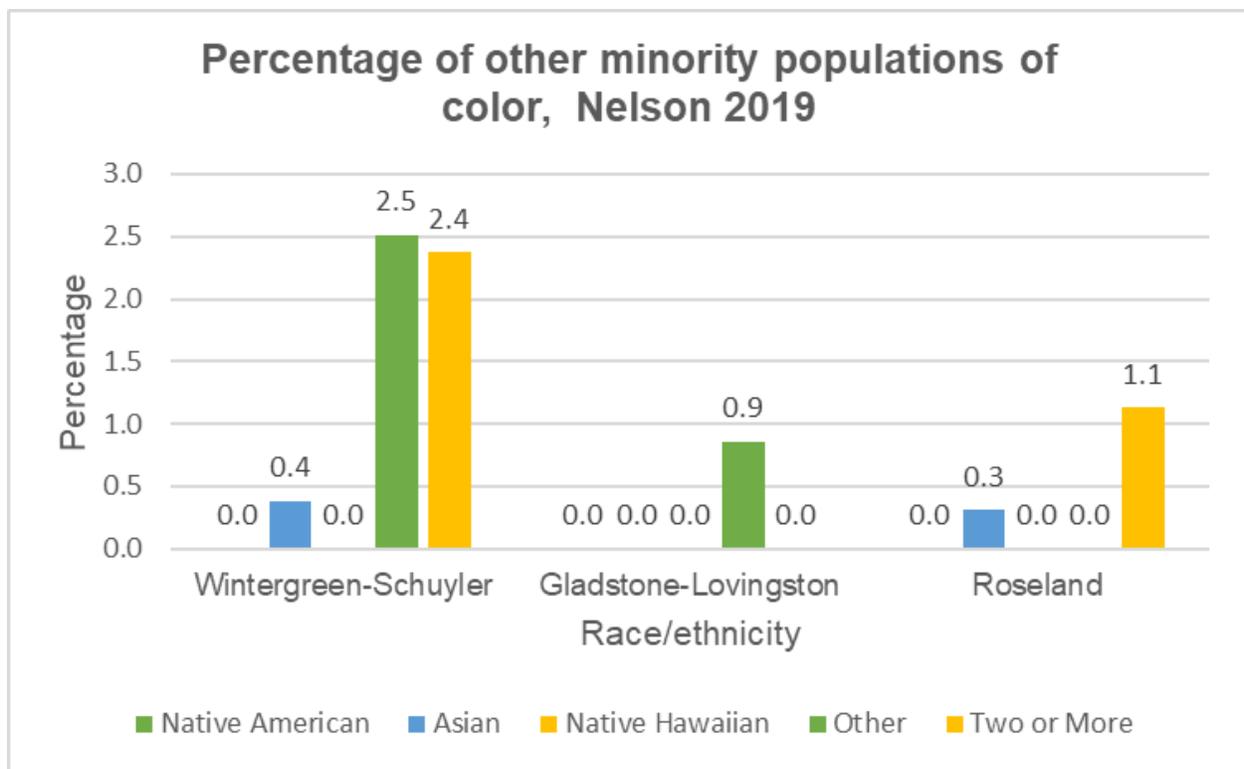


Figure N.2: Minority populations of color Nelson County, VA. Data Source: 2019 American Community Survey 5-year estimates.

²¹ Ken Heise, Nelson County Community Fund (NCCF), March 14, 2022.

2.1.b. Income

During the years 2010 to 2014 the Median Household Income in all three census tracts stayed relatively constant. However, between 2014 and 2019, Median Household Income increased significantly in two of the Nelson County census tracts. During this time frame, the Wintergreen-Schuyler census tract experienced a 39% increase in income. Roseland income experienced a significant increase of 62%. While Gladstone-Lovingston income increased slightly during the 2010 to 2014 time frame (from \$45,161 to \$49,389), it decreased to \$47,073 in 2019, an overall 4% increase from 2010-2019 (Figure N.3.).

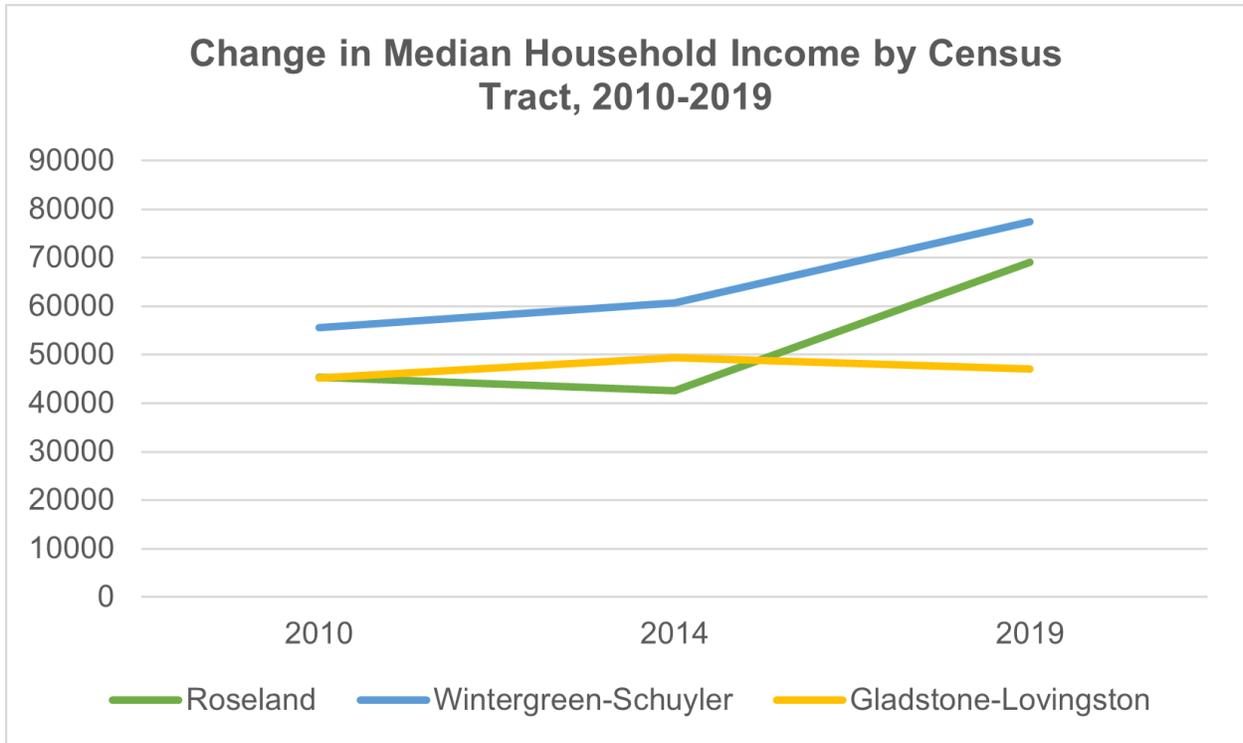


Figure N.3. Median Household Income, Nelson County, Va. Data source: American Community Survey 5-year estimates.

Income disparities within each Census Tract were mentioned throughout the conversation of the Nelson county focus group. "...and (highway) 151 itself, you have an older group of apartment buildings up near Afton that I suspect, I don't know what they cost, but I guess they'd have to be pretty affordable. Then the whole rest of that corridor is dotted with half million dollar homes that have been built in the last 5

years.”

Based on the focus group’s mention of retirement communities and more affluent people building more expensive residences and second homes in the county, the higher Median Household Income could correlate with this new development. A focus group participant stated, “ Wintergreen is a 11k acre tract with 3,600 individual properties, of which 1,200 are condos, and for the most part this is a retirement community or even a second home community. I don’t like to use the word affluent to describe our community, but it is what it is, it’s an affluent community. And that starts to drive its own market at a certain point, because for whatever reason for the last year, everybody has wanted to purchase property here, and the bidding wars just drive prices through the roof (Nelson County Focus Group, 2022).”

Based on the 2019 American Community Survey data, Figure N.4 shows Nelson County’s reported household income disaggregated by race. The Hispanic/Latino population shows the lowest, and most similar distribution of income across each Census Tract, while the Black population has the widest range of income levels across areas. The population of Nelson county is predominantly white and this population shows a moderate range of income levels across the county.

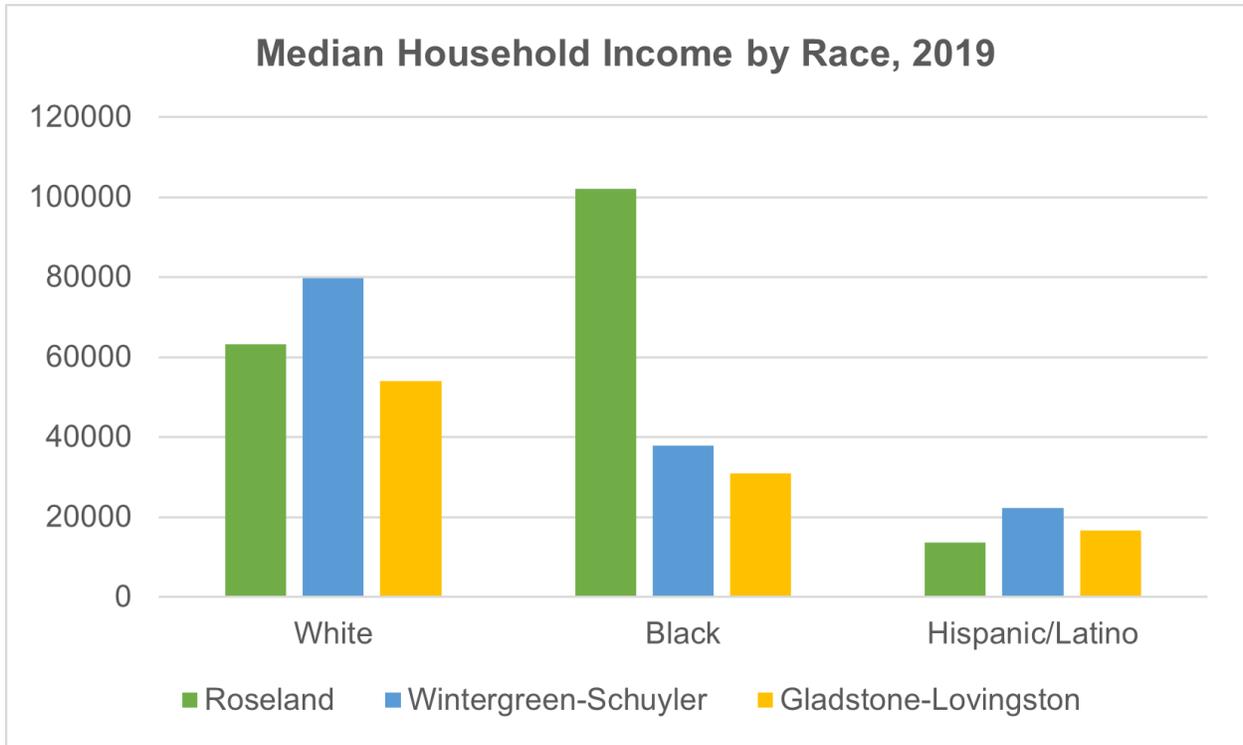


Figure N.4. Median Household Income by Race, 2019. Data source: American Community Survey 5-year estimate.

2.1.c. Age

Nelson County has a total population of 14, 831²² people, with the majority of the population being between 25 and 54 years old. In 2010, the highest percentage of the population was 44 to 54 years old, and in 2019 the highest percentage of the population was between 64 to 74 years old (Figure N.5). During interviews with members of community organizations, Nelson County is characterized as a place that has experienced slow growth and has retained older populations, which is consistent with the data that displays the increase in ages 60 to 84 years old from 2010 to 2019 (Figure N.5).

²² U.S. Census Bureau; American Community Survey, 2019 5-Year Estimates.

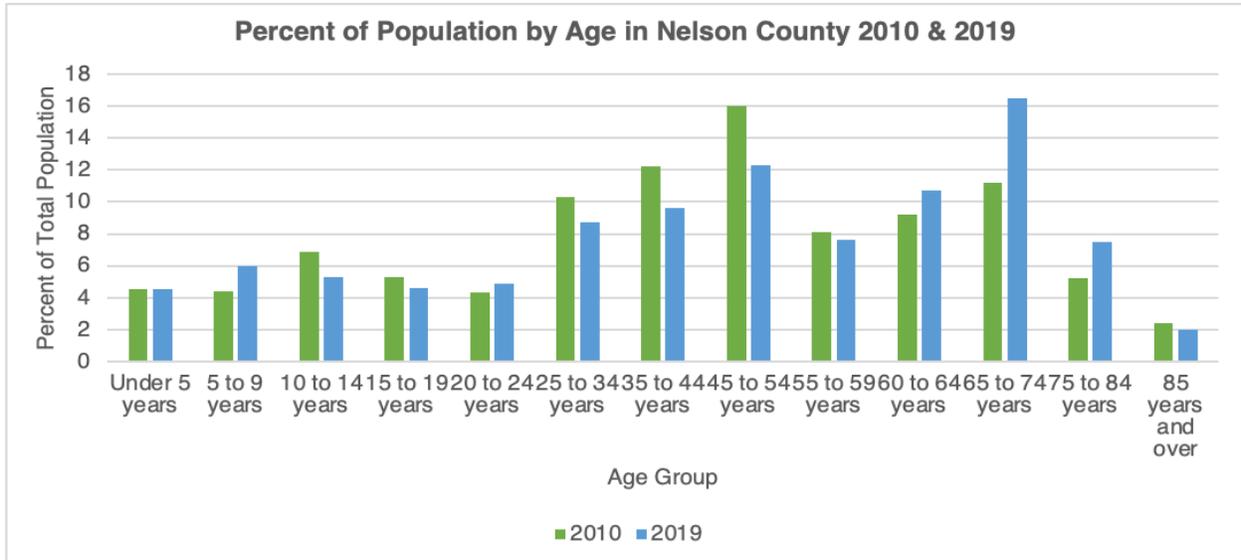


Figure N.5. Percentage of Population, 2010 - 2019, Nelson County. Data source: American Community Survey 5-year estimates.

In an interview with a representative of the Nelson County Community Fund, an organization that raises funds to give grants to community members, it was noted that Nelson County consists of a retiree population that is expected to remain in Nelson County. This aging in place population was attributed to the COVID-19 pandemic bringing urbanites into a rural area to escape the pre-pandemic urban lifestyle as well as older generations remaining where they established their social and economic roots. The Wintergreen community was mentioned in the Nelson County focus group discussion as an area with an older demographic, which has prompted resources to be allocated towards services that support aging populations. For example, senior transportation and carpooling services, companion care, and elderly errand services have been developed as an opt-in membership to support the aging population.

2.2 Food Insecurity

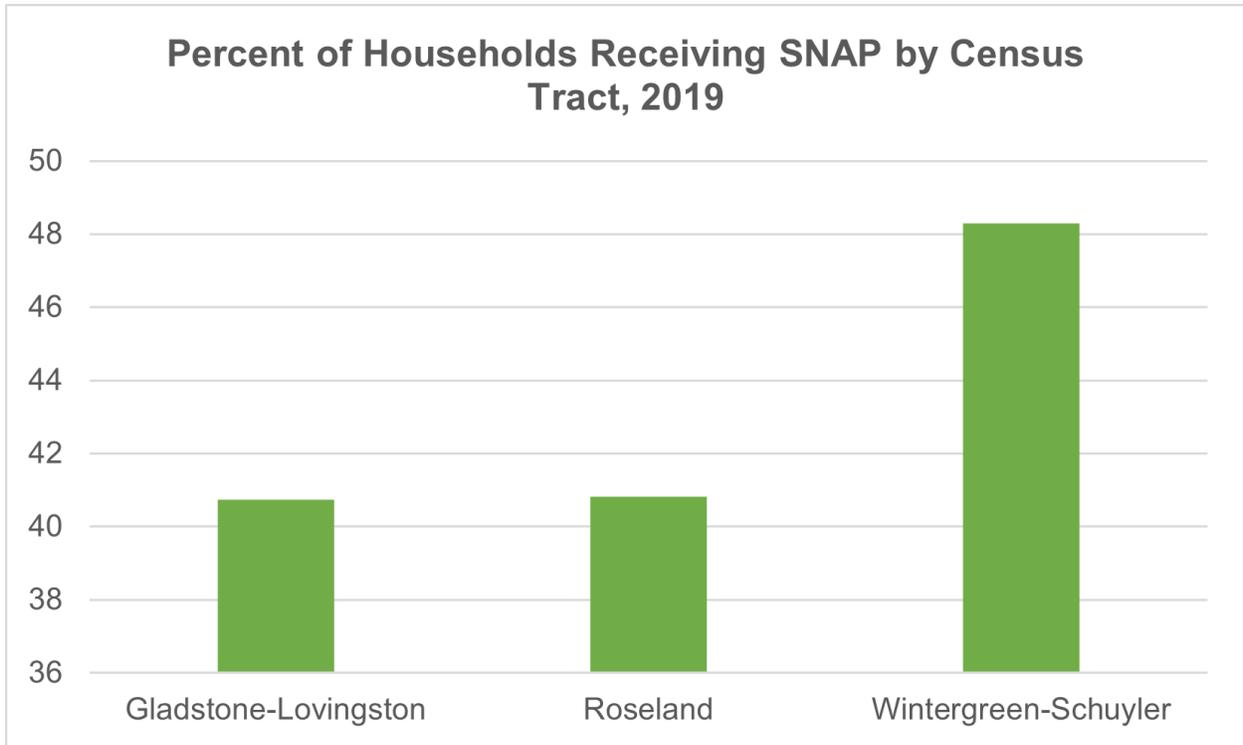


Figure N.6. Percent of Households Receiving SNAP in Nelson County, VA. Data sourced from the American Community Survey 5-year estimates for Nelson County, VA, 2010-2019.

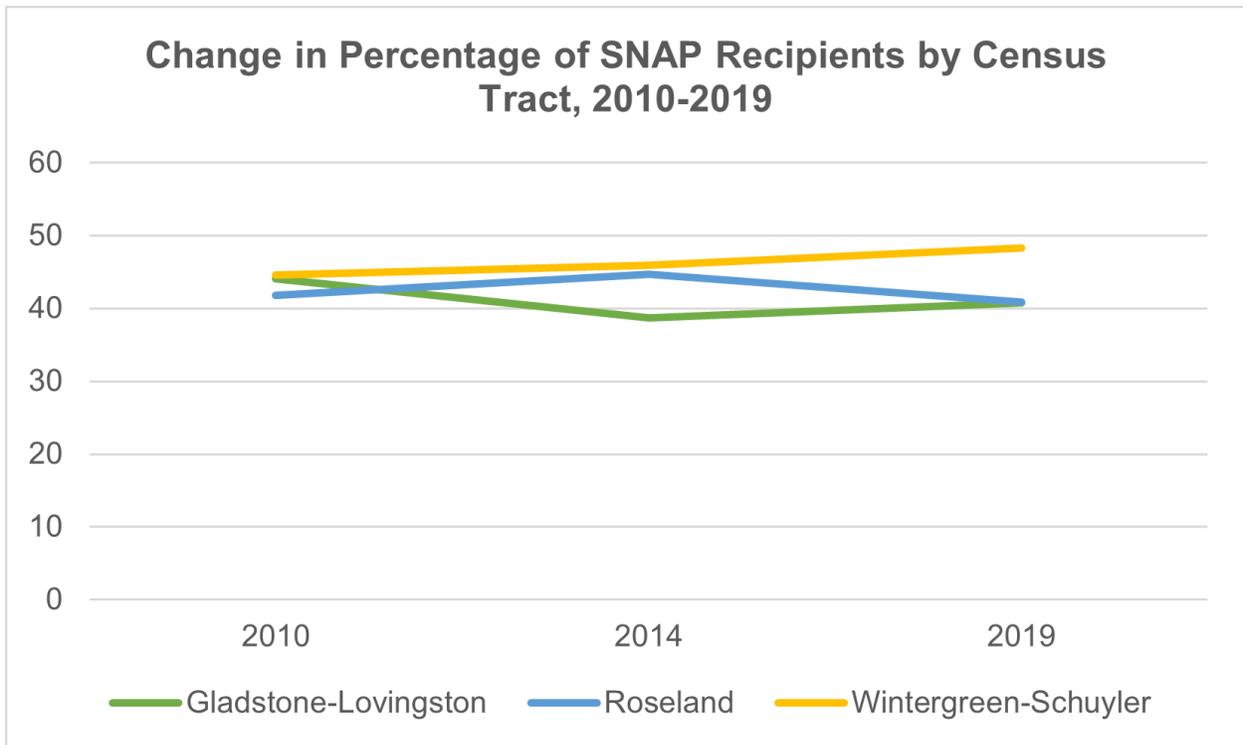


Figure N.7. Change in Percentage of SNAP Recipients by Census Tract, 2010-2019. Data sourced from the American Community Survey 5-year estimates for Nelson County, VA, 2010-2019.

Between 2010-2019, total SNAP recipients in Nelson County remained between 35-50%, a relatively low change over this time period. Almost half of the Wintergreen-Schuyler population was receiving SNAP benefits in 2019, and the tract's percentage of recipients steadily, but slightly, increased over time (Figure N.7.). Nelson county's focus group revealed the Wintergreen-Schuyler tract as the area with the highest disparity in access, and it is also a popular destination for wealthy people purchasing second homes. A participant in the focus group stated " It feels like the disparity is worse on the north side of the county than it is on the south side. The Albemarle/Charlottesville market certainly has a lot of influence into Nelson County, but if you get all the way down into Arrington or Gladstone, or all the way east near Buckingham, then I dont think its nearly as pronounced, but certainly you could draw a line from Woods Mill, everything from there north, everything from Nellysford north has been permeated by Albemarle market (Nelson County Focus Group, 2022)." Increasing numbers of high-income residents could lead to further food access disparities over time, which is illustrated in Wintergreen-Schuyler's high percentage of SNAP recipients (Figure N.6).

2.3 Employment

Analyzing the percentages of employment through different factors shows discrepancies between economic access and opportunities, which play a significant role in financial autonomy and economic vitality for the residents of Nelson County. Figure N.E.1 below depicts that from 2010 to 2014, the total percentage of people employed in the civilian labor force decreased from 57.5% to 54.4%, but then slightly increased to 55.9% in 2019. The unemployment rate had a similar fluctuation from an unemployment rate in 2010 of 3.1% that jumped to a rate of 6.2% in 2014, and bounced back to around 3.4% in 2019. However, with the pandemic, employment

opportunities are continuing to recover. Furthermore, Ken Heise discussed the growth of Nelson and its employment opportunities. He stated there is continued growth in commercial agriculture, vineyards, wineries, breweries, and distilleries in Nelson County because of its "strong growth industry". However, he also said that many of these enterprises are having trouble finding people to work, partly from the pandemic and low wages but mostly from not being able to fill jobs.²³ Candance and Helen, from the Central Virginia Partnership for Economic Development, mentioned the same issue of trying to help people find and fill jobs. Candance and Helen primarily help Nelson county companies to grow so that they can remain in the county. They mentioned that "right now talent's a huge issue, so just trying to help folks with talent and helping them fill the jobs they have open is a big focus" currently in Nelson County.²⁴

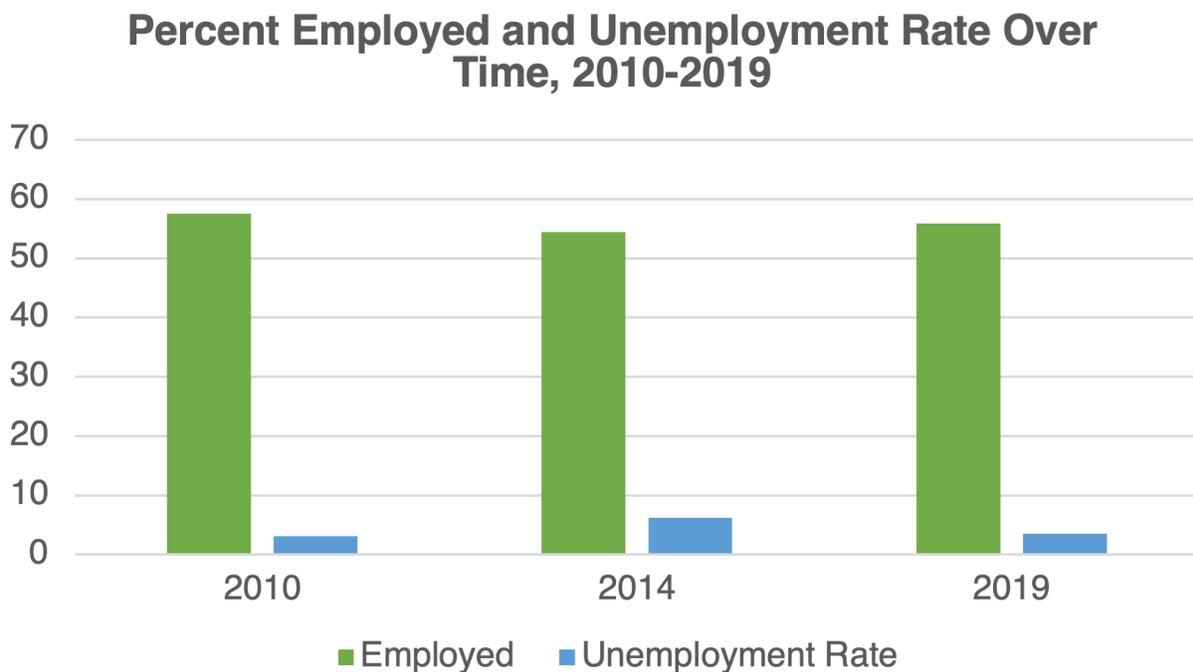


Figure N.8. Percent Employed and Unemployment Rate, 2010 - 2019, Nelson County, Va. Data source: American Community Survey 5-year estimates.

²³ Ken Heise, Nelson County Community Fund (NCCF), March 14, 2022.

²⁴ Helen Cauthen, Central Virginia Partnership for Economic Development, March 23, 2022.

Figure N.8. illustrates the percentage of people employed and the unemployment rate disaggregated by race. The Two or More Races group had the highest percentage of people employed in 2019 with a percentage of 78.4% and an unemployment rate of 0%. Both the Asian and the African American race groups also have an unemployment rate of 0%. However, the employment rates of these groups are only 57.6% and 59.6%, respectively. Following these groups with the lowest employment percentages are white, Hispanic or Latino, and Other Races with percentages of employment of 55.3%, 53.2%, and 50.5%, respectively. Although the white race group has an unemployment rate of 3.6% and the Hispanic and Latino group has an unemployment rate of 13.9%, the Other Race group has the highest unemployment rate of 38.3%. The employment and unemployment rates within the Other Race and Two or More Races group could be related to the large immigrant community that resides in Nelson. Denise Bonds, from Virginia Department of Health stated that “There’s a really strong immigrant community that tends to be transient because of the large number of commercial orchards that are in Nelson County, so we see a lot of migrant farm labor workers. So we try and make sure we always have translation services available” (Bonds, 18 March 2022).²⁵ Ken Heise mentioned that “Wintergreen often itself brings in a lot of international kids to help run the restaurants because they can’t recruit locally”²⁶ It is evident that Nelson has really brought in the non-English community and is working with them, but they still need support to dissipate inequities in employment.

²⁵ Denise Bonds, Virginia Department of Health (VDH), March 18, 2022.

²⁶ Ken Heise, Nelson County Community Fund (NCCF), March 14, 2022.

Percent Employed and Unemployment Rate by Race and Ethnicity, 2019

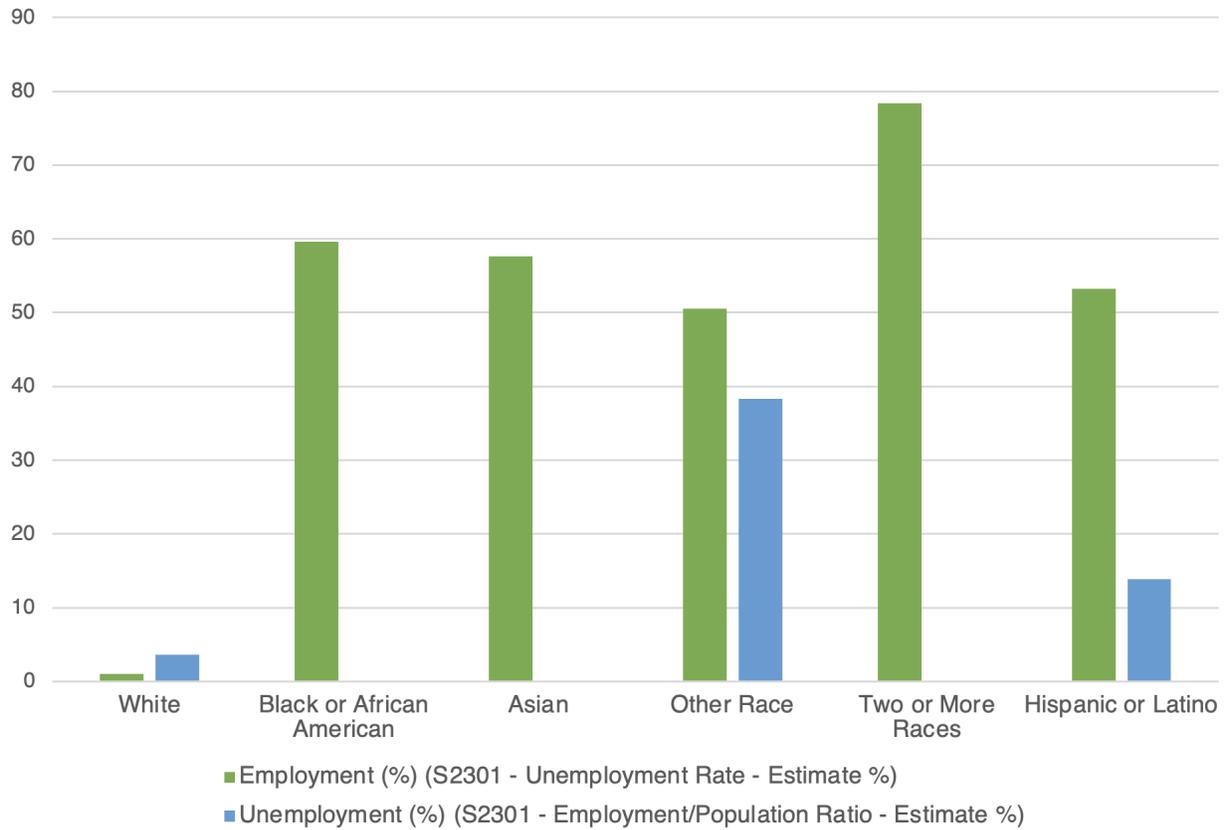


Figure N.9. Percent Employed and Unemployment Rate by Race and Ethnicity. Data source: American Community Survey 5-year estimates.

The percent employed and the unemployment rates are disaggregated by gender in Figure N.10. below. More men are employed than women in Nelson County. In 2019 81.1% of men were employed compared to only 64.3% of women. However, the unemployment rate of 4.2% was the same for both genders. From the focus group and interviews, it appears that there are many barriers to employment that make it hard to fill opportunities. This is especially true for women, which may be a cause for the lower employment percentage of this group. In Candace and Helen’s interview, they shared the story of a woman who had trouble keeping her job due to the lack of child care. They mentioned that even though this woman had trouble finding childcare, “she started earning so much money that she lost some of her benefits and actually couldn't

quite make ends meet. So, the fact that our, our benefits are established so that as somebody that's trying to get out of a lower income situation can't do it because they almost have to give up their job in order to qualify for what they need for their kids".²⁷

Percent Employed and Unemployment Rate by Gender, 2019

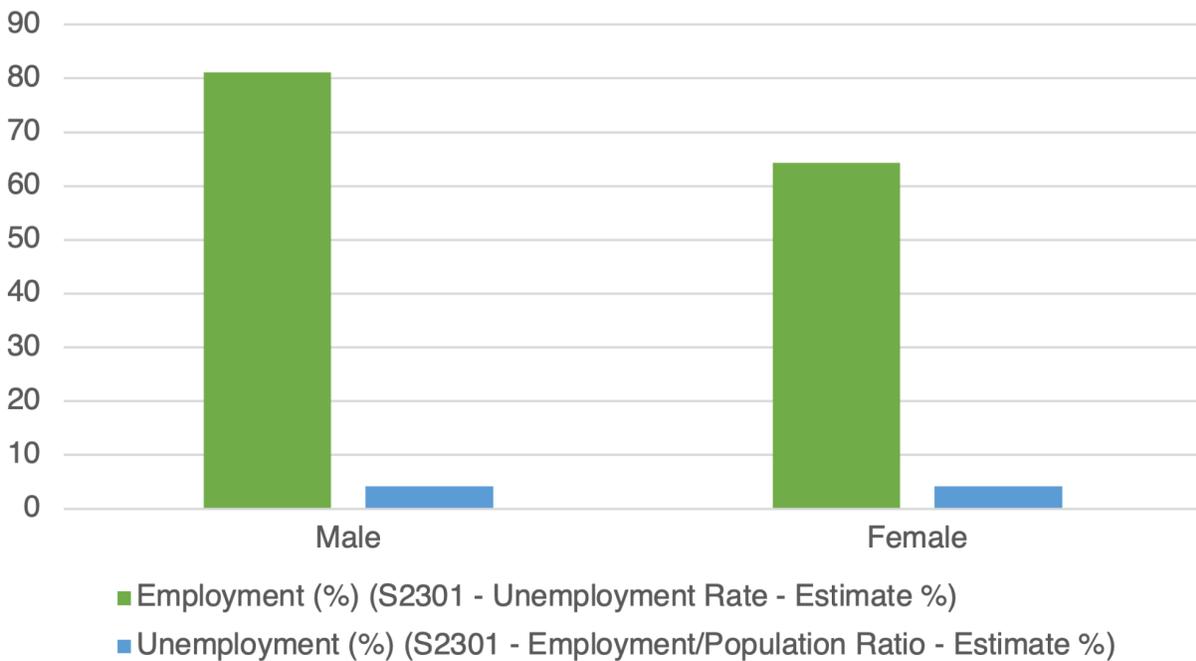


Figure N.10. Percent Employed and Unemployment Rate by Gender. Data sourced from the American Community Survey 5-year estimates for Nelson County, VA, 2019.

Attracting companies to Nelson County, and helping to find opportunities for its residents, should support employment and economic recovery from Covid-19 and show an increase in the percentage of employed residents. Especially, as Helen Cauthen states, with the goal of "attracting companies that have values similar to ours and are focused on that will just make us a more attractive place to work."²⁸ However,

²⁷ Helen Cauthen, Candace Spence, Central Virginia Partnership for Economic Development, March 23, 2022.

²⁸ Helen Cauthen, Candace Spence, Central Virginia Partnership for Economic Development, March 23, 2022.

from these analyses and interviews, it is evident that finding a job is not the sole issue; the employment discrepancies are caused by barriers to employment, like the lack of child care and the qualifications of established employment benefits.

2.4 Housing

Spending more than 30% of household income on rent is considered rent burdened.²⁹ For this report, rent burden was calculated from gross rent data that was disaggregated by percentage of household income in the past twelve months. According to 2019 ACS data, 39.3% of households in Nelson County were rent burdened. This places Nelson County in the middle percentage compared to other counties in the region³⁰. According to Figure N.H.1, Rent burden in Roseland has increased 19.3% since 2014. Roseland also has the highest rent burden of Nelson County's census tracts at 56.9%. This poses an equity concern because being rent burdened has been found to be associated with "higher eviction rates, increased financial fragility, and wider use of social safety net programs, compared with other renters and homeowners".³¹ There are few affordable housing options in Nelson County, and members of a focus group mentioned that while affordable housing is available, consumers still struggle to afford what is available. As income disparity increases, this issue will only get worse. This resonates with Denise Bonds of VDH, who believes with the lack of a middle class, there will be a population of low-income residents who can not afford to leave because affordable housing options are limited everywhere.³²

²⁹ Pew Research, "American Families Face a Growing Rent Burden", April 19, 2018.

³⁰ U.S. Census Bureau; American Community Survey, 2019 American Community Survey 5-Year Estimates, (26 April 2022).

³¹ Pew Research, "American Families Face a Growing Rent Burden", April 19, 2018.

³² Denise Bonds, Virginia Department of Health (VDH), March 18, 2022.

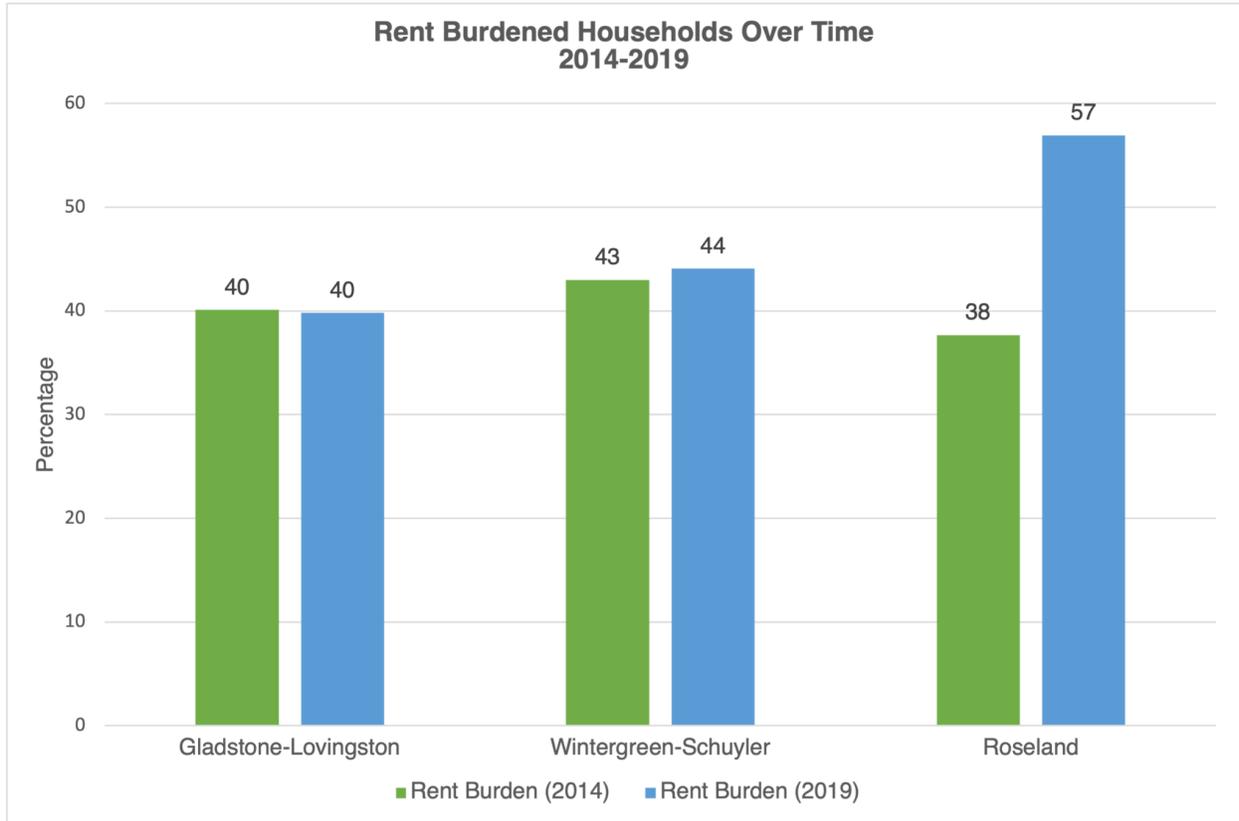


Figure N.11. Rent Burdened Households in Nelson County, Va. Data source: American Community Survey 2019 5-year estimates.

The Median Home Value graph below depicts the median home value of owner-occupied housing units in the county and census tracts. According to 2019 ACS data, the median house value in Nelson County was \$235,000. This is comparable to the other counties in the region.³³ According to Figure N.H.2, the average median home value in Nelson County increased 24% between 2014 to 2019. During this time, Gladstone-Lovingstone had a -19% change in median home value, Wintergreen-Schuyler had a 8.9% increase in median home value and Roseland’s increased 40.2%. Wintergreen-Schuyler remains the highest home value at \$296,900. Perhaps this increase can be attributed to an increase in median household income in this tract. As presented in the income section of Nelson County’s report, this area has the highest median household income. A conversation with Ken Heise indicated that the reason for this is that this tract is home to Wintergreen Resort and Stoney Creek which attract several hundred families with higher incomes than those in surrounding rural areas. Many are retired from places like

³³ U.S. Census Bureau; American Community Survey, 2010 and 2019 American Community Survey 5-Year Estimates, Table B25064; using data.census.gov; <<https://data.census.gov/cedsci/>> (26 April 2022).

Richmond or Northern Virginia.³⁴ A resident from a focus group with Nelson County mentioned that once outside of the Stoney Creek and Wintergreen areas, there is more of a mixture of housing and gave an example of “the most basic dwelling, even a trailer, and in the same area on the same road, within view, there’s a mansion.”

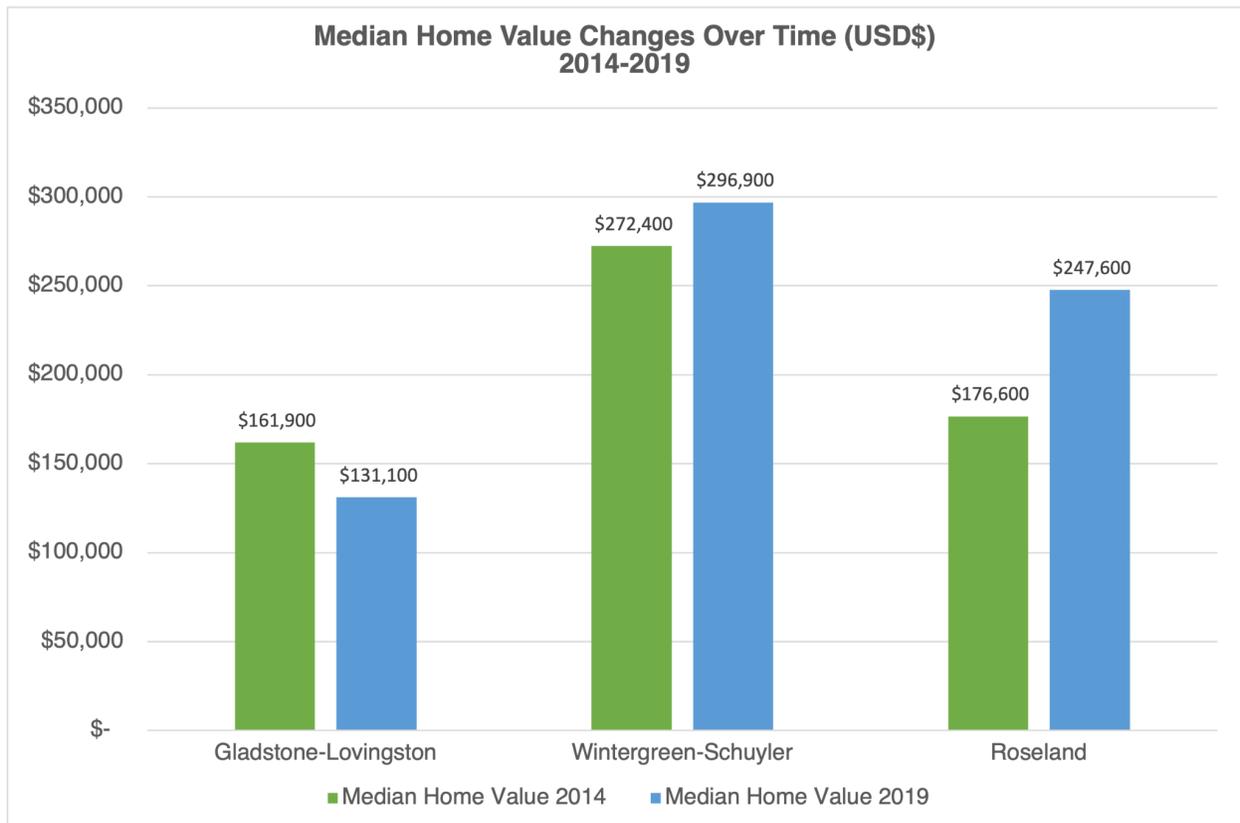


Figure N.12. Median Home Value Changes Over Time (USD\$) 2014-2019. Data sourced from the American Community Survey 5-year estimates for Nelson County, VA, 2014-2019.

Median gross rent represents the median contracted rent plus the estimated cost of utilities. 2019 ACS data suggests that Nelson County’s median gross rent of \$759 is significantly lower than other counties in the region, and that Nelson county’s median gross rent increased 42% between 2014-2019.³⁵ According to Figure N.H.3, during the same time period, the census tracts experienced the following increases in median gross rent: Gladstone-Lovingstone 54.5%, Wintergreen-Schuyler 54.9%, and Roseland 19.1%.. Wintergreen-Schuyler remains the highest

³⁴ Ken Heise, Nelson County Community Fund (NCCF), March 14, 2022.

³⁵ U.S. Census Bureau; American Community Survey, 2010 and 2019 American Community Survey 5-Year Estimates, Table B25077; using data.census.gov; <<https://data.census.gov/cedsci/>> (26 April 2022).

rent at \$1,057 a month (ACS 2019). Again, our dialogue with Ken Heise suggests that this is attributed to Wintergreen Resort. The mountain top resort is known for skiing and other outdoor activities, making it a desirable location to stay. Hundreds of units are rented out, only some are occupied year round.³⁶ Our data in Figure N.H.3 suggests that median gross rent has increased more in the census tracts which border Albemarle County, Gladstone-Lovingston and Wintergreen-Schuyler. Similar to our findings, residents of a focus group for Nelson County expressed that the Albemarle and Charlottesville housing market is impacting housing on the north side of Nelson (from Nellysford and north), than on the county's south side (Roseland).

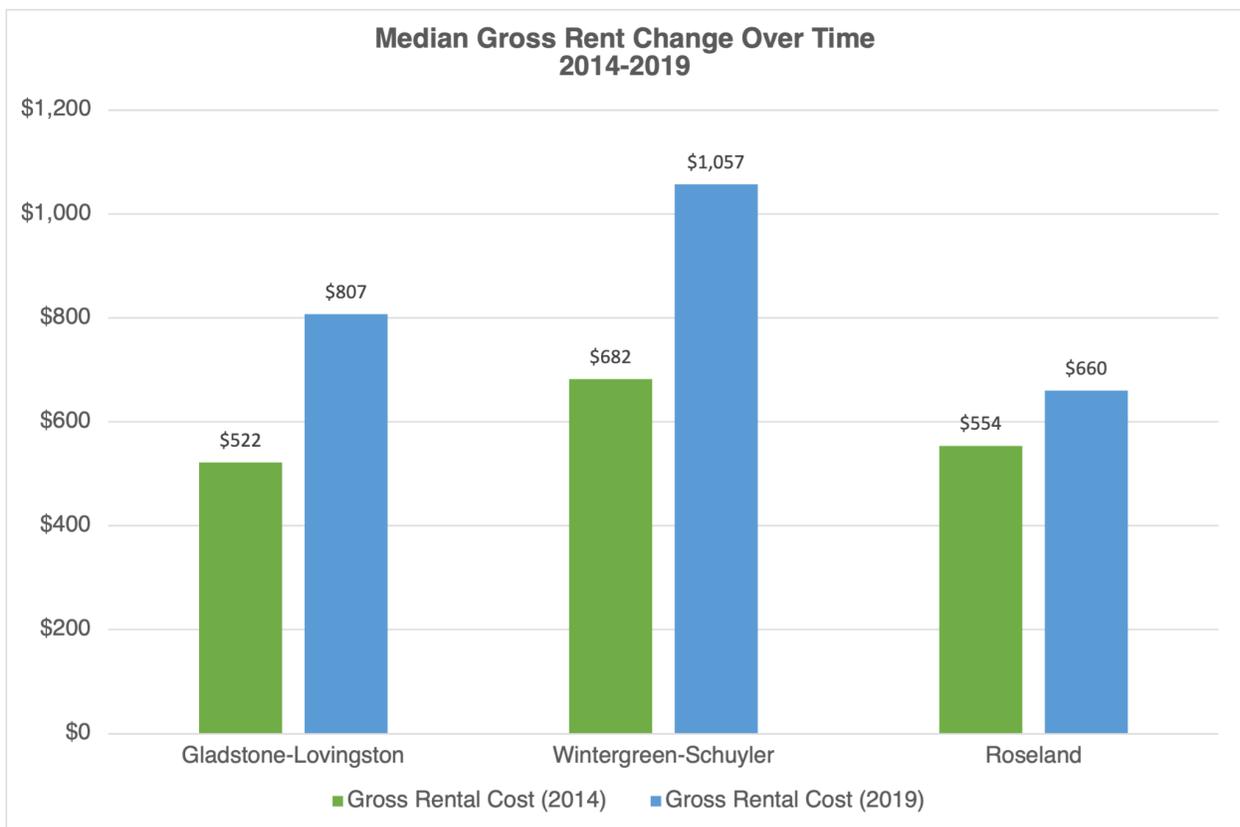
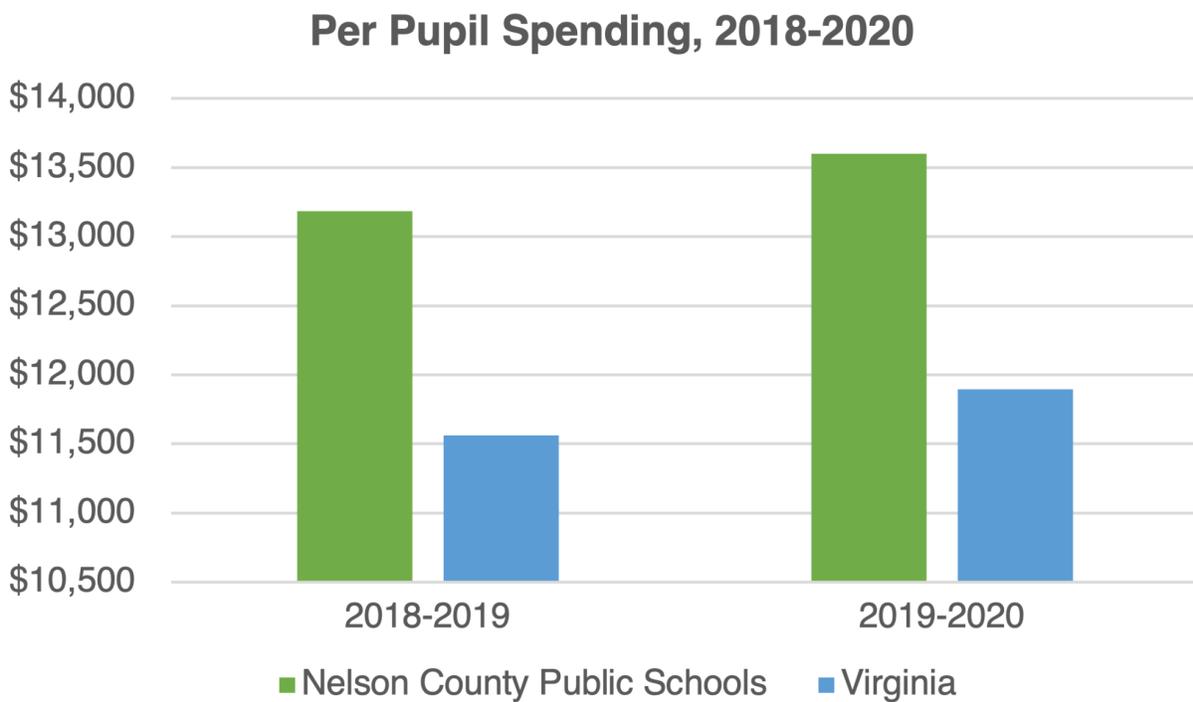


Figure N.13. Median Gross Rent Change Over Time 2014-2019. Data sourced from the American Community Survey 5-year estimates for Nelson County, VA, 2014-2019.

2.5 Education

³⁶ Ken Heise, Nelson County Community Fund (NCCF), March 14, 2022.

Research on Nelson County's public high school outcomes, shows that although the county receives comparatively generous funding and graduation rates are high, there are still inequities within the county's school system. Figure N.S.1 below shows the differences in Per Pupil Spending in Nelson County and the State of Virginia from 2018 to 2019 and 2019 to 2020. In 2018 the spending was \$13,185 and it increased to \$13,600 in 2019. However, the State's average did not increase as much and remained within the \$11.6 to \$11.9 range. Having a higher quantity of spending than the state's average for the county's schools could play a significant role in Nelson County's graduation rates. The proximity of the University of Virginia is another possible factor in the county's graduation rates. Ken Heise, explained that there is a heavy emphasis regionally on education due to the university's influence..³⁷



³⁷ Ken Heise, Nelson County Community Fund (NCCF), March 14, 2022.

Figure N.S.1. Per Pupil Spending in Nelson County Public Schools. Data sourced from the Virginia Department of Education School Quality Profiles for Nelson County, VA, 2018-2019.

The graduation rate for the county’s public high schools is considered high, as shown in Figure C.S.2. However, it is also a lower rate in comparison to the state of Virginia’s average graduation rate of 91.52% in 2019. In Nelson County, the graduation rate was 89.57%, with a dropout rate of 3.86%. The dropout rate is lower than the average state dropout rate, which was 5.6% in 2019. Outside of graduation and dropout rates, the rate of other reasons for not completing graduation was 14.11% in 2019.

Graduation and Dropout Rate, 2018-2019

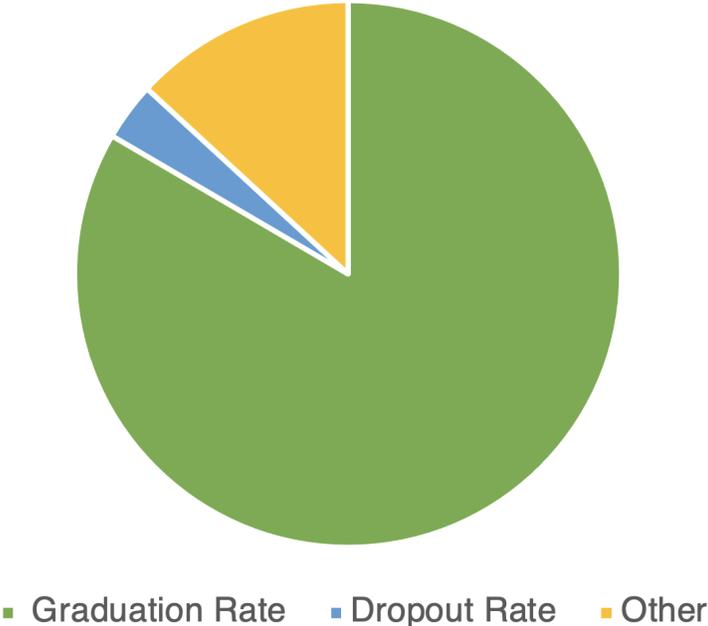


Figure N.S.2. Graduation and Dropout Rate in Nelson County Public High Schools. Data sourced from the Virginia Department of Education for Nelson County, VA, 2018-2019.

In Figure C.S.3 and Figure C.S.4, the 2019 graduation rate is disaggregated by both race and gender. In both figures, it is evident that there are disparities between races and genders when it comes to graduating high school. Figure C.S.3, shows data only on African American and white students as there was no other race data in the 2019 ACS. Even with this disparity, the 2019 graduation rate shows that African American students had a higher graduation rate at 95.83% while white students had a graduation rate of 87.9%. However, the dropout rates between the two races are similar and are 4.17% for African American students and 4.03 for white students. The graduation rate disparity in the county’s high schools continues with gender in Figure C.S.4. Although the female graduation rate is high at 93.51%, the male graduation rate is almost 10% lower at 85.05%. However, the female dropout rate of 3.9% is almost 0.4% higher than the male dropout rate of 3.49%.

Graduation and Dropout Rate By Race 2018-2019 Nelson County, VA

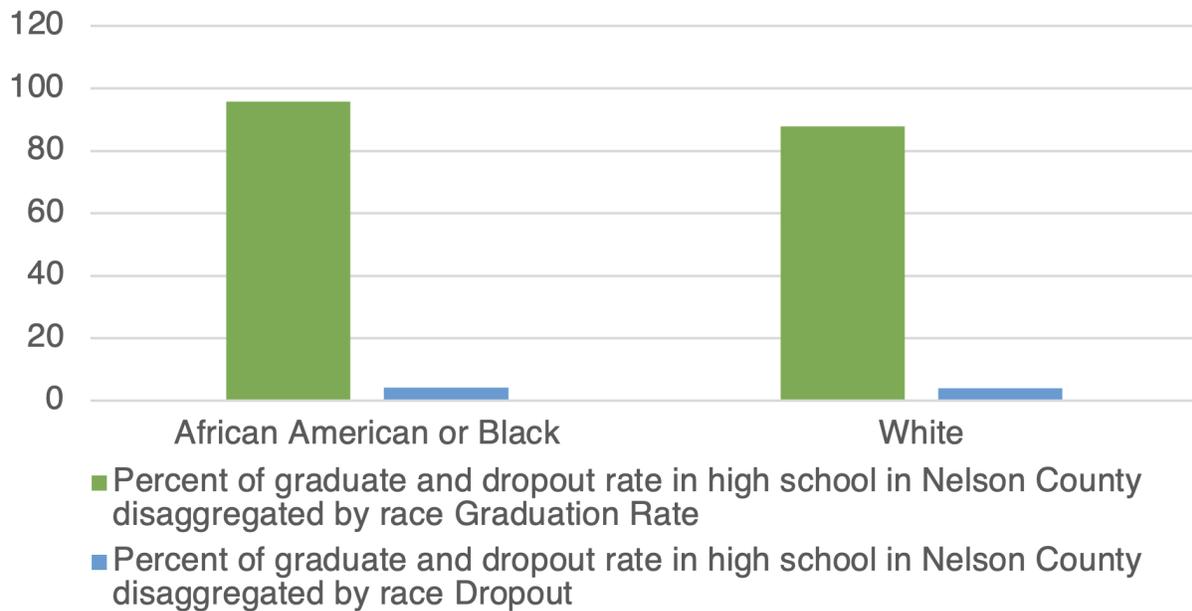


Figure N.S.3. Graduation and Dropout Rate by Race in Nelson County Public High Schools. Data sourced from the Virginia Department of Education for Nelson County, VA, 2018-2019.

Graduation and Dropout Rate By Gender 2018-2019 Nelson County, VA

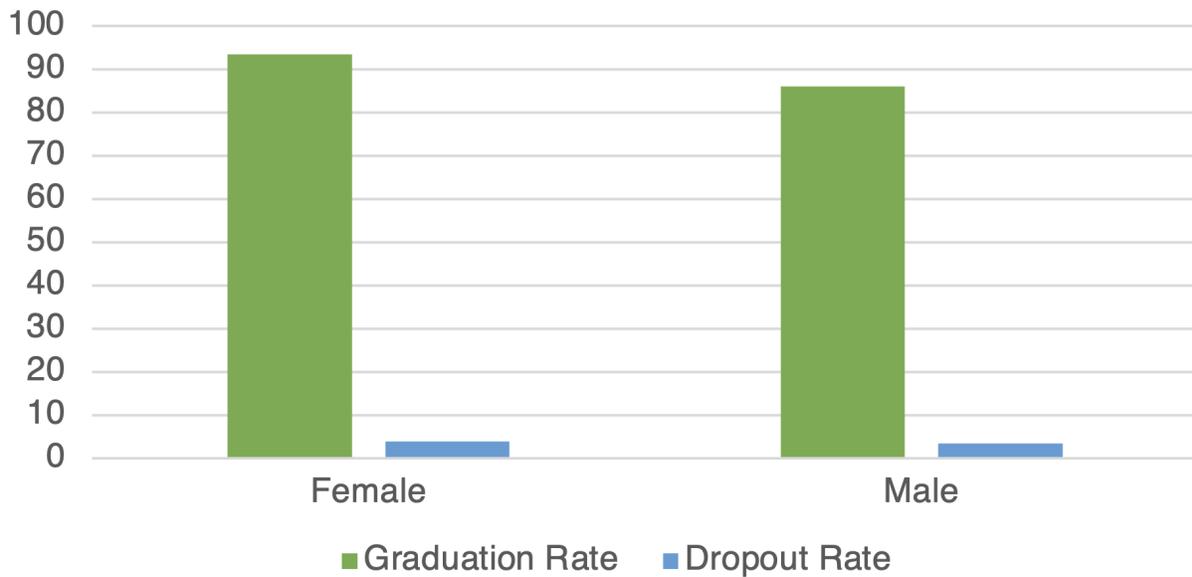


Figure N.S.4. Graduation and Dropout Rate in Nelson County Public High Schools. Data sourced from the Virginia Department of Education School for Nelson County, VA, 2018-2019.

Figure C.S.4 shows the total percentage of students approved for free or reduced prices for school lunches between 2011 and 2020 for grades Kindergarten through 12th grade. The significant drop in the percentage of approved students from 2014 to 2017 is surprising and could cause concern. However, according to the Virginia Department of Education, in 2014, Virginia school districts began to participate in a Community Eligibility option. This allows school districts to provide free or reduced-price meals to all students at high poverty or high need schools without determining the exact number of eligible students. This federal program includes students who would otherwise not qualify for free and reduced meals, and it is therefore possible that the number of students depicted on the graph after 2014 may not be the most accurate indicator of students approved for free or reduced lunch. Although free and reduced price lunch supports low income families and their children, Ken Heise stated that some of these families also struggle to provide nutritious meals for their children when they are not in school. For this reason, the "Nelson County

community fund support[s] a feeding program, a nutritional supplement program for kids in the Nelson County school system that prepares a bag or a box of supplemental food that ... That might reach 100 or 150 children directly” (Heise, 14 March 2022).³⁸ Although these programs do make a difference by providing meals to children from low income families, disparities and inequities of nutritious school food programs remain, especially as the number of students who qualify for these programs has decreased again over the past few years.

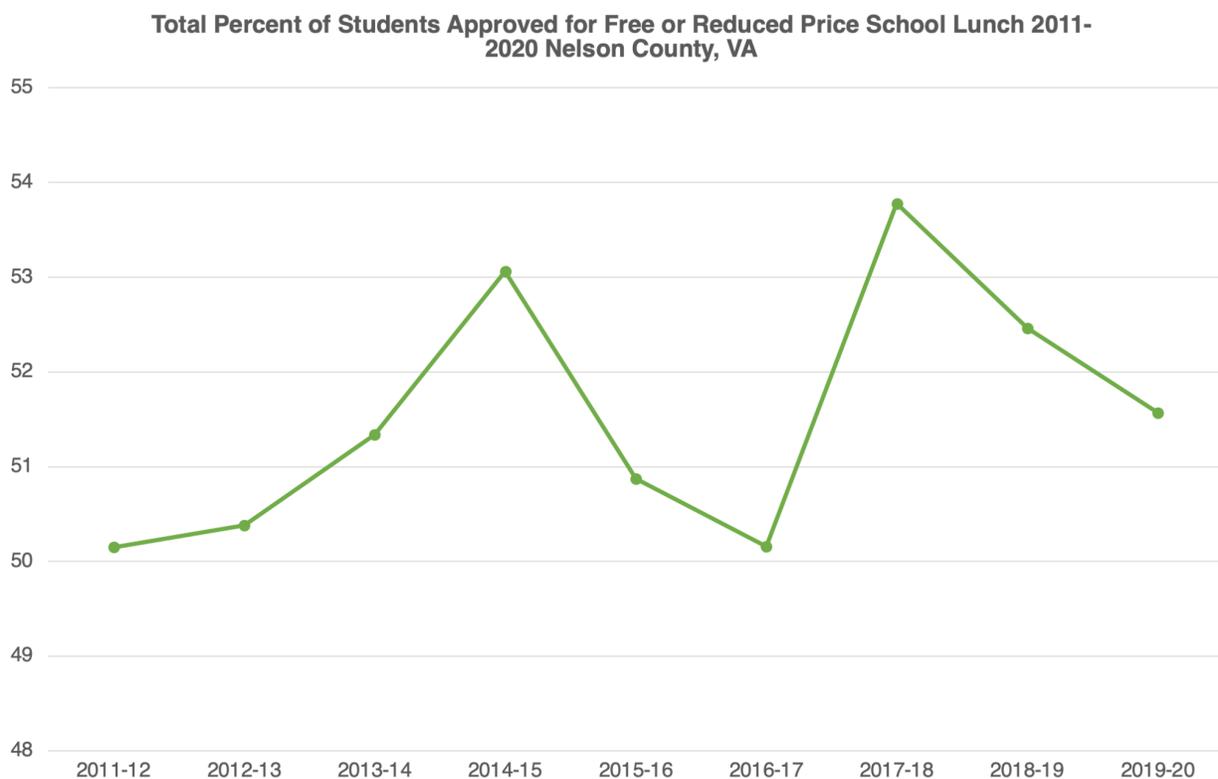


Figure N.S.5. Graduation and Dropout Rate in Nelson County Public High Schools. Data sourced from the Virginia Department of Education and Kids Count by The Annie E. Casey Foundation for Nelson County, VA, 2018-2019.

Although there are discrepancies within the Nelson County high schools in graduation rates and free and reduced lunch programs, attention should also be paid specifically to younger children in Nelson County. In an interview with Denise Bonds, she

³⁸ Ken Heise, Nelson County Community Fund (NCCF), March 14, 2022.

mentioned that "They are talking about closing one of their elementary schools. So that would mean there would be only one elementary... There is already only one high school and one middle school, and that is not unusual for rural areas. That is the case for all of our localities except Albemarle and Charlottesville. However, only having one elementary school means that very young kids will be on the bus for a very long period of time" (Bonds, 18 March 2022).³⁹ In another interview with Candace Spence and Helen Cauthen, Helen stated that, "COVID has been scary for the disadvantaged kids and maybe even other kids. I think there are probably many kids that are really, really behind right now." She also says that it is "such a huge challenge...no matter what we try to do, but we have also got to figure out somehow how we can make sure that those people are, that are those that are disadvantaged, have access to better resources and tools" (Cauthen and Spence, 23 March 2022).⁴⁰

2.6 Digital Divide

Access to computers varies considerably among the census tracts of Nelson County. Gladstone-Lovingston and Roseland have the highest percentage of white residents without access to computers; however, this may be a reflection of their presence as a majority racial category in the county, rather than one of access alone. Black and Hispanic categories of the population reflect lower percentages of inaccessibility to computers. The absence of data for Asian and Native American populations may be a result of their negligible presence in the county, as shown in Figure 1.

³⁹ Denise Bonds, Virginia Department of Health (VDH), March 18, 2022.

⁴⁰ Helen Cauthen, Candace Spence, Central Virginia Partnership for Economic Development, March 23, 2022.

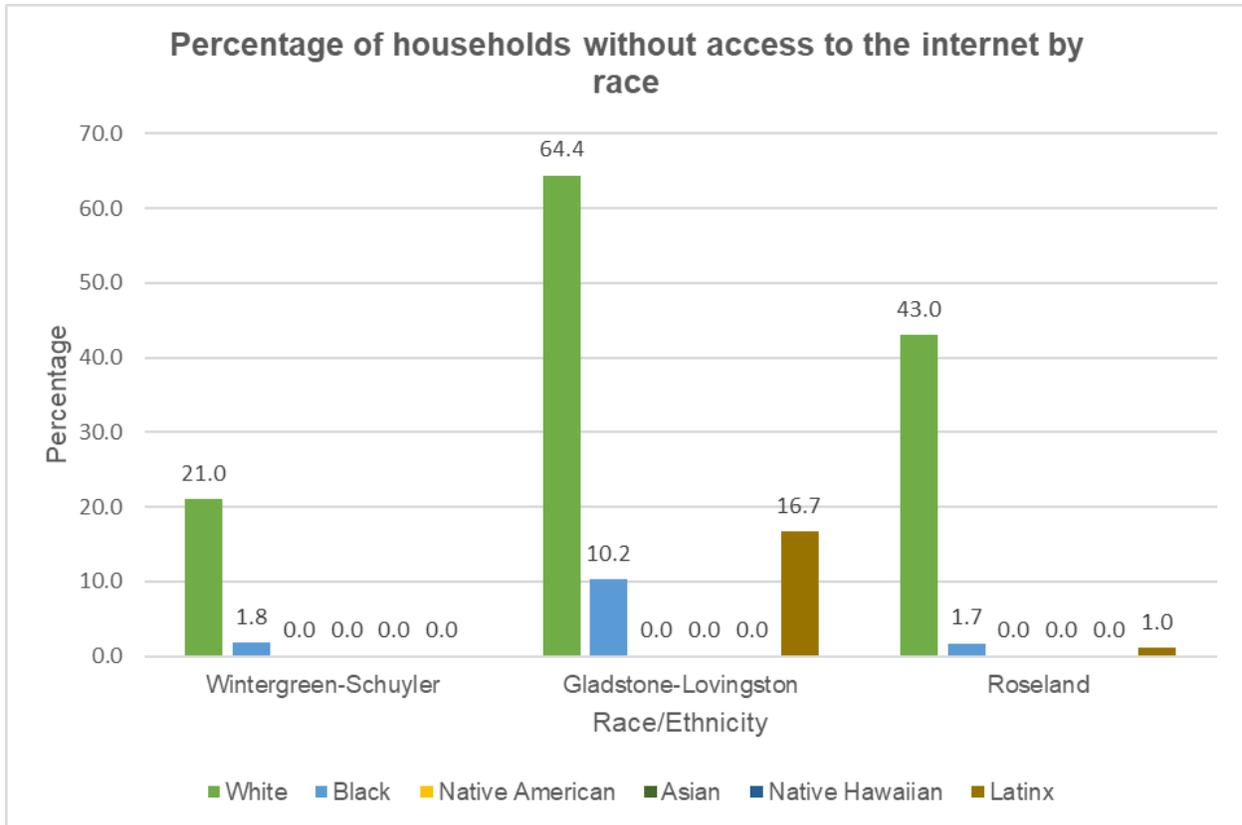


Figure 1: Households without access to the internet by race. Data taken from the American Community Survey 5-year estimates for Nelson County, VA, 2015-2019.

The percentage of households without access to an internet subscription across the county is considerable, despite the fact that Nelson County had the highest number of individuals working remotely in 2019 with equivalently high internet demands (Provence, 2022).⁴¹ It is interesting to note that the highest income groups in each tract appear to constitute a relatively high percentage of the total population without access to internet subscriptions. The highest percentage of households without access to the internet are groups in the income bracket below \$19,000 in Gladstone-Lovington as shown in Figure 2.

⁴¹ Provence, Lisa. "How Nelson County became No.1 for remote workers", *Cardinal News*, <https://cardinalnews.org/2022/01/04/how-nelson-county-became-no-1-for-remote-workers/> (4 January, 2022)

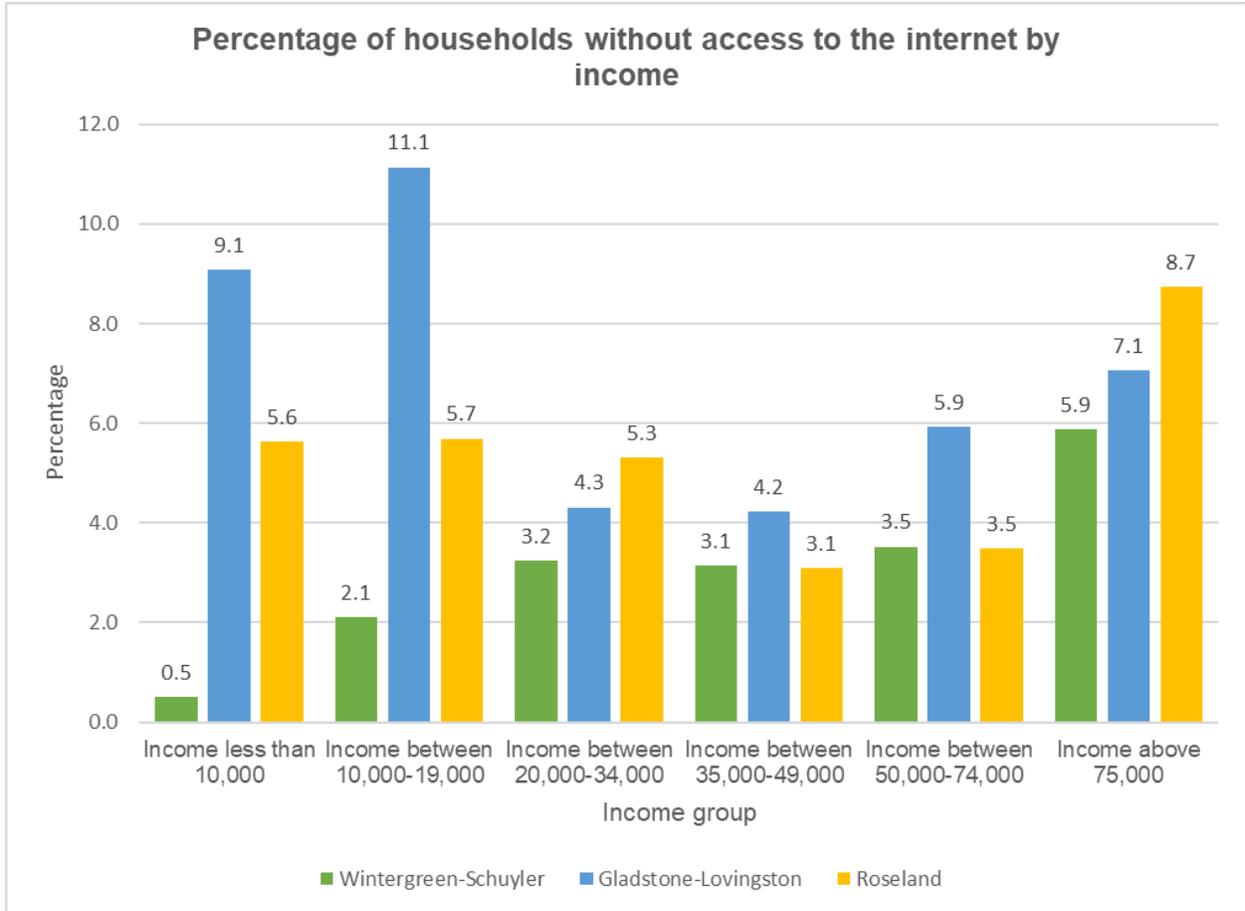


Figure 2: Households without access to the internet by income. Data taken from the American Community Survey 5-year estimates for Nelson County, VA, 2015-2019.

Figure 3 appears to reflect the wider population proportions rather than inaccessibility per se, as the white population across census tracts appears to have the highest number of individuals without access to internet subscriptions, followed by Black and Latinx households. As mentioned earlier, the lack of data for Asian, Native American and Native Hawaiian households may be a result of their negligible presence in the county. The interviews also revealed that internet access tends to be very interrupted across the county, with vast stretches lacking the provision of reliable internet services. One respondent from the NCCF also noted that while a local organization was given a grant to tackle this issue last year, they elected to focus their efforts on sections of the county’s population who they believed could afford to pay for the internet: “We have

pretty lousy rural internet here. There’s a local organization that got a grant to provide internet but they chose to sort of focus initially on the communities that they knew could easily pay for their services even though they had received grant money to put in fiber optics for communities that were not being currently served” (Heise, 14 March 2022).⁴² However, there do exist other organizations within the county who are focusing their efforts on the improvement of digital literacy, social services and education outcomes for particularly marginalized communities such as migrant workers.

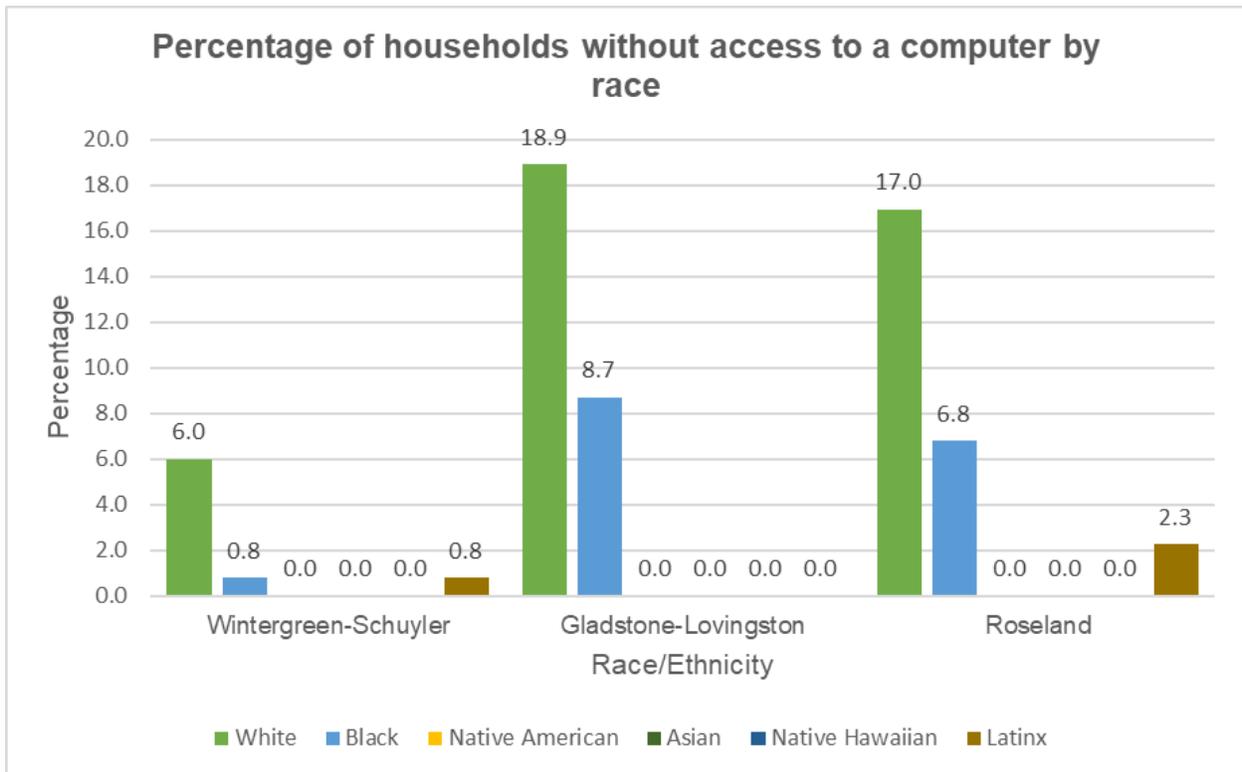


Figure 3: Households without access to a computer by race. Data taken from the American Community Survey 5-year estimates for Nelson County, VA, 2015-2019.

2.7 Mobility

The topic of transportation and mobility is crucial to understanding quality of life in Nelson County, as transportation patterns show how people are connected to services that support human flourishing: employment, grocery stores, and health centers.

⁴² Ken Heise, Nelson County Community Fund (NCCF), March 14, 2022.

Nelson County is a rural area, which has significant implications for access to transportation, time spent traveling, and methods of transportation. A common theme from interviews and focus groups of Nelson County community members is the lack of public transportation. The nonexistent transportation system compounded with the geographically large area and small population has produced a dependence on vehicular travel, which cannot always be a viable option for residents. Interviews revealed that many Nelson County members are restricted in travel by high gas prices, unreliable cars, and having to share cars within the family.

A nuance to mobility data is that the Census measures transportation data within the context of employment, meaning that transportation methods are only recorded for those who work, which is not reflective of the total population of Nelson County. The populations described in transportation and mobility figures represent 56% of Nelson County's working age population (adults over 18 years old). This calculation was internally performed using ACS 5-year estimates.

Vehicular access was emphasized as a necessity in Nelson County in the interviews and focus groups conducted, which is corroborated by the high levels of car ownership by workers in Figure N.T.1. As a rural area, Nelson County workers commute to places of employment. For the county, the average commute time ranges from 23 to 32 minutes (Figure N.T.2) whereas the Virginia state average for commuting is 27.61 minutes. Driving Alone, Carpooling, and Walking are the three ways workers travel to and from work in Nelson County (Figure N.M.2.). The median age for "Driving Alone" is 49.5 years, "Carpool" is 43.6 years, and "Walking" is 41 years.

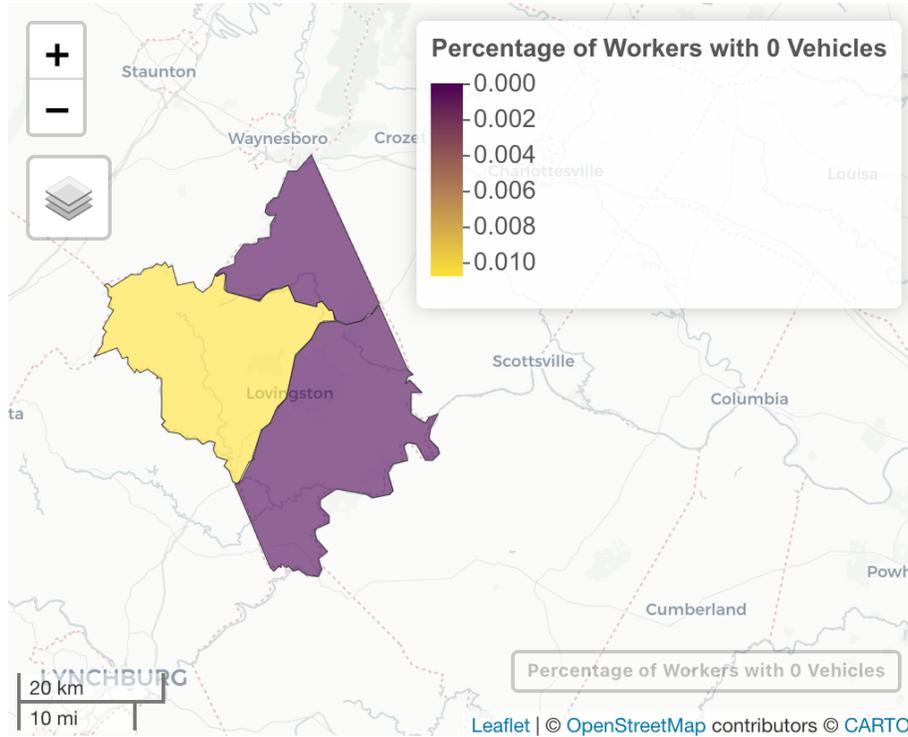


Figure N.T.1. Percentage of Workers with Zero Vehicles by Census Tract, Nelson County. Data sourced from the American Community Survey 5-year estimates for Nelson County, VA, 2019.

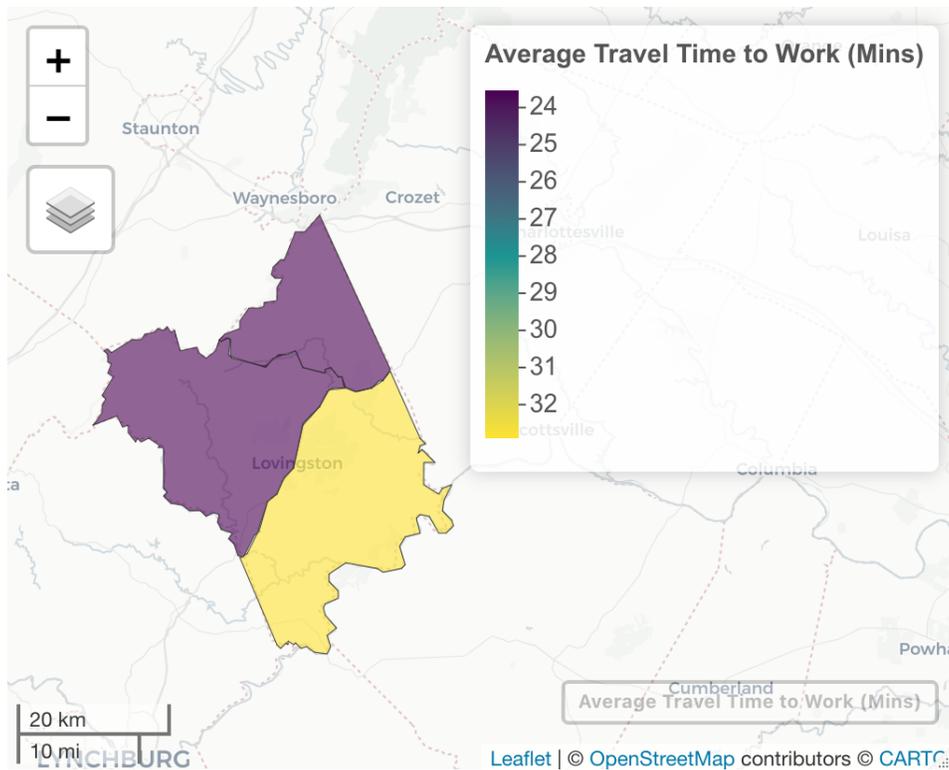


Figure N.T.2. Average Travel Time to Work by Census Tract, Nelson County. Data sourced from the American Community Survey 5-year estimates for Nelson County, VA, 2019.

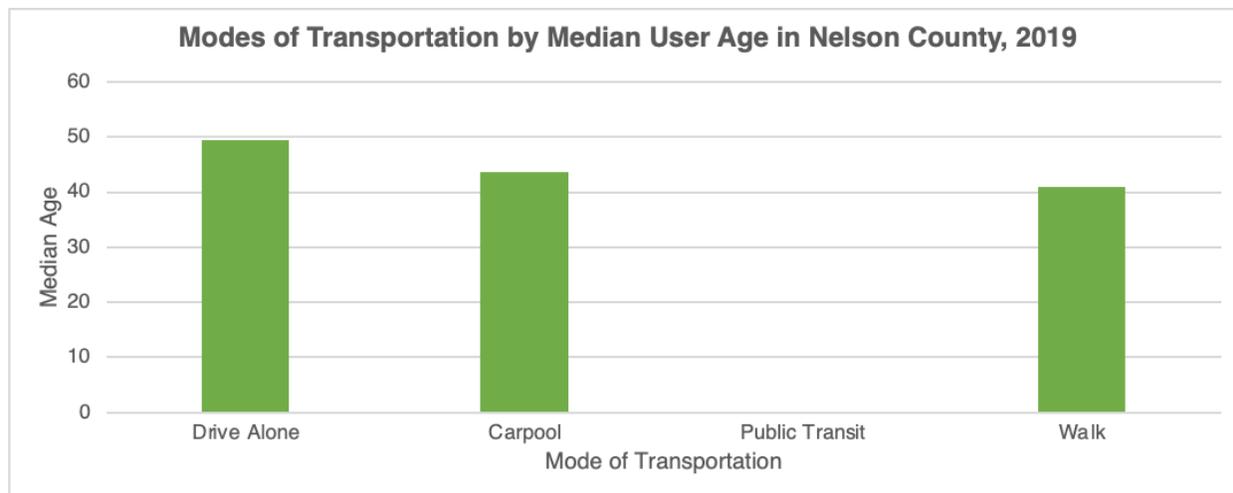


Figure N.T.3. Modes of Transportation by Median User Age, Nelson County. Data sourced from the American Community Survey 5-year estimates for Nelson County, VA, 2019

Dependence on cars extends past transportation, as people utilize cars to access grocery stores and health care. Members of the focus group discussed healthcare disparities that are exacerbated through slow ambulance travel throughout rural areas and long travel times to healthcare appointments. This issue of rural mobility and connectivity are particularly salient as Nelson County consists of a large elderly population, discussed in the section on "Age".

3.8 Land Use + Environment

The Multi-Resolution Land Characteristic's National Land Classification Database (NLCD) was used to generate total acreage within Nelson County. A series of three maps representing each United States Census tract for Nelson County in 2019 shows the land class cover from the NLCD's 2019 dataset.

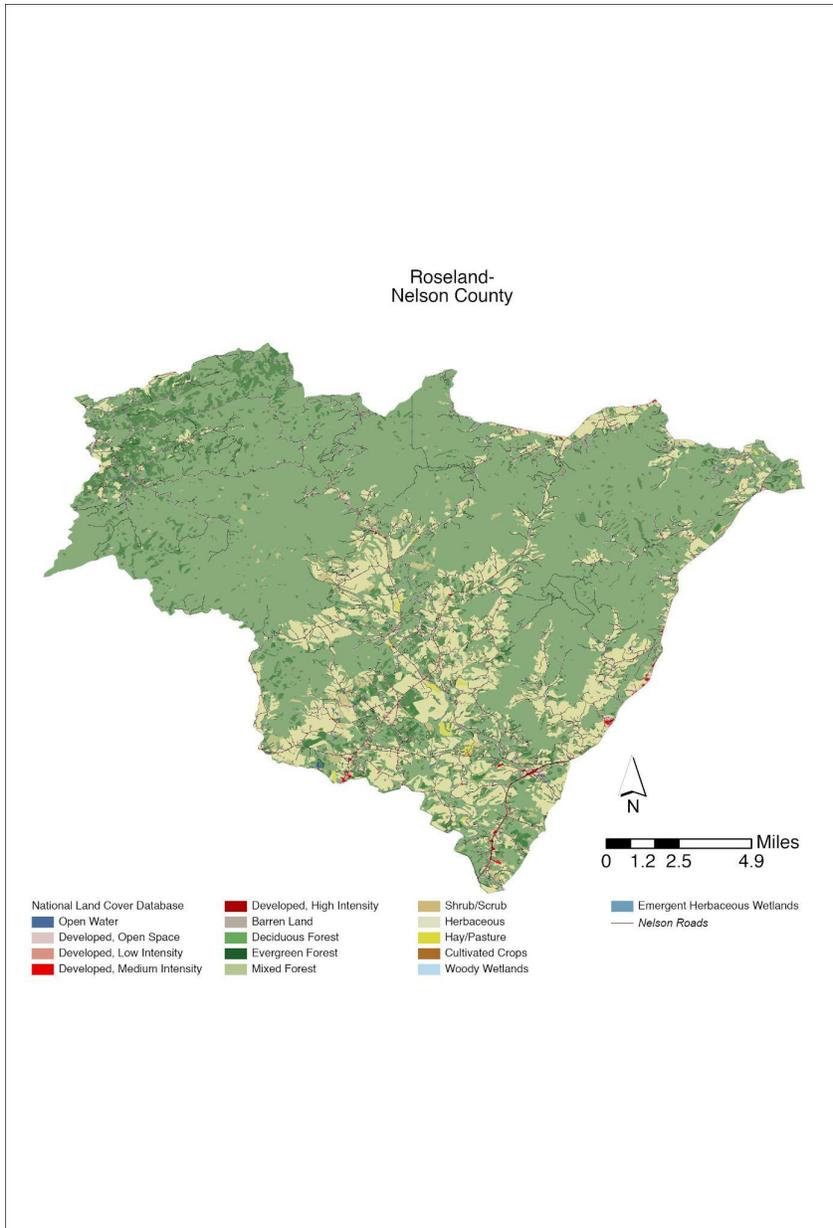
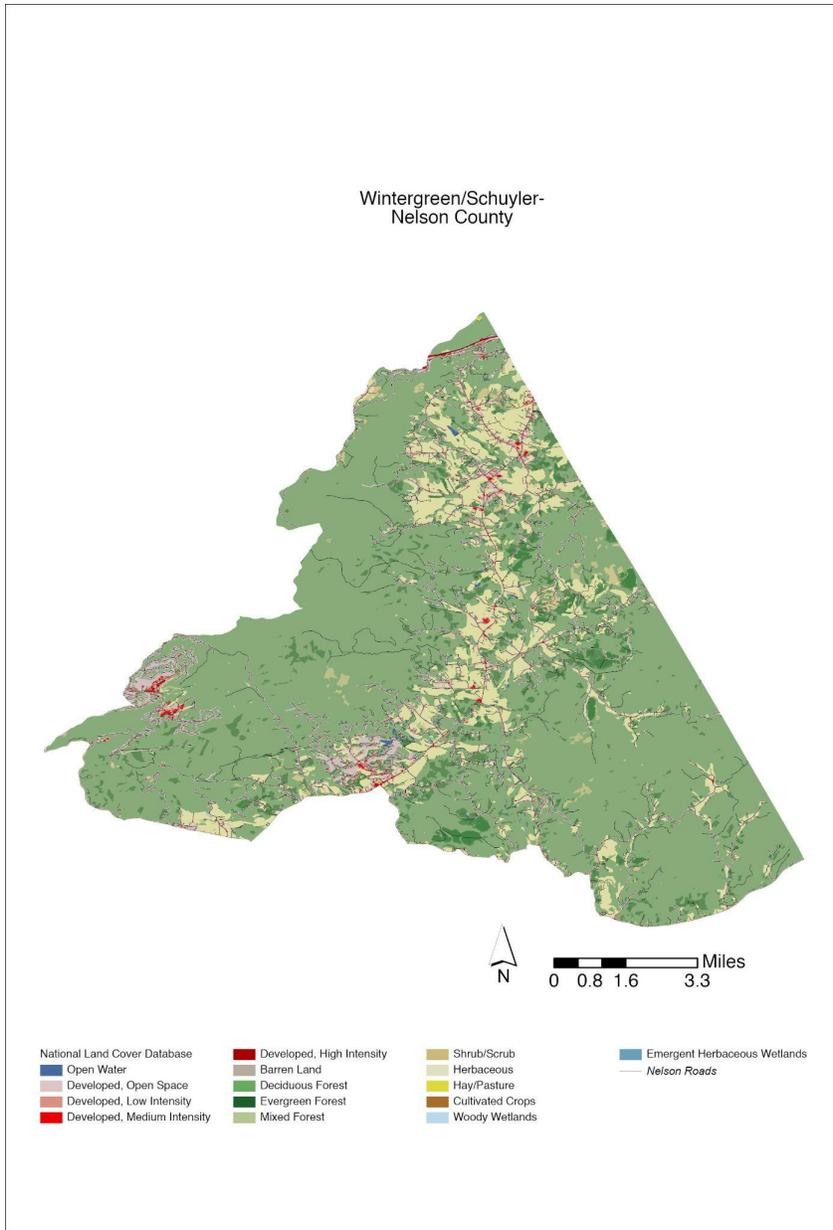
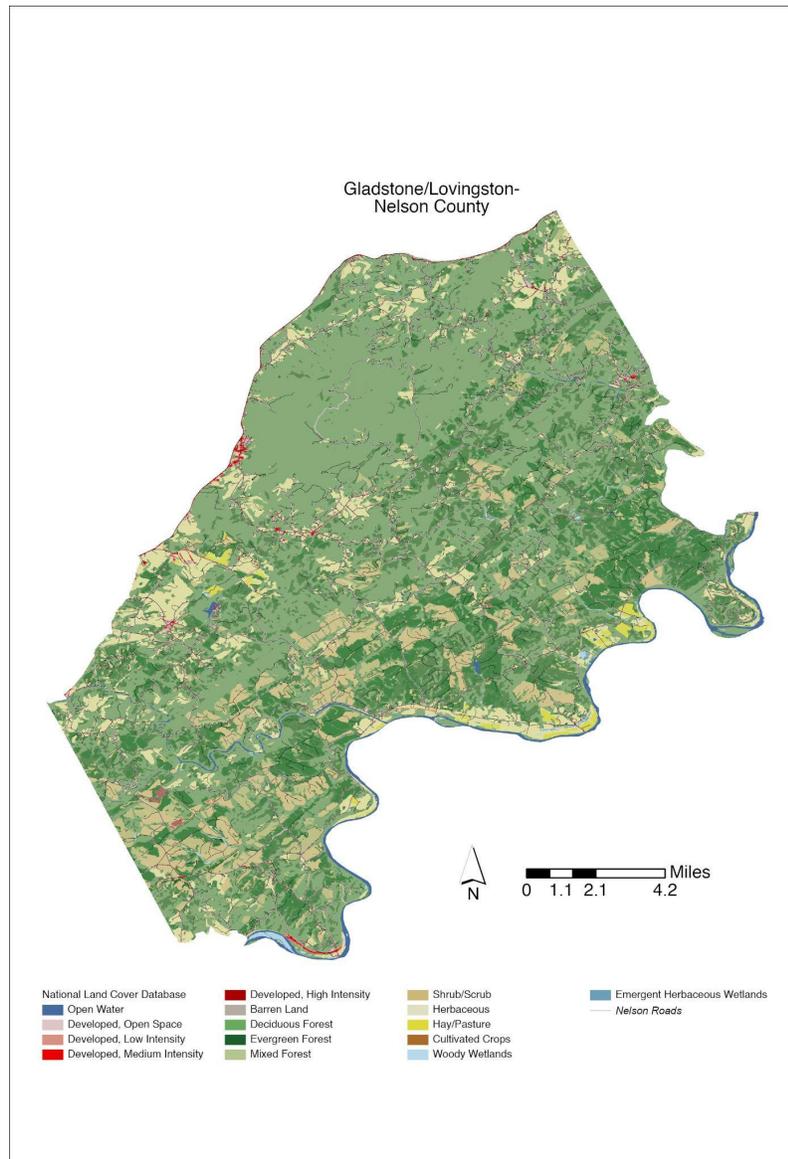


Figure 1: Roseland (2019 Census Tract 9503), data sourced from the National Land Classification Database and U.S. Census Bureau, 2019, map generated using ArcGIS Pro.



Map 2: Wintergreen-Schuyler (2019 Census Tract 9502), data sourced from the National Land Classification Database and U.S. Census Bureau, 2019, map generated using ArcGIS Pro.



Map 3: Gladstone-Lovingston (2019 Census Tract 9501), data sourced from the National Land Classification Database and U.S. Census Bureau, 2019, map generated using ArcGIS Pro.

Based on total acreage statistics, forested areas dominate the landscape of Nelson County. Calculations were made by percentage of acreage for the entirety of Nelson County (Figure N.L.1) as well as by census tract (Figures N.L.2, N.L.3, N.L.4). Forested areas dominated every census tract in Nelson County ranging between (60%

to 78% (30,820.8 to 94,561.7 acres) of total acreage per census tract. In Roseland, cultivated land was twice the size of land use at 30% compared to Wintergreen-Schuyler and Gladstone-Lovingston's 13% and 10% respectively. Developed land and herbaceous land was not as prominent as forested area. Developed land ranged from 6% to 10% of land per census tract. Herbaceous land amounted to 6% in Gladstone-Lovingston while Wintergreen-Schuyler and Roseland only had 1% of their land as Herbaceous. Through this land use analysis, it is abundantly clear that green space, particularly undeveloped or cleared space, is prevalent in all of Nelson County.

The mountainous terrain acts as a natural yet social barrier to Nelson County. A focus group participant stated "We have a lot of mountains here, so cell service, fiber optic, broadband, connectivity in general is challenging here, although there is a lot in the works now, it's still an ongoing process". Folks in Nelson County are aware of the natural barriers that strains connectivity, but are a motivated community that seeks to get services, like internet access, more readily available to all.

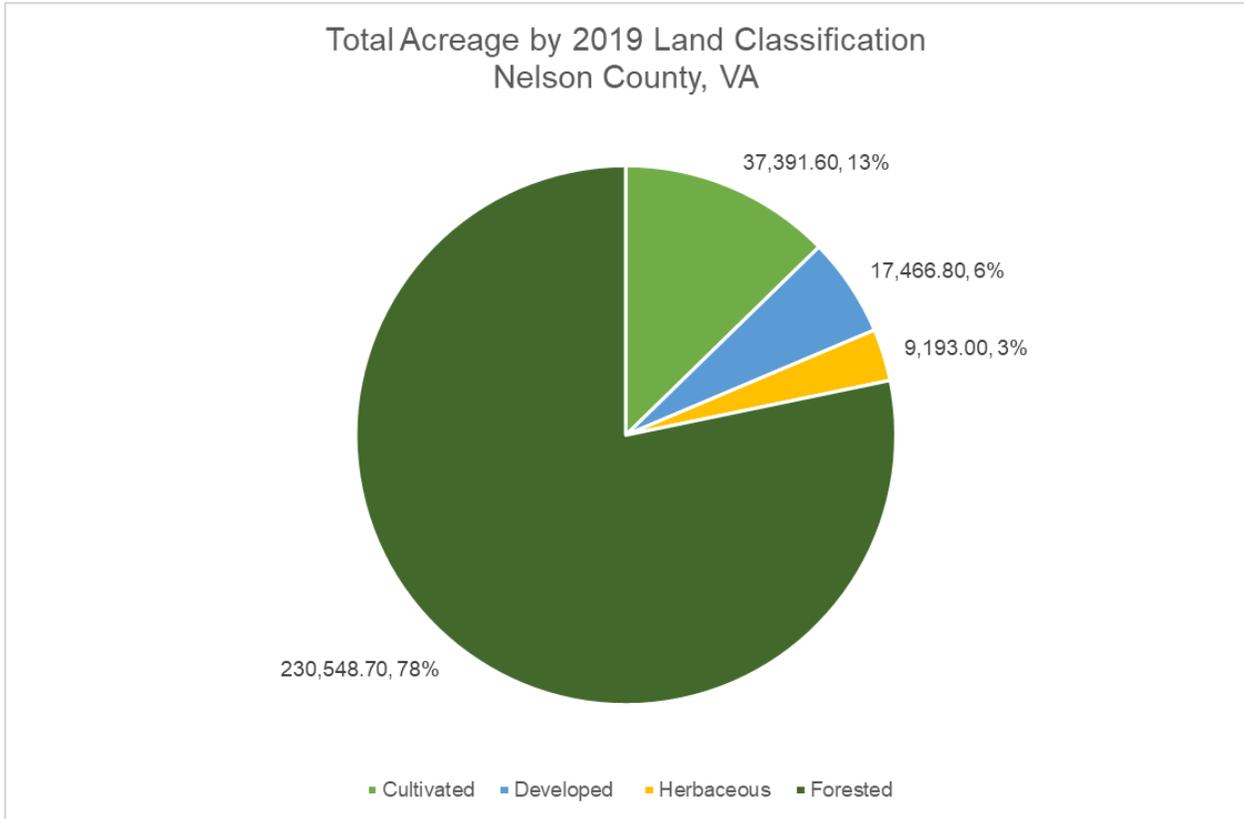


Figure N.L.1: Total Acreage by 2019 Land Classification and Percentages in Nelson County, Virginia. Data sourced from the National Land Classification Database.

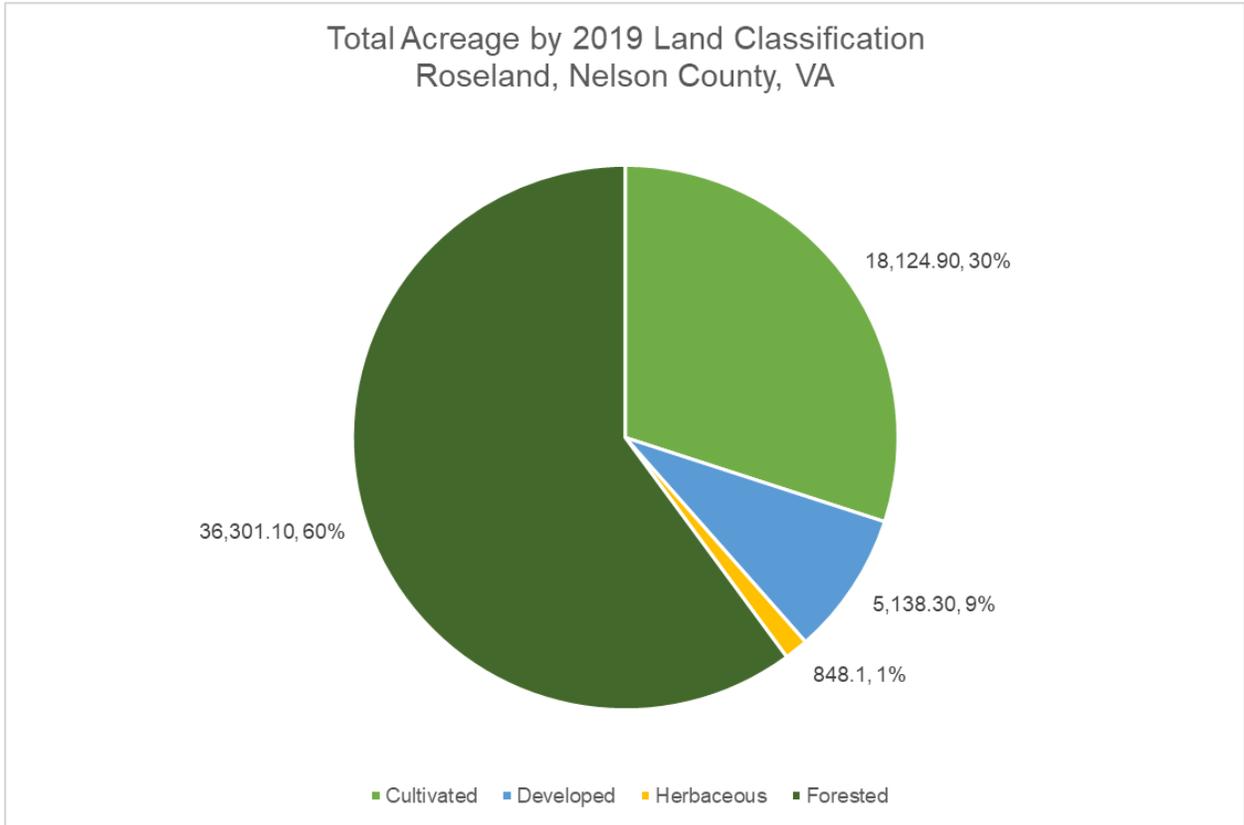


Figure N.L.2: Total Acreage by 2019 Land Classification and Percentages in Roseland, Nelson County, Virginia. Data sourced from the National Land Classification Database.

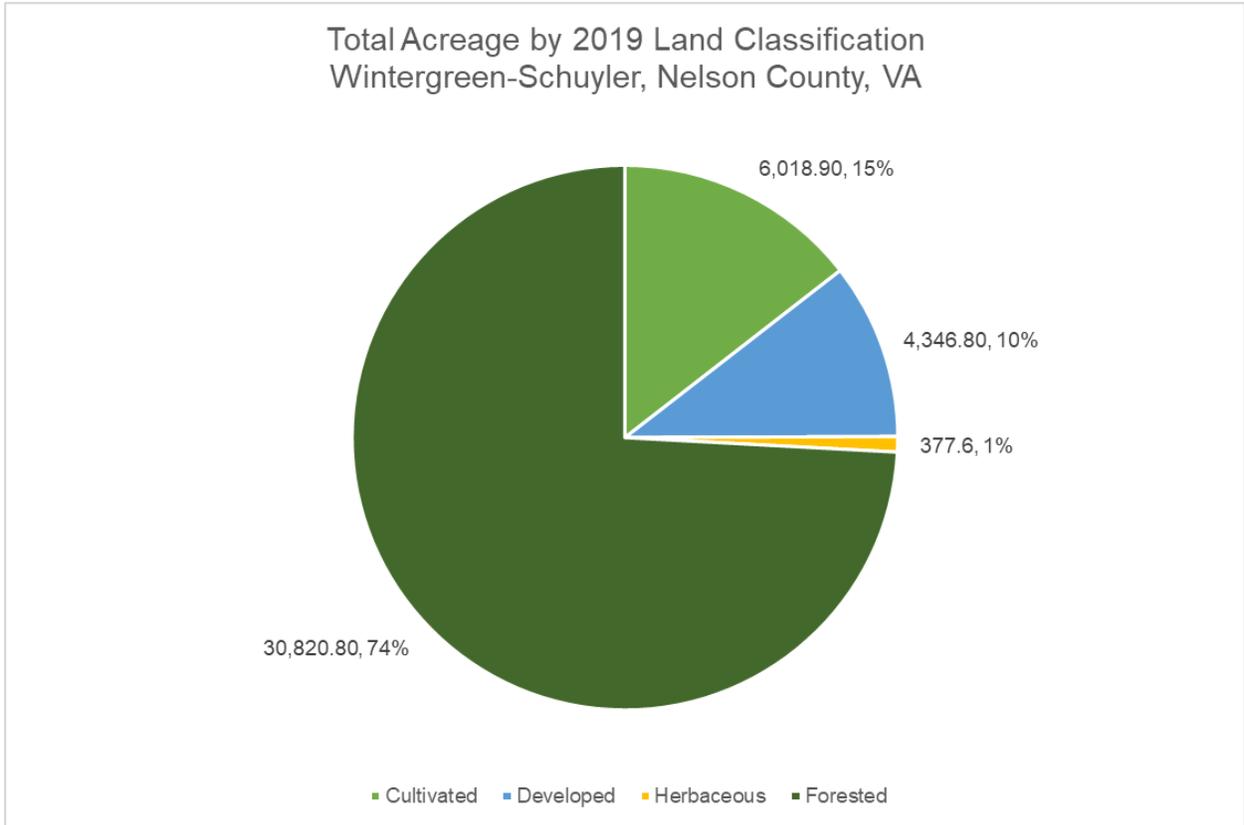


Figure N.L.3: Total Acreage by 2019 Land Classification and Percentages in Wintergreen-Schuyler, Nelson County, Virginia. Data sourced from the National Land Classification Database.

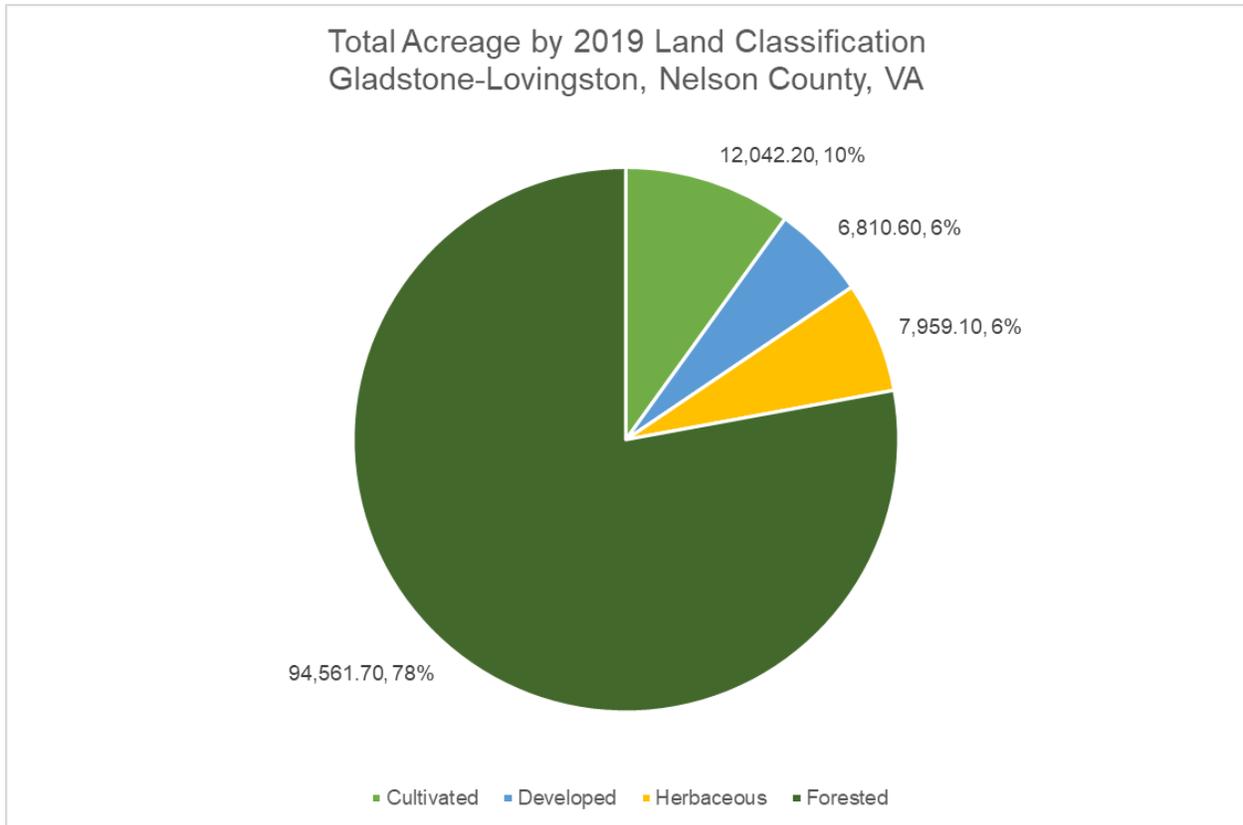


Figure N.L.4: Total Acreage by 2019 Land Classification and Percentages in Gladstone-Lovingston, Nelson County, Virginia. Data sourced from the National Land Classification Database.

Conclusion

Although Nelson County is growing, with industries catering to tourists, equitable development for Nelson means creating infrastructure that not only benefits these industries, but also the residents of this area. The local residents of Nelson County know "...it's a constant effort to stand up, raise our hands, and say don't forget the rural areas. It's a constant mantra that we have to keep up to stay noticed" and have put in the time and effort to support the County as a whole. Nelson has excelled in their educational endeavors and has above average state spending per pupil. This could provide reasoning for Nelson's high graduation and low dropout rates across male, female, white and Black students.

Moving forward in a post-pandemic and digital era, students as well as people who work from home, may need greater access to internet and cellular access than what is currently available to them. Nelson County has pushed for funding to expand its digital access but may have trouble securing these funds and services. In the focus group, a participant stated "...it doesn't matter what the localities are asking for if the private companies, like Verizon and AT&T, (because) they're not building out the rural network in counties . . . they're focused somewhere else, the board of supervisors are never gonna have the money to build the towers". Nelson County additionally has natural barriers to having service towers built due to the mountainous landscape. With the need to rely on individual transportation and the overall age of Nelson being elderly, there is a disparity between who and how services are delivered because of these natural and technological barriers.

Nelson County has seen an increase in median household income from 2010 to 2019, particularly in Roseland and Wintergreen-Schuyler, and this is primarily due to the Albemarle County and Charlottesville housing market pouring into Nelson. A surge in high income renters could be a factor in the steady increase of SNAP recipients in Wintergreen-Schuyler, the lack of affordable housing available, and the high rent burden. Nelsonians will undoubtedly continue to speak up where there are inequitable economic disparities, as well as push for the continuation of funding already received to keep Nelson on the path towards connectivity for all.

CONCLUSION

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APPENDICES