Central Virginia Equity Profile

A Regional Equity Profile for the Members of the Thomas Jefferson Planning District Commission: The City of Charlottesville, Fluvanna County, Greene County, Louisa County, and Nelson County

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Co-Authored by The Equity Center, A UVA Democracy Initiative for the Redress of Inequity through Community-Engaged Scholarship, and graduate students from the Spring 2022 PLAN 6020 Methods of Community Research and the Spring 2022 PLAN 6040 Quantative Methods of Planning Analysis classes in UVA's Master's of Urban and Environmental Planning program.

Partners:







Collaborators:

Siri Russell, Director of Equity and Inclusion, Albemarle County

Dr. Barbara Brown Wilson, Faculty Director, The Equity Center

Michael Salgueiro, Research Programs Manager, The Equity Center

Jackie Martin, Community Outreach Programs, Sentara Martha Jefferson Hospital

Dr. Andrew Mondschein, Director of Urban and Environmental Planning, University of Virginia

Fluvanna County:

Student Collaborators:

City of Charlottesville:

City of Charlottesville.	ridvarilla Courty.	Louisa Courty.
Carreen De Cardenas	Nancy Etro	Connor Burke
Molly Nealon	Roy Jenkins	Sophie Delzell
Conor O'Donnell	Emily Thomas	Emelia Lehmann
Lily Slonim	Jedediah Grant	Paige Werman
John Strangfeld	Jenni Rogan	Samantha Veth
John Ward		
Tyler Pearre	Greene County:	Nelson County:
	Christopher Barber	Ashley Clubb
	Kendall Carter	Caroline Gaenzle
	Jennah Coltrain	Erin Herock

Jennah Coltrain Erin Herock
Aziza Longi Gabrielle Linde
Sarah Rizk Rachael Miller
Ramya Tella

Louisa County:

CENTRAL VIRGINIA EQUITY PROFILE

Centering Equity in Evaluating Well-Being & Quality of Life for Residents of Central Virginia

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Source: Virginia's Blue Ridge.

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." 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 linked 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.

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Siri Russell et al., 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

This Regional Equity Profile seeks to identify similar conditions and gaps in services that exist in the other five localities in the TJPDC so that the qualitative and quantitative data is publicly available for those who may wish to use it. 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
- Demographics
 - » Race
 - » Income
 - » Age
- Food Insecurity

- Employment
- Housing
- Education
- Digital Divide
- Land Use/Environment
- Transportation/Mobility

Each of the above sections were identified as potential environmental, social, or economic factors that may affect quality of life and well-being of residents. Additionally, for each locality, 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.

DEMOGRAPHICS (RACE, AGE, AND INCOME):

RACE

Race and ethnicity are key determinants of equitable outcomes for the communities in the counties under study. The disaggregation of the five-year ACS data for these categories was carried out at the scale of the census tract for the year 2019. The rationale for this selection was to arrive at an understanding of how the data could be located in the context of specific factors such as income, employment, access to transportation and internet usage, among others. The data indicates that white residents constituted the majority across counties, followed by Hispanic/Latino and Black residents.

AGE

Age is also an important factor when considering equity, quality of life and life expectancy for communities in this study. The age of a population influences the needs of a community, especially what kinds of services should be provided. For instance, our research indicates that older populations benefit from accessible transportation to get to appointments and essential services, while younger populations might require more education-related opportunities such as child care. In this way, understanding age trends among these counties helps inform other metrics and issues affecting equity throughout the region. For this report, we looked at age data from the 5-year ACS data for 2010 and 2019 to understand changes to the age of populations over the last decade as well as current age distributions in each county.

INCOME

Income is a critical predictor of quality of life and equity. Median household income values give insight about how community members' wealth varies across groups and through time. Income directly relates to other measures including poverty, food security, and housing. Families with higher median household incomes have more financial flexibility and economic resilience. This report disaggregates income data across census tracts, by race, and through time in order to understand how communities are impacted by the economy.

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FOOD INSECURITY

Food insecurity is defined by the U.S. Department of Agriculture (USDA) as lack of access to healthy and affordable quality food. When a household is food insecure, household members reduce their food intake and normal eating patterns due to lack of money and resources for food. Several factors contribute to food insecurity, including cost of healthy foods and access to grocery stores. The Supplemental Nutrition Assistance Program (SNAP) is intended to reduce food insecurity by providing additional resources to purchase food. The number of people receiving SNAP is indicative of the levels of food insecurity in a community. Including this data in the Regional Equity Profile highlights those who are most impacted by food insecurity.

EMPLOYMENT

Employment is a major indicator of the economic and financial well-being of communities and their residents. Job access is the foundation of financial stability and upward mobility for individuals. However, the distribution of job access across communities can often lead to barriers on the basis of demographics and location. Factors such as transportation access, childcare resources, income brackets, and educational attainment are major barriers for the residents within the counties observed by this profile. The percentage of the working-age population that is employed is compared against the percent of those in the population who are in the labor force (desire employment) but are unemployed. Together, these measures give an idea of the proportion of voluntary and involuntary workforce participation among regional demographics.

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). 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.

EDUCATION

Education is a significant determinant of socioeconomic stratification. Public education is typically the first exposure to social life outside of the home and is necessary for subsequent integration within broader society. Both through individual character development and for post-graduation explicit opportunities employment, educational access highlights general social trends within a county and comparative social trends among separate demographics. Barriers to educational access include local funding for school systems, availability of transportation to the school site, and economic and behavioral limitations. These barriers were drastically heightened throughout the COVID-19 pandemic, as classroom access became largely dependent on at-home internet capabilities, the ability to operate requisite technology, and the availability of domestic childcare. While the majority of this report's quantitative data was collected before the 2020-2021 school year, qualitative analyses have indicated that the pandemic exacerbated existing divisions in educational access.

DIGITAL DIVIDE

Digital resources are an important determinant of the ability of individuals and communities to access equitable outcomes through education and employment opportunities, transit networks and other variables relevant to the counties under study. The data illustrates that access to a computer is not equivalent to access to the internet, with significant proportions

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of the populations within these counties without access to a computer. Income, race and ethnicity are variables that mediate access to the internet and offer a useful metric for comparison across the wider study area.

MOBILITY

Transportation and mobility data provide insight into how people are moving in and through space. Movement patterns and rhythms are informed by the legacy of transportation and connectivity planning, because how an individual moves through spaces is dictated by the accessibility of transportation, inclusivity of modes, and connectivity to places. Transportation influences the allocation of public resources and economic opportunities of an area, marking travelers' quality of life and positioning within a system. This Regional Equity Profile examines various conditions across demographic groups and geographic areas through the lens of transportation and mobility in order to collect qualitative and quantitative data that displays the current status of mobility to prompt discussion as to where equitable mobility may be improved. The transportation and mobility data was examined in terms of the working population, which is defined within each county's section.

LAND USE

Urban land use is used as a proxy in this report to indicate areas of accessible land. Because data on access to public green spaces was not readily available, land use was used to consider developed and urban land, forested land, and farmed land. Green and public spaces contribute to the overall well being of communities, cultivate gathering spaces, and generate understanding of the purpose of land in the region. This data was taken from the Multi-Resolution Land Characteristics Consortium (MRLC) and analyzes the percentage of total land use designated to each land use category.

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Source: "VirginiaGreen"

CITY OF CHARLOTTESVILLE

CITY INTRODUCTION

The City of Charlottesville is located in Central Virginia, along the Rivanna River and at the foothills of the Blue Ridge Mountains. The city is home to 46,553 people across 10.24 square miles of land.¹ While Charlottesville is an independent city, it 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.²

The historic town 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.³ Charlottesville gained global attention with controversy surrounding removing its 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.

¹ US Census. Charlottesville City, Virginia. United States Census Bureau, 2020. https://www.census.gov/quickfacts/charlottesvillecityvirginia

^{2 &}quot;About Charlottesville | Charlottesville, VA." n.d. https://www.charlottesville.gov/694/About-Charlottesville.

^{3 &}quot;About Charlottesville | Charlottesville, VA."

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."

This profile analyzes metrics and conditions across demographic groups and geographic areas that contribute to quality of life. The goal is to provide citizens and organizations with relevant information that might contribute to work that promotes a more equitable Charlottesville.

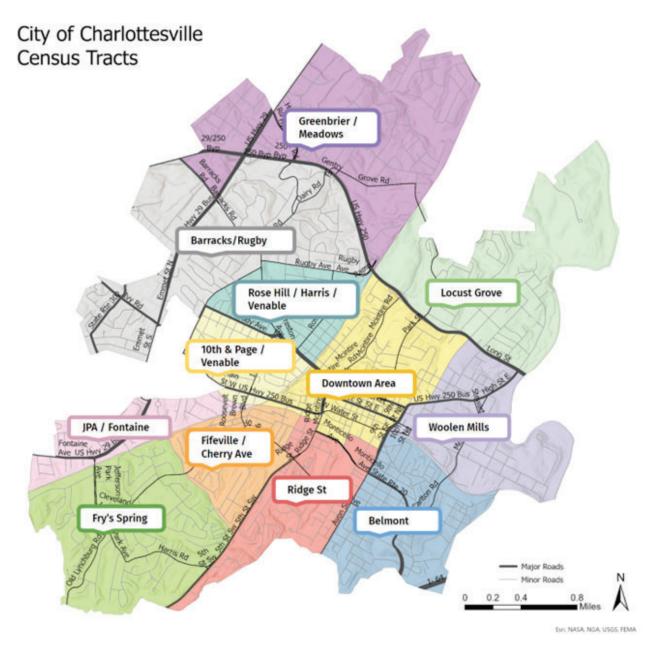


Source: Peter Frank Edwards/REDUX

^{4 &}quot;Charlottesville City Council Vision - 2025," City of Charlottesville City Council, accessed April 22, 2022, https://www.charlottesville.gov/684/Vision-Statement.

COMMUNITY MAPPING EXERCISE

The 2021 U.S. Census identified 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 Regional Equity Report correspond to 2019 census tracts, there were no changes in census geography in the 2010-2020 period in Charlottesville.



Focus Group Census Tract Naming Exercise

DEMOGRAPHICS

RACE

The majority of Charlottesville's population identifies as white or Black (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. The Downtown, Barracks/Rugby, and Locust Grove neighborhoods are overwhelmingly white. As seen in Figure C.2.A, 88.2 percent of the Downtown Area is white, with 2.5 percent 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/Latino. Within Jefferson Park Avenue (JPA)/Fontaine there is a high population of Asian residents, comprising 24 percent of the neighborhood. In Greenbrier and Ridge Street the Hispanic/Latino population is quite sizable, especially in relation to other tracts. According to Figure C.2.A, 15.4 percent of Greenbrier's population is Hispanic/Latino, while 9.6 percent of Ridge Street's population is Hispanic/Latino.

Observations and the sharing of lived experiences 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."⁵

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

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 like Staple's and McDonald's.

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." The creation of this position is a positive first step in the government's efforts to address its historical negligence and wrongdoing.

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

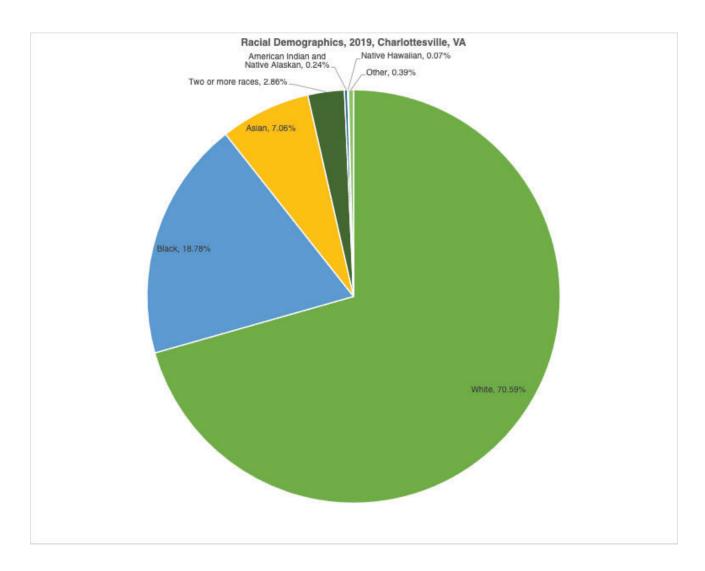


Figure C.1: Racial Demographics, 2019. (Source: ACS)

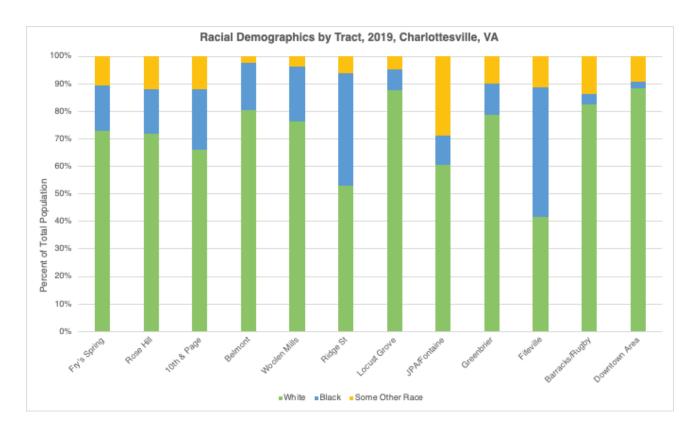


Figure C.2.A: Racial demographics by tract, 2019. (Source: ACS)

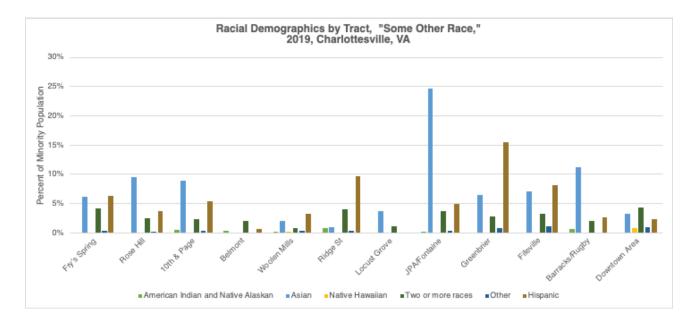


Figure C.2.B: Racial demographics by tract, "Some Other Race," 2019. (Source: ACS)

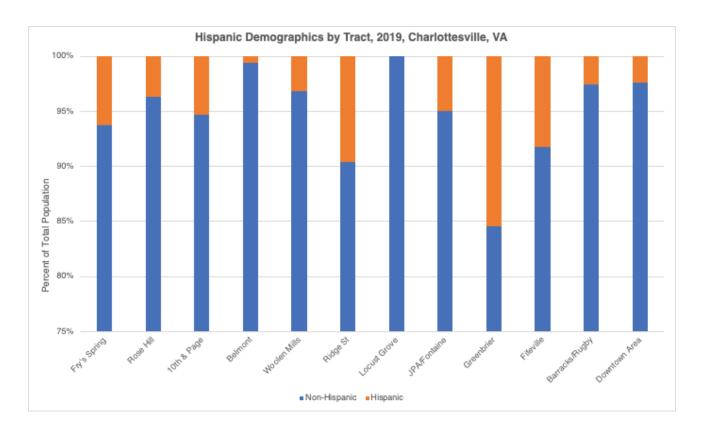


Figure C.3. Hispanic/Latino population by tract, 2019. (Source: ACS)

INCOME

The fluctuation of income patterns is a normal occurrence throughout a decade. In Charlottesville, households have experienced growth, loss, and static retention. The latest data is depicted by the graph in Figure C.4 which shows the variation of median income in Charlottesville by census tract from 2019.

Figure C.4 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. Conversely, Fry's Spring holds a sizable advantage in incomes relative to any other community area.

Figure C.5 compares geographical and racial breakdowns of income in Charlottesville. It is important to note that for some 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 a lack of residents in these areas. It is evident in this graphic that income levels vary across location and racial group. For instance, Ridge Street 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, the median household income of Black residents in Ridge Street are less than a quarter of their counterparts in Fry's Spring.

It is also important to recognize that the state's median household income is just below \$76,400, while the median household income for Charlottesville is \$59,598 according to the U.S. Census Bureau. While it is evident that many different households across Charlottesville reach that threshold, many 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 (Figure C.5). The difference of income by race perpetuates inequalities in Charlottesville that require active solutions..

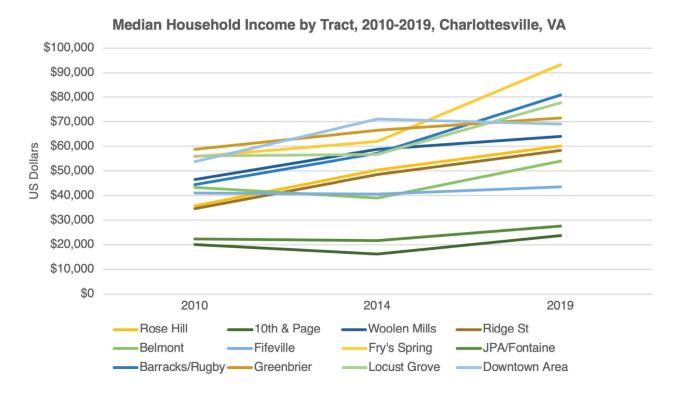


Figure C.4: Median household income, 2010-2019 (Source: ACS)

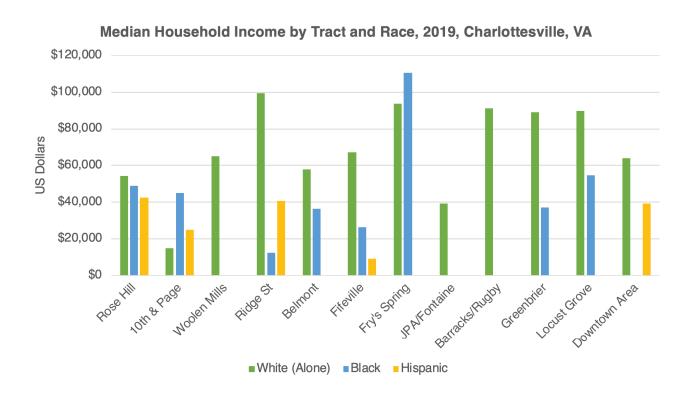


Figure C.5: Median household income by tract and race/ethnicity, 2019 (Source: ACS)

AGE

Charlottesville's population has aged between 2019 and 2020 (Figure C.6). Significant declines occurred within younger age groups. For instance, the age cohorts 15 to 19 and 20 to 24 declined the most of any age group between 2010 and 2019. Notable increases occurred within older age groups; people 64-74 years of age and 60 to 64 years of age increased the most of any age group between 2010 and 2019.

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." 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.

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

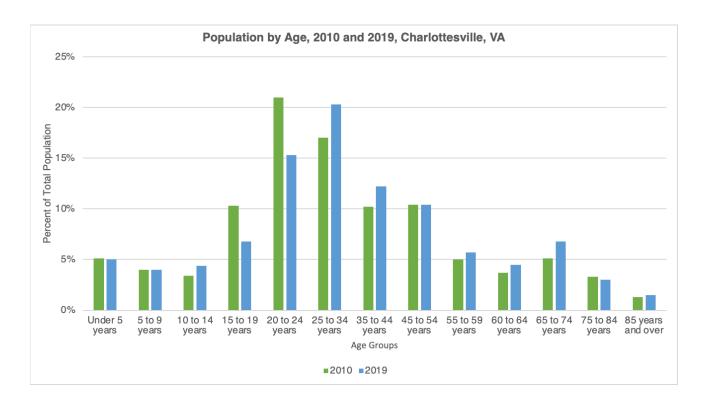


Figure C.6: Percent of population by age, 2010 and 2019 (Source: ACS)

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 present and past. Charlottesville's work towards this type of improvement can be analyzed from multiple perspectives, like the need of attaining Supplemental Nutrition Assistance Program (SNAP) benefits. SNAP benefits are disbursed by states to supplement food budgets for low-income households.

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 former (Figure C.7) shows the variation across census tracts. It is evident that location is related to SNAP benefits and the number of people affected by food insecurity. The distribution of SNAP benefits and the median income level graphic shown earlier display a similar level of fluctuation depending on location.

Figure C.8 depicts the change in number of households across 2010-2019 that received SNAP benefits. This graphic shows a general increase of people utilizing SNAP benefits over time. Overall, it is evident that the data is showing a spike in the number of people requiring SNAP benefits. One might assume that SNAP is more necessary today because incomes have not risen at a level to keep pace with cost of living. Another illustration of inequity appears from comparing Figure C.8 with Figures C.2-C.3. This comparison reveals a direct relationship between higher Black and other minority populations and higher percentages of households receiving SNAP benefits. Due to the fact that this insecurity can be related to income and race, these inequities may be further perpetuated by food insecurity in Charlottesville, which requires addressing.

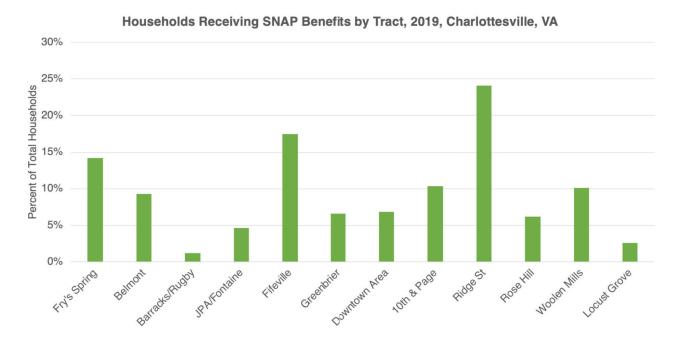


Figure C.7: Percent of households that received SNAP benefits, 2019 (Source: ACS)

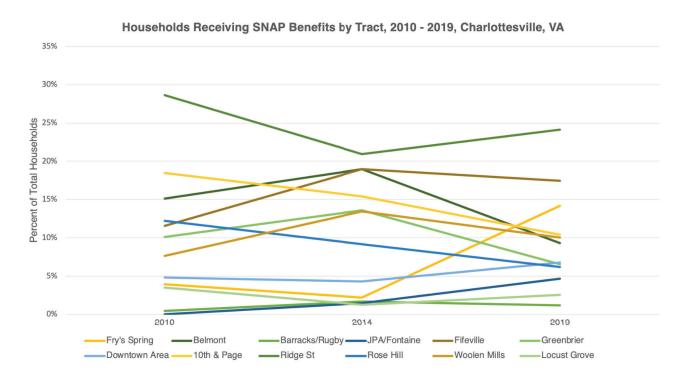


Figure C.8: Percent of households receiving SNAP benefits by tract, 2010-2019 (Source: ACS)

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 57.0 percent to 61.4 percent, while the unemployment rate remained between 2.7 to 3.1 percent throughout (Figure C.9). When compared to nearby counties, it should be noted that employment numbers may be lower in Charlottesville due to the city's high university 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.11).

For race and ethnicity, however, there were noticeable disparities in the unemployment statistics (Figure C.10). On the low end, Hispanic/Latino residents had an unemployment rate of 1.6 percent compared to white residents, who had a rate of 2.5 percent. Black residents had more than double these rates, with 7.6 percent unemployment, while Asian residents had 8.5 percent. The highest unemployment rate was observed in residents who identified as two or more races, who experienced unemployment at 21.8 percent. American Indian and Native Alaskans as well as Native Hawaiian and Other Pacific Islanders had an unemployment rate of zero percent, though this may be negligible due to the small size of those populations.

ACS data cannot provide an explanation for inequality in unemployment numbers. These differences may 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, "ultimately, 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."

⁸ City government employee in interview with UVA graduate students, March 21, 2022.

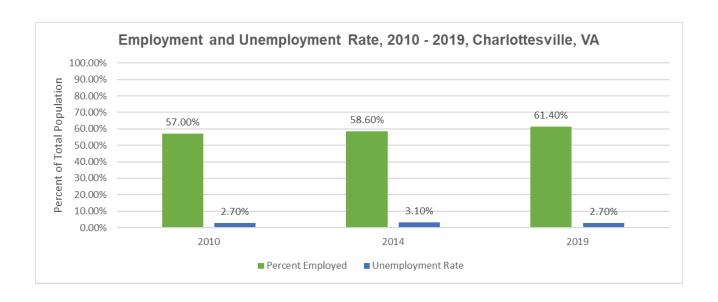


Figure C.9: Employment and unemployment rate, 2010 - 2019. (Source: ACS)

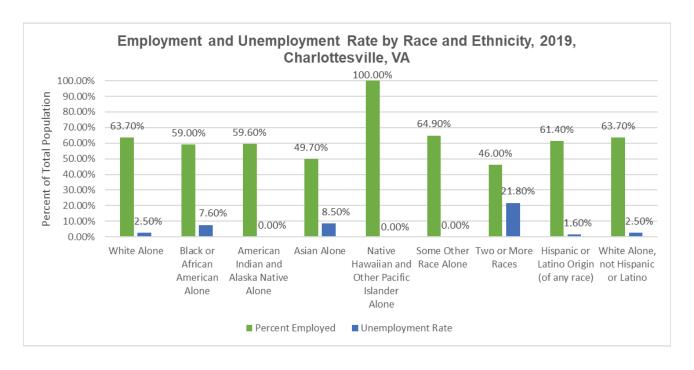


Figure C.10: Employment and unemployment rate by race and ethnicity, 2019 (Source: ACS)

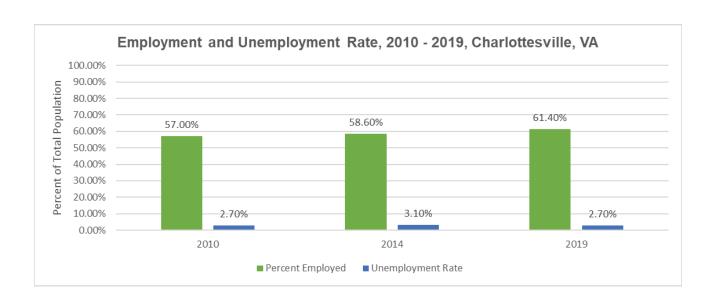


Figure C.11: Percent employed and unemployment rate by sex, 2019 (Source: ACS)

HOUSING

This report looks at median housing value, median rent, and rent burden to understand housing in the city. 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 rent burden represent the ability of residents to have affordable housing access.

Figure C.12 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 percent in 2014 to 76 percent five years later. Locust Grove has the highest change overall, having an 18 percent decrease in rent burden.

In Figure C.13, 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. They serve as a benchmark for comparison, as median home values here are much higher than in surrounding tracts, with an increase in value for the Downtown Area of 16 percent. Most notable is the 10th & Page/Venable area, which saw a staggering 66 percent 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.14 describes the change in median gross rent change over time from 2014 to 2019. Fifeville experienced the highest increase, with a median monthly gross rent in 2014 of \$948 increasing to \$1,180 five years later. Residents in the Ridge Street area, however, saw a 23 percent 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 through the eyes of residents. A participant during the focus group gave their testimony on the housing situation within Charlottesville; "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."

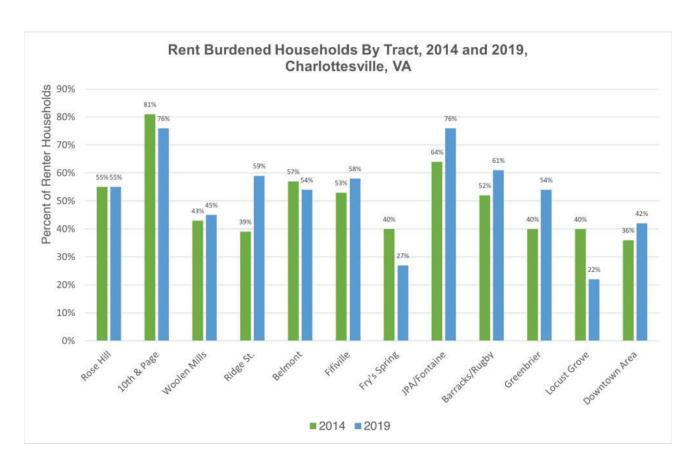


Figure C.12: Rent burdened households by census tract, 2014 and 2019 (Source: ACS)

⁹ Community health worker in interview with UVA graduate students, March 22, 2022.

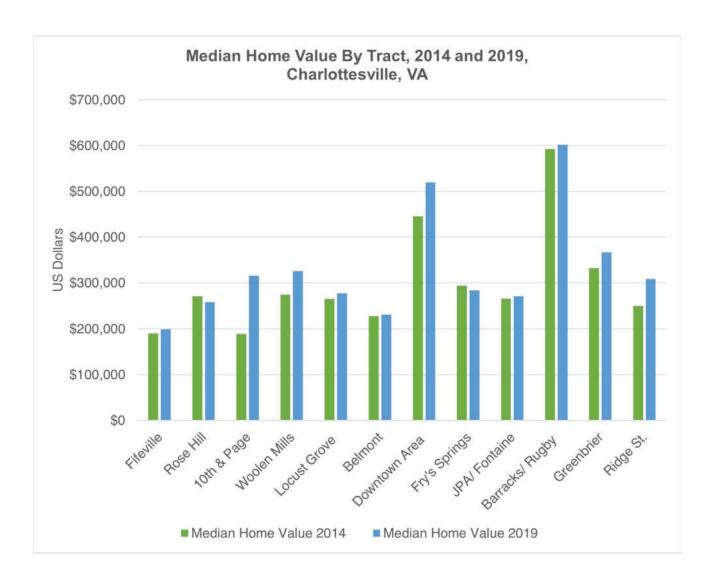


Figure C.13: Median home value by census tract, 2014 and 2019 (Source: ACS)

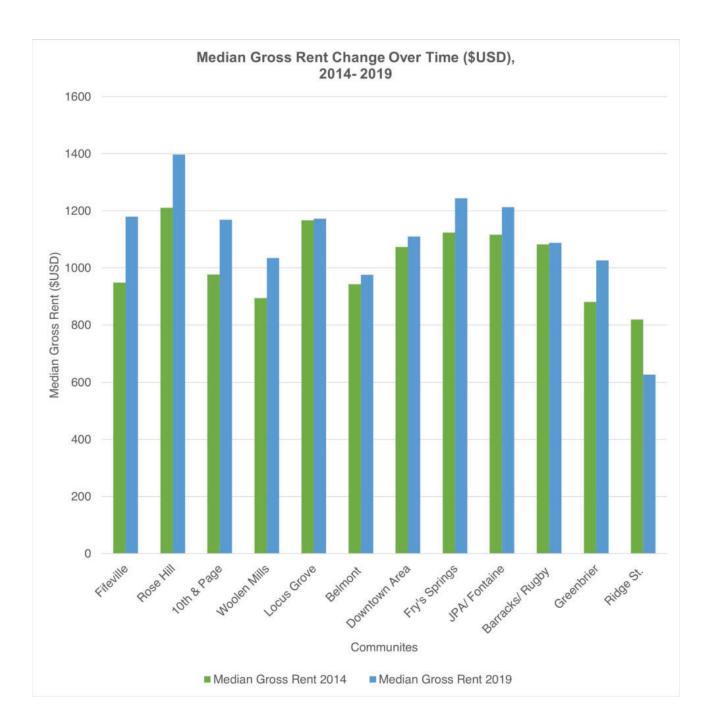


Figure C.14: Median gross rent, 2014 and 2019 (Source: ACS)

SCHOOL OUTCOMES/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 \$15,500 to \$16,200 for each pupil in its public school system. In both years, this number is almost 25 percent higher than that of the state average, which has remained around \$11,600 to \$11,900 (Figure C.18). 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 96 percent graduation rate while the Virginia average was 92 percent (Figure C.15). This is despite the fact that more Charlottesville high school students qualify for free and reduced lunch programs than the state average (Figure C.19).

When disaggregated, the data reveal a visible disparity across racial and ethnic groups within the school system. While white students in 2019 were graduating at a rate of 97 percent, only 91 percent of Hispanic/Latino students were graduating with six percent having dropped out. Black students had a graduation rate of 96 percent (Figure C.16). 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... between elementary school and middle school and then high school for particularly Black males, we are really failing them." ¹⁰

¹⁰ Community health worker in interview with UVA graduate students, March 22, 2022.

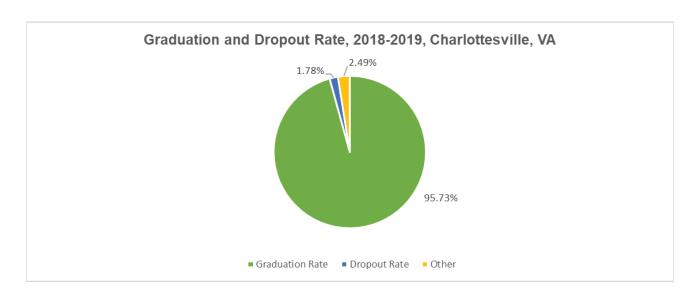


Figure C.15: High school graduation and dropout rates, 2018-2019 (Source: Virginia DOE)

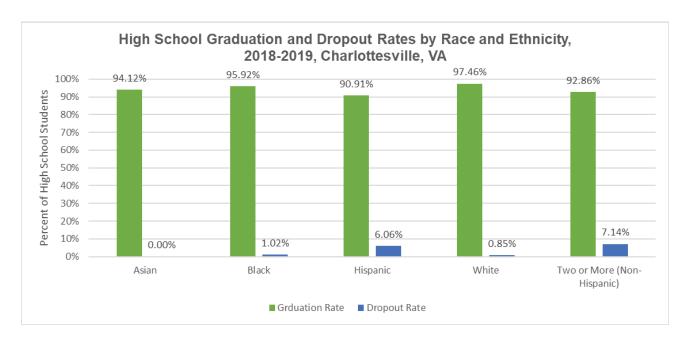


Figure C.16: High school graduation and dropout rates by race and ethnicity, 2018-2019 (Source: Virginia DOE)

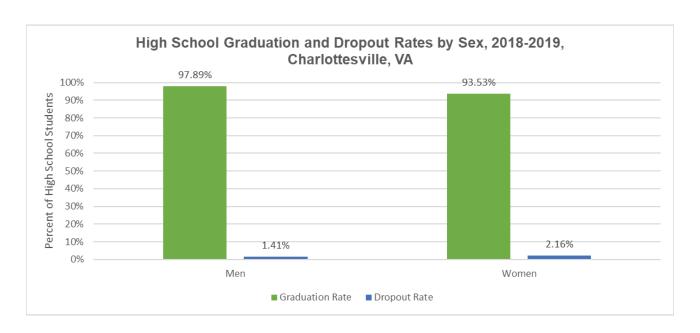


Figure C.17: High school graduation and dropout rates by sex, 2018-2019 (Source: Virginia DOE)



Figure C.18: Per-pupil spending, 2018-2020 (Source: Virginia DOE)

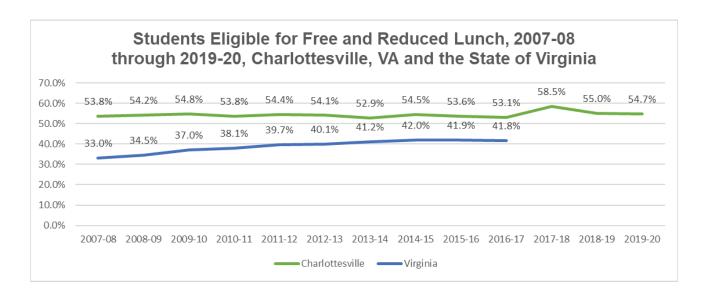


Figure C.19: Percent free and reduced lunch from the 2011-2012 school year to the 2019-2020 school year (Source: The Annie E. Casey Foundation) Note: Virginia state data unavailable after the 2016-17 school year.

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.21). Within these neighborhoods, the highest percentages of residents without computer access or internet subscriptions are white or Black (Figures C.20 & C.21). Additionally, residents without internet subscriptions are low-income (Figure C.22); the income brackets 'less than \$10,000' and 'Between \$10,000 - \$19,000' have the greatest number of residents without internet subscriptions.

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.

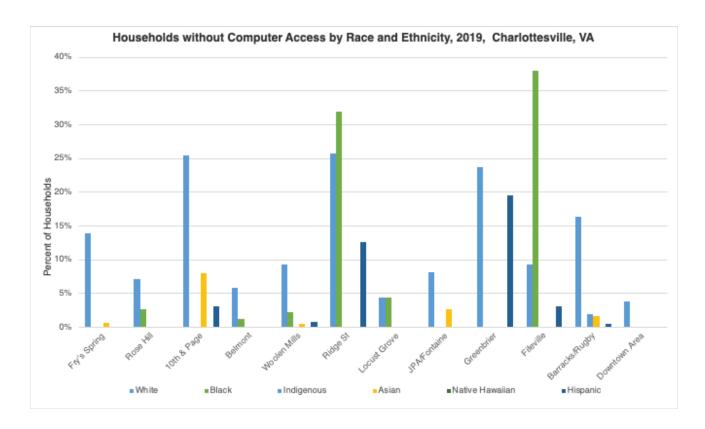


Figure C.20: Percent of households without computer access, 2019 (Source: ACS)

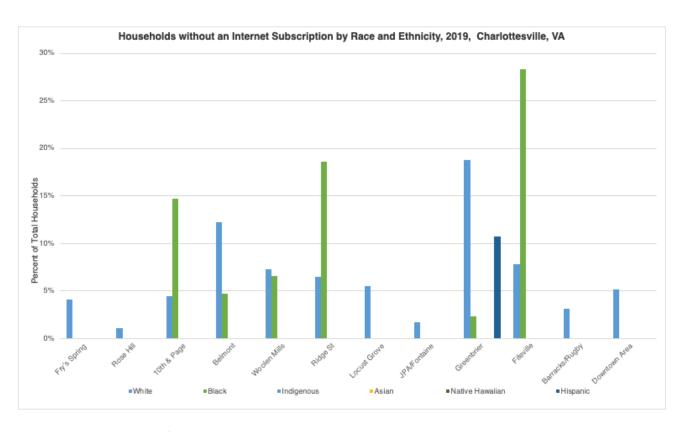


Figure C.21: Percent of households without an internet subscription by race and ethnicity, 2019. (Source: ACS)

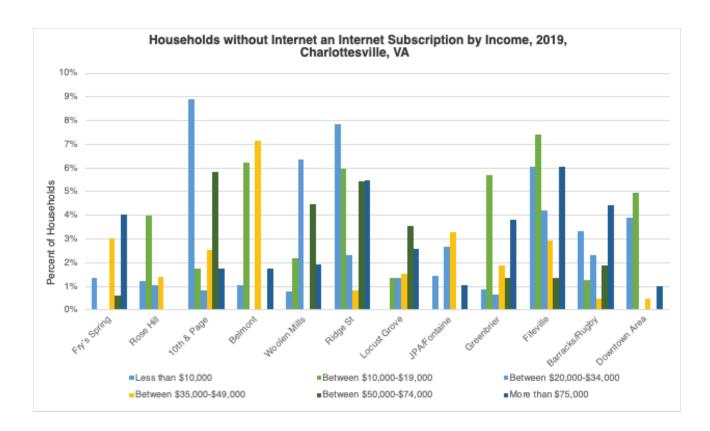


Figure C.22: Households without an internet subscription by income, 2019. (Source: ACS)

MOBILITY/TRANSPORTATION

Mobility was examined in terms of the working population. In this section, the data represents 60 percent of Charlottesville's working population.¹¹

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.23). Examining vehicle access is critical because the majority of Charlottesville residents commute to work by driving alone (Figure C.25). 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.24). 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.¹²

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 and mentioned that transportation was considered a barrier to equity. There are services in Charlottesville, such as healthcare, 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." Another participant explained, "not everyone has

¹¹ American Community Survey. 2019. Accessed April 15, 2022.

¹² American Community Survey. 2019. Accessed April 15, 2022.

¹³ Health equity non-profit worker in focus group, April 14, 2022.

the opportunity to purchase a car, so if we can get to 15-minute transit opportunities how life-changing could that be?"¹⁴ There is an opportunity for Charlottesville to develop a more equitable public transportation network.

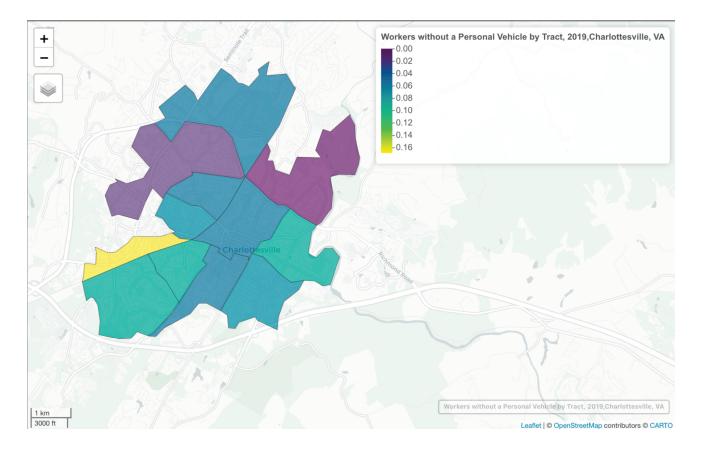


Figure C.23: Percent of workers who do not own a vehicle by tract, 2019. (Source: ACS)

¹⁴ City government employee in interview with UVA graduate students, March 21, 2022.

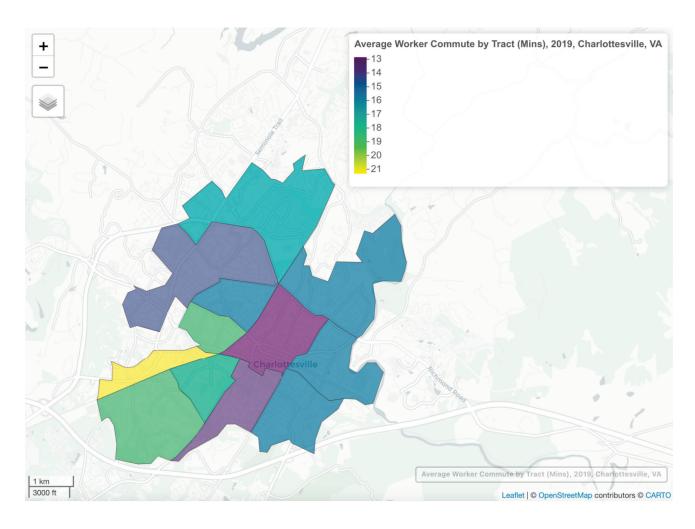


Figure C.24: Average worker commute by tract, in minutes, by tract, 2019. (Source: ACS)

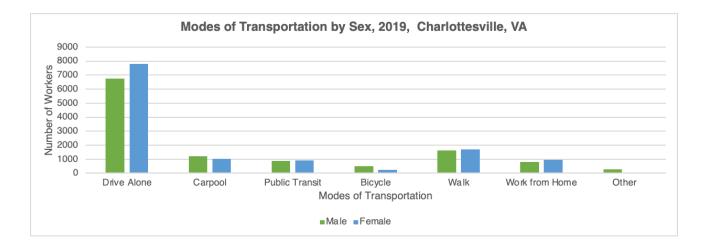


Figure C.25: Modes of transportation by sex, 2019. (Source: ACS)

LAND USE AND ENVIRONMENT

We analyzed the Multi-Resolution Land Characteristics (MRLC) consortium data from 2019 to assess land use in Charlottesville. Figure C.26 shows the land class cover from the National Land Cover Database's (NLCD) 2019 dataset. The majority of Charlottesville is dominated by developed land, albeit at varying densities. Developed areas dominate the entirety of Charlottesville, with no major variation across census tracts. Developed land covers 89 percent 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, a major landholder in the area, 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 to physical, mental, and social health, as well as natural impacts like urban island heat effect and reduced air quality, greater noise levels and longer water filtration rates. Areas such as the Downtown area within Charlottesville would notice the greatest impacts of a lack of green space, with the red line indicating this rise in development.

¹⁵ Dwmurawski, Dashel. "The Values and Shortcomings of Green Spaces in Urban Environments." Office of Sustainability - Student Blog, May 19, 2020. https://usfblogs.usfca.edu/sustainability/2020/05/19/the-values-and-shortcomings-of-green-spaces-in-urban-environments/

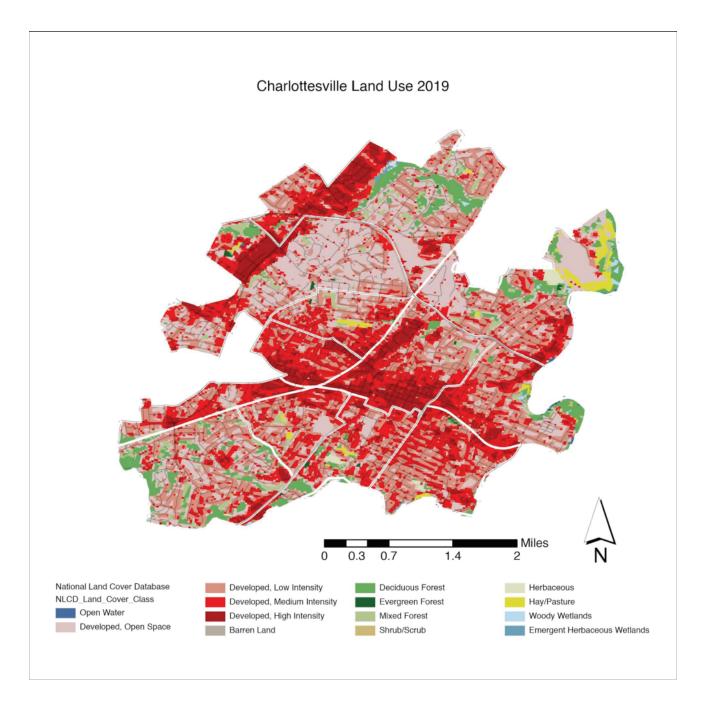


Figure C.26: Land cover map, 2019 (Source: MRLC & National Land Cover Database)

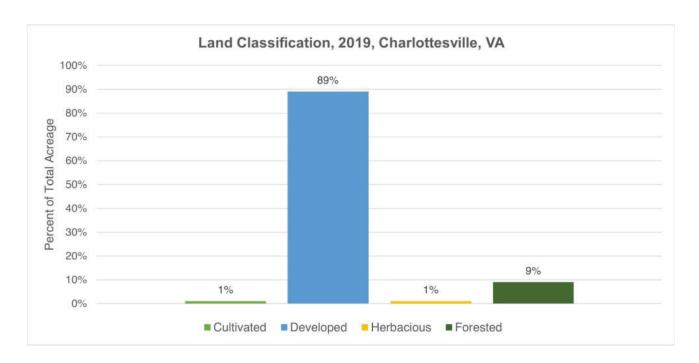


Figure C.27. Land classification, 2019 (Source: MRLC & National Land Cover database)

CONCLUSION/SUMMARY OF FINDINGS

Charlottesville is a community rich in history and assets. 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 residents experience 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 that several areas of opportunity to improve still exist, especially when disaggregating key data points. For instance, in most census tracts, median 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 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 already challenging, but finding a doctor who accepts Medicaid and/or offers language interpretation is even more difficult.

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 critical 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 people will tell you, gladly, where they feel they're being shortchanged and what things would be better." 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 "listen to [residents]. Get their input and actually make a concerted effort to genuinely use their input." 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.

¹⁶ Health equity non-profit worker in focus group, April 14, 2022.

¹⁷ Maternity health services employee in focus group, April 14, 2022.

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Source: "Photo by Robert Kenward, www.fluvannacounty.org"

FLUVANNA COUNTY

COUNTY INTRODUCTION

The county Board of Supervisors' vision states, "Fluvanna County... The heart of Virginia and your gateway to the future. A great place to live, learn, and play"¹. Located in the central piedmont region of Virginia, it is home to a diversity of people and landscapes. As of 2020, the population of Fluvanna County is 27,249 and the majority of the population lives in the Lake Monticello area. Fluvanna is 290 square miles, with 286 square miles of land and four square miles of water.² The James River flows along the southern border of the county and the Rivanna River diagonally dissects the county. Fluvanna is home to the Monacan Indian Nation. Today Rassawek, located outside of Columbia and the Nation's historic capital and important burial ground, is considered one of America's most endangered historic places.^{3,4}

¹ Fluvanna County. Fluvanna County Mission and Vision. Fluvanna County, 2022. https://www.fluvannacounty.org/bos/page/fluvanna-county-mission-and-vision

² US Census. Fluvanna County, Virginia. United States Census Bureau, 2020. https://data.census.gov/cedsci/profile?g=0500000US51065

³ Eason, Hannah. Monacan Indian Nation site in Fluvanna Co. included in America's most endangered historic places. NBC12, 2020.

⁴ Brockell, Gillian. Battle over Native American burial site in Virginia ends in tribal victory. The Washington Post, 2022.

Fluvanna County was established in 1777 after separating from Albemarle. The county is named after the Fluvanna River which was the name of the western branch of the James River at the time.⁵ Fluvanna means "Annie's River" and is named after Queen Anne of England.⁶ The county's seat is located in the Village of Palmyra, which was established in 1824. Until the railroad was introduced to the area in 1881, the county's main source of prosperity was through a system of canals constructed in 1805 by the Rivanna Navigation Company. The eastern half of the county also had multiple successful gold mines in the 1830s.⁷

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 Inc.⁸



Source: Central Virginia Partnership for Economic Development

⁵ Genealogy Trails. Fluvanna County, Virginia Genealogy and History. Genealogy Trails History Group, 2006.

⁶ Fluvanna County. Fluvanna County History. Fluvanna County, 2022.

⁷ Fluvanna County. Fluvanna County History. Fluvanna County, 2022.

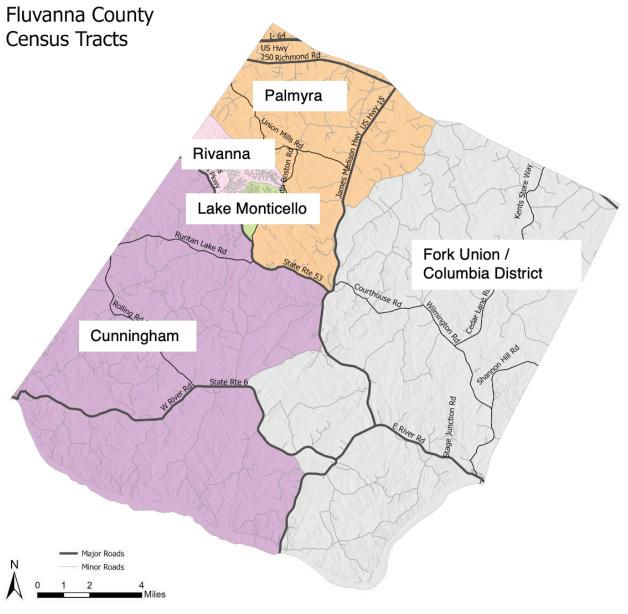
⁸ Virginia Employment Commission. Virginia Community Profile, Fluvanna County. Virginia Labor Market Information, 2022.

COMMUNITY MAPPING EXERCISE

Fluvanna is composed of three census tracts. During a Fluvanna County resident focus group on April 14, 2022, the census tracts were given their locally recognized names. As shown the map below, these tracts are named Rivanna/Lake Monticello, Palmyra, Columbia/Fork Union, and Cunningham. 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 Bremo 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 a rural locality has articulated a distinct disconnect between economically advantaged and disadvantaged residents, and this is reflected in tensions within 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.

⁹ Community health worker in focus group discussion with UVA graduate students, April 14, 2022.



Esri, NASA, NGA, USGS

Focus Group Census Tract Naming Exercise

DEMOGRAPHICS

RACE

The majority population of Fluvanna County is white, with about 80 percent of the total population identifying as white. Every community within the county has a white population of at least 74 percent (Figures F.1 and F.2A). The community with the greatest racial diversity is Columbia/Fork Union, which is 74 percent white, 23.7 percent Black, 0.4 percent American Indian or Alaska Native, and 1.9 percent of two or more races (Figure F.2A, F.2B). The Lake Monticello/Rivanna community is home to the largest population of Asian residents, as well as residents who identify with two or more races (Figure F.2B). The Hispanic/Latino population of Fluvanna makes up 3.5 percent of the county's population, with the largest Hispanic/Latino population residing in Columbia/Fork Union, which has a Hispanic/Latino population of 8 percent (Figure F.4).

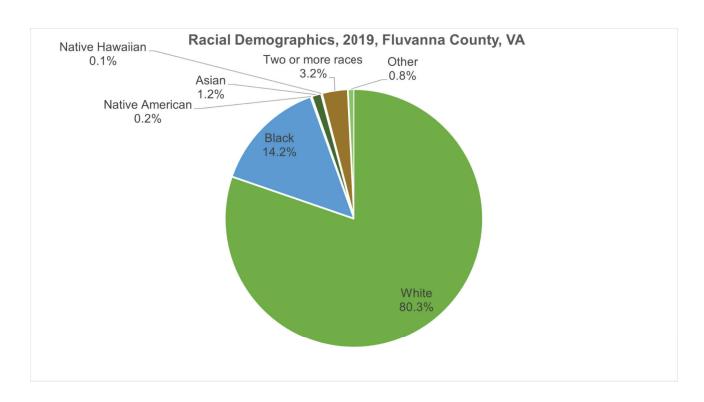


Figure F.1: Racial Demographics, 2019. (Source: ACS)

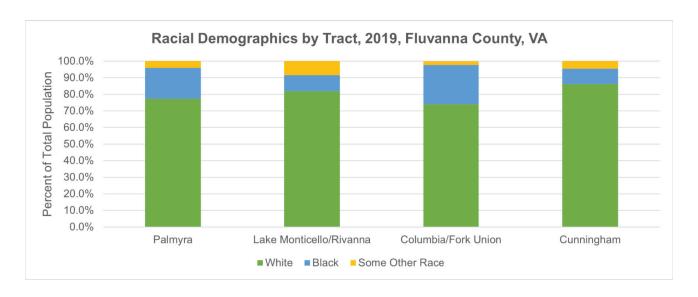


Figure F.2.A: Racial demographics by tract, 2019. (Source: ACS)

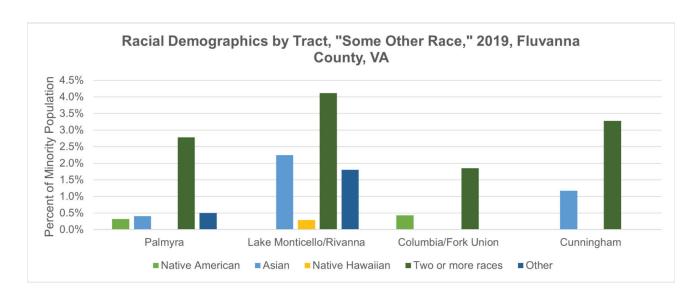


Figure F.2.B: Racial demographics by tract, "Some Other Race," 2019. (Source: ACS)

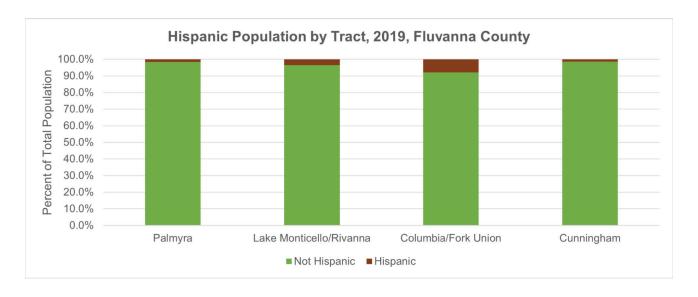


Figure F.3. Hispanic/Latino population by tract, 2019. (Source: ACS)

INCOME

Fluvanna's median household income varies by census tract and race. All census tracts have experienced an increase in median household income between 2014 and 2019, except for Palmyra which experienced a slight decrease (Figure F.4). 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 F.5 disaggregates median household income by race and ethnicity in 2019, although the data was unavailable for Hispanic/Latino households. The greatest disparity is seen in Columbia District / Fork Union where the median income for white Alone households is \$75,800, and \$37,000 among Black households.

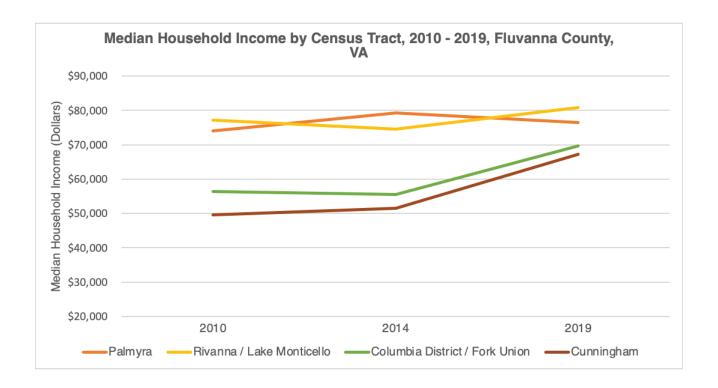


Figure F.4: Median household income, 2010-2019 (Source: ACS)

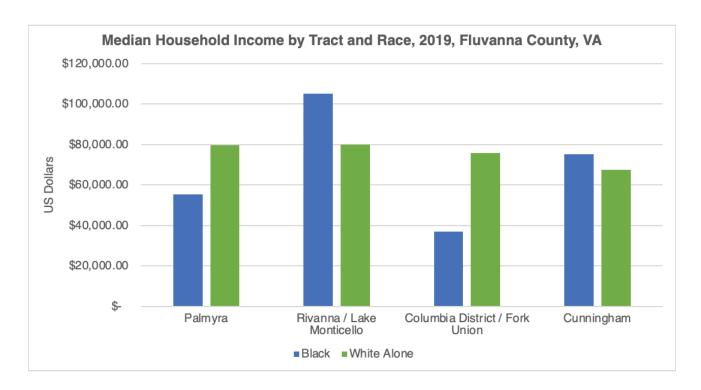


Figure F.5: Median household income by tract and race/ethnicity, 2019 (Source: ACS)

AGE

Generally, the difference in the percentage of population by age within Fluvanna county was relatively similar between 2010 and 2019, however, a few anomalies exist (Figure F.6). Among persons 65-74 years of age, the largest change was observed where this group grew three percent in population over nine years.

Another notable change that has occurred since 2010 is that the percentage of residents between 25-54 years of age has decreased by an average of two 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 60 and older are remaining in the area.

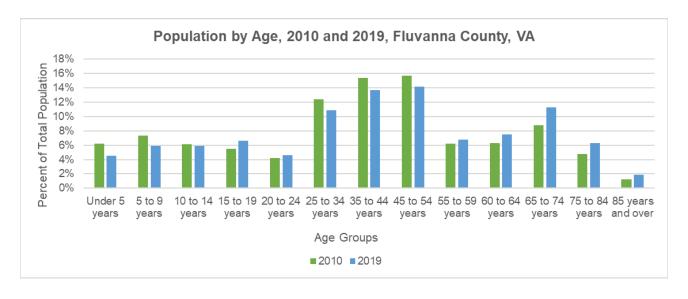


Figure F.6: Percent of population by age, 2010 and 2019 (Source: ACS)

FOOD INSECURITY

In Fluvanna County, there is little variation in enrollment in SNAP Benefits across census tracts. As of 2019, Palmyra and Columbia District / Fork Union had the highest percentage of households receiving SNAP Benefits at 3.3 percent of the population, followed closely by Cunningham at 3.2 percent (Figure F.7). The percentage of households receiving SNAP benefits in Rivanna / Lake Monticello is lower than the other three census tracts at 1.9 percent of the population. Palmyra has experienced the greatest changes in SNAP recipients since 2010, reaching a peak of 14.5 percent in 2014 before decreasing dramatically to 3.3 percent in 2019. Columbia District / Fork Union has experienced a steady decrease of about 6 percent in SNAP recipients since 2010. SNAP Recipients in Rivanna / Lake Monticello decreased significantly from 2010 to 2014 but had very little change between 2014 and 2019. Cunningham was the only tract to increase in the percentage of households receiving SNAP benefits, increasing by 0.6 percent (Figure F.8). Further disaggregation would be necessary to determine the causes of these changes.

A participant in the Fluvanna County Focus Group explained that there are only "two grocery stores in the county... one is a local mom and pop's, the other is Food Lion... or you go to Charlottesville or drive to Richmond." The lack of access to grocery stores in Fluvanna County contributes to food insecurity, requiring access to transportation and time, and increasing the cost of food through these additional costs.

Examining which populations in Fluvanna are impacted the most by food insecurity can help the government and local organizations effectively address the issue. Solutions that could alleviate food insecurity include expanding access to a variety of grocery stores that 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.

¹⁰ Local government worker in focus group discussion with UVA graduate students, April 14, 2022.

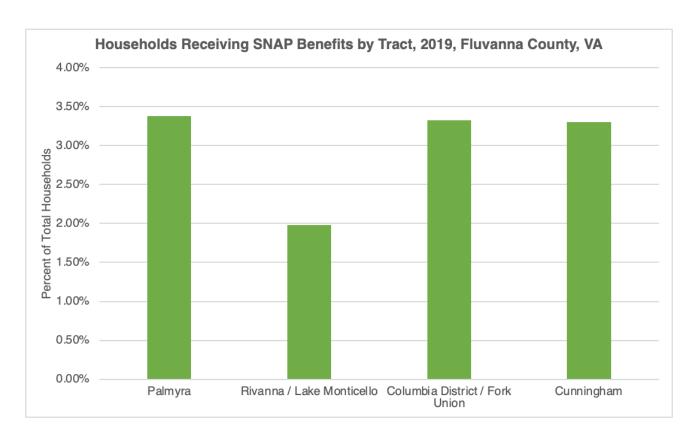


Figure F.7: Percent of households that received SNAP benefits, 2019 (Source: ACS)

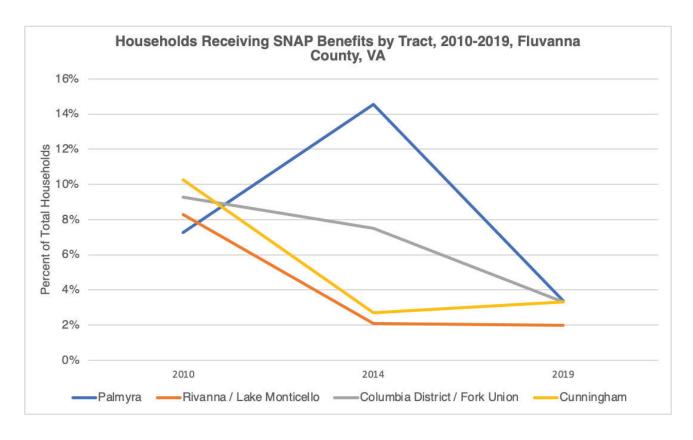


Figure F.8: Percent of households receiving SNAP benefits by tract, 2010-2019 (Source: ACS)

EMPLOYMENT

Approximately 15 percent of Fluvanna's workforce is employed within the county, with 84 percent commuting to a separate 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 a particular 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. As such, employment is a vital aspect of this report. The following figures demonstrate employment by educational attainment, sex, and 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 or racial groups, with Asian and Hispanic/Latino populations averaging between 40 percent and 50 percent, respectively (Figure F.9). When disaggregated by sex, males were recorded with a higher employment percentage at 84 percent compared to the 64 percent recorded with females (Figure F.10). Employment rates between 2010 and 2019 (using three data points) remained relatively stable, with 2010 recording 66.7 percent and 2019 recording 66.0 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 F.11).

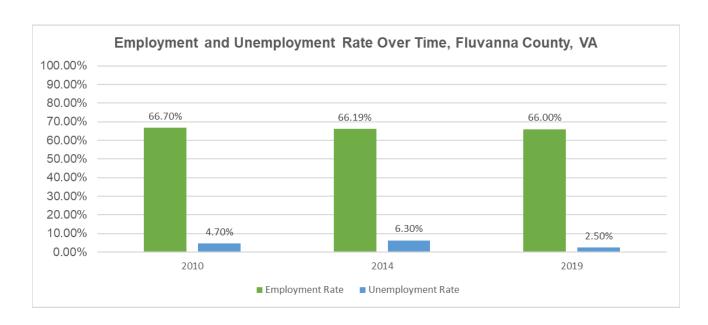


Figure F.9: Employment and unemployment rate, 2010 - 2019. (Source: ACS)

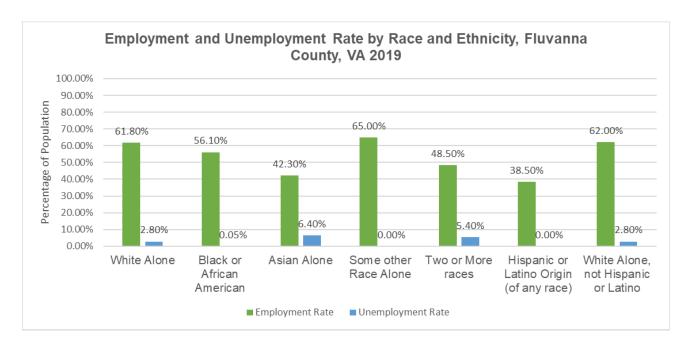


Figure F.10: Employment and unemployment rate by race and ethnicity, 2019 (Source: ACS)

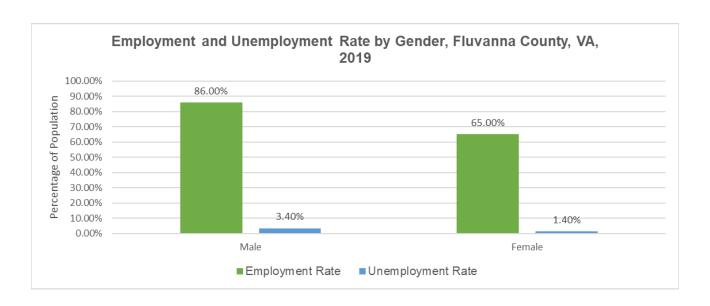


Figure F.11: Percent employed and unemployment rate by sex, 2019 (Source: ACS)

HOUSING

As mentioned in the introduction and the income section, there are significant financial differences within the county. Homeownership and rent burden are key components of financial success. Being able to purchase a home determines many of the quality of life factors that 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 percentage of renter households in the county that are rent-burdened 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. Palmyra has the highest median home value of \$278, 800. 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 reflect on the median household income. If the median home value of an area is much higher than the median household income 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 wealthier households since these areas have the highest and second-highest median home values, respectively.

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. Columbia/Fork Union has the lowest median gross rent of \$854. On top of median gross rent, rent burdened households within each census tract were calculated. In 2019, Palmyra had the highest percentage of rent burdened households with 47 percent while Columbia/Fork Union had the lowest percentage of rent burdened households with 21 percent of households.

Changes in median home value and median gross rent between 2014 and 2019 were analyzed using ACS data. 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 also influence affordability for certain households. 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 21 percent increase or increasing by \$39,300, as shown in Figure F.12. Rivanna/Lake Monticello experienced a 4 percent increase (\$8,000) and Palmyra experienced a 6 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.

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. 13. Rivanna/Lake Monticello experienced an 11 percent increase (\$150) in median gross rent and Cunningham experienced a 6 percent (\$55) increase. Columbia/Fork Union experienced a significant decrease in rent by 23 percent or \$257. As shown in Figure F.14, there has been a significant change in the number of 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 if renters or homeowners in Columbia/Fork Union have the same access to public services and job opportunities as renters or homeowners in wealthier areas such as Palmyra and Rivanna/Lake Monticello. The change in housing value and rent can also influence access to public services and funding for these services as well as public schools. Large disparities in affordability within a county such as Fluvanna may be an indicator of the level of equity within the county.

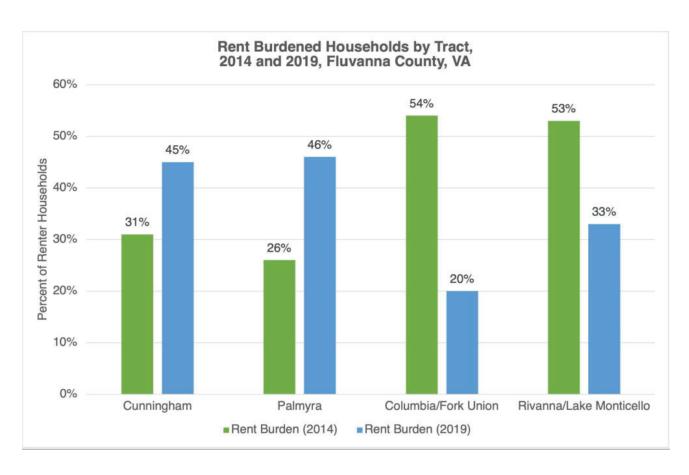


Figure F.12: Rent burdened households by census tract, 2014 and 2019 (Source: ACS)

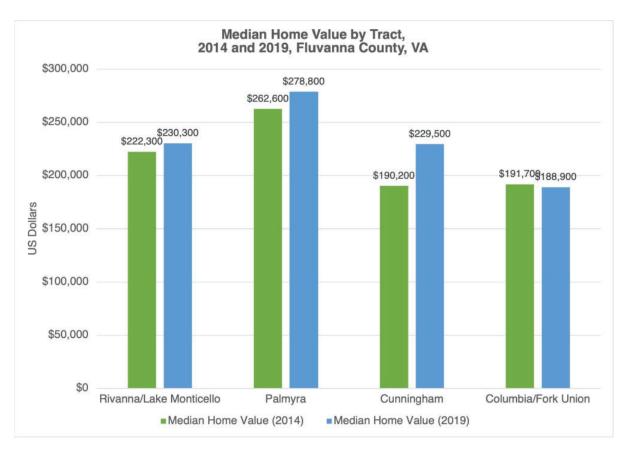


Figure F.13: Median home value by census tract, 2014 and 2019 (Source: ACS)

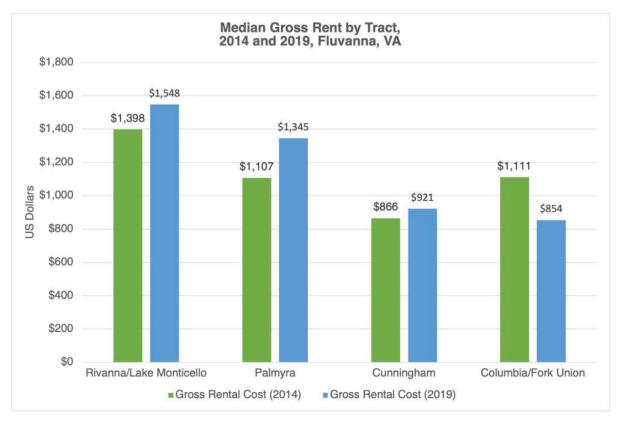


Figure F.14: Median gross rent, 2014 and 2019 (Source: ACS)

SCHOOL OUTCOMES/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 school-wide 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 94 percent and a dropout rate of 1.8 percent, with the remaining 4 percent defined as "other" (Figure F.15). White, Black and Hispanic/Latino graduation rates were similar for the 2018-2019 school year, with each at approximately 93 percent (Figure F.16). Black and white dropout rates were 2.04 percent and 2 percent, respectively, and Hispanic/Latino dropout rate was 0.0 percent (Figure F.17). It should be noted that, as of the 2020 census, the Hispanic/Latino (of any race) population was 4.06% compared to respective white and Black population percentages of 76.19% and 13.46%. A lower recorded population could affect data reliability. Male and female graduation rates were 93 percent and 95 percent, respectively, and dropout rates were 2.1 percent and 1.5 percent, respectively (Figure F.18). Per pupil spending in 2018-2019 was recorded at \$9968 compared to the state average \$11560 (Figure F.19). 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 (30.0 percent), before spiking in 2018 and 2020 to approximately 36 percent (Figure F.19).

Participants of the focus group expressed concern that access to non-college, post-secondary education or employment is lacking in Fluvanna. Despite robust opportunities for technical education within Fluvanna High School and the prevalence of available apprenticeships, graduating students were described as being largely unprepared for social and financial independence if they decided to not attend college. Speaking on the overemphasis of college-attendance to the detriment of technical training, one participant noted, "My brother, brilliant kid that he is, was never made for a college career. He sort of blocked out everything else, including college. Cause, that wasn't what he wanted to do. So let's just totally block it out. And finally, somebody just sort of snagged him and said 'what about plumbing?'. You know, why don't you go be a plumber? And he is brilliant at it."

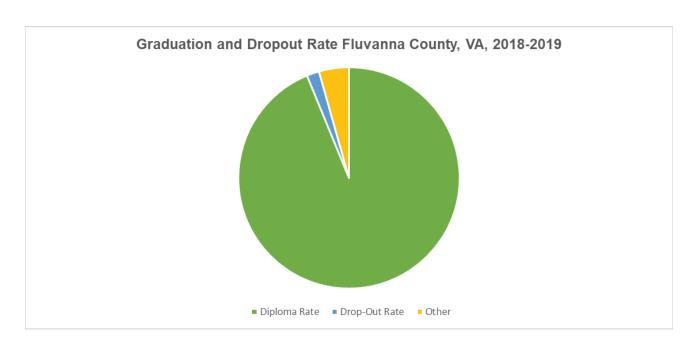


Figure F.15: High school graduation and dropout rates, 2018-2019 (Source: Virginia DOE)

¹¹ Community health worker in focus group discussion with UVA graduate students, April 14, 2022.

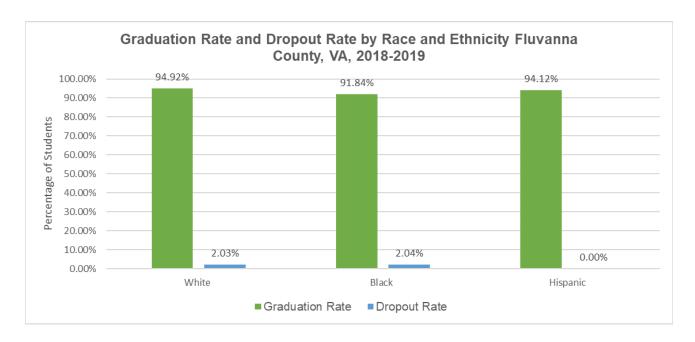


Figure F.16: High school graduation and dropout rates by race and ethnicity, 2018-2019 (Source: Virginia DOE)

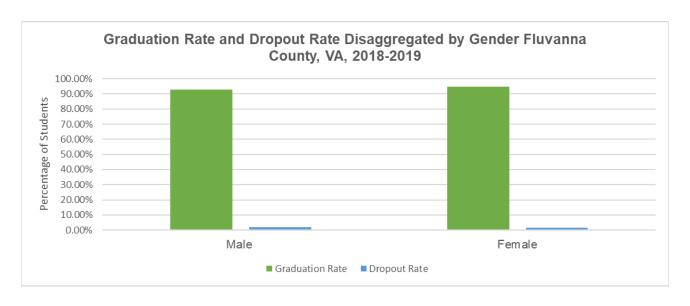


Figure F.17: High school graduation and dropout rates by sex, 2018-2019 (Source: Virginia DOE)

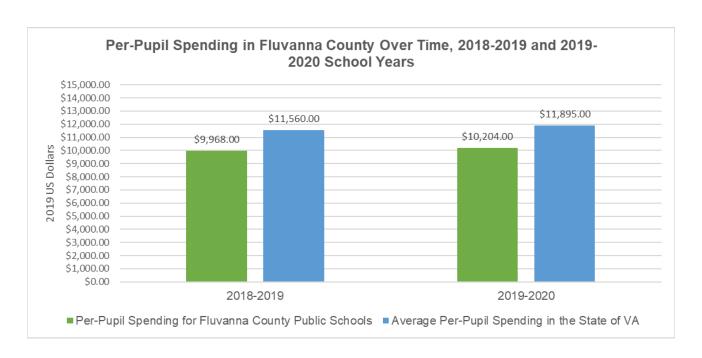


Figure F.18: Per-pupil spending, 2018-2020 (Source: Virginia DOE)

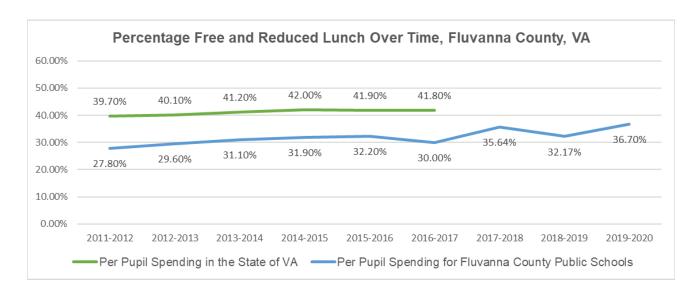


Figure F.19: Percent free and reduced lunch from the 2011-2012 school year to the 2019-2020 school year (Source: The Annie E. Casey Foundation) Note: Virginia state data unavailable after the 2016-17 school year.

DIGITAL DIVIDE

In Fluvanna County, there are distinct differences in internet and computer access across 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 on the western side of the county, in Cunningham and Columbia/Fork Union. Whereas, Lake Monticello/Rivanna have higher rates of households with internet access. When examining computer and internet access with regards to race (Figure F.20 and F.21), the majority of those without access are white residents. However, given the strong majority of Fluvanna County is white, further disaggregation and deeper research may be needed to elucidate if populations of color experience a greater disparity within their race. For example, in Columbia/Fork Union, as one example, 9.8 percent of the Black households do not have an internet subscription (F.21). However, the total Black population for this geographical region is only 24 percent.

When examining those who do not have a computer at home with regards to race, larger percentages of Black households do not have a computer at home (Figure F.20), in both Columbia/Fork Union and Palmyra. In Lake Monticello/Rivanna, the percentages of households without a computer are all relatively low, but more distributed across different races and ethnicities. Given that Lake Monticello/Rivanna is 82 percent white, however, this 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.21). 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. Another possibility is that the population density in this area allows for the cost of an internet subscription to be more affordable for residents.

As for the relationship between internet access and income (Figure F.22), there does not appear to be a strong correlation between an increase in income and a decrease in the percentage of those without internet access. Again, this may be due to skews within the data, as the majority of residents of Fluvanna County fall into the income bracket between \$35,000 and \$75,000. As with the disaggregation by race, 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 (Figure F.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.

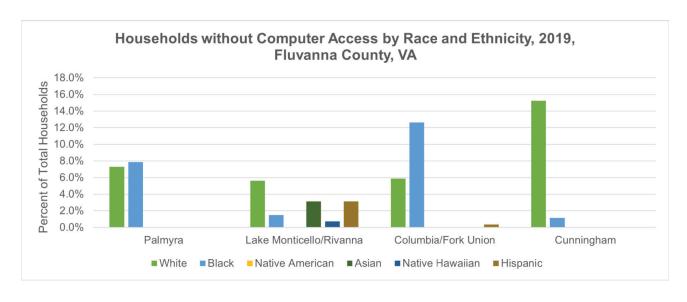


Figure F.20: Percent of households without computer access, 2019 (Source: ACS)

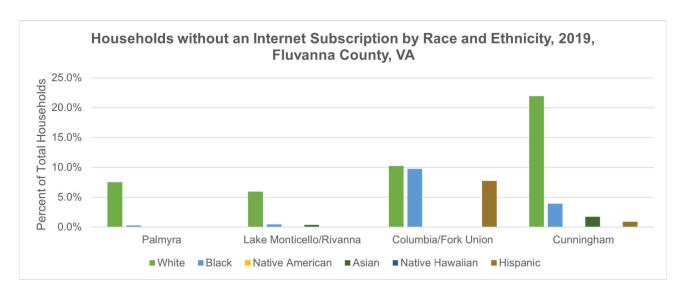


Figure F.21: Percent of households without an internet subscription by race and ethnicity, 2019. (Source: ACS)

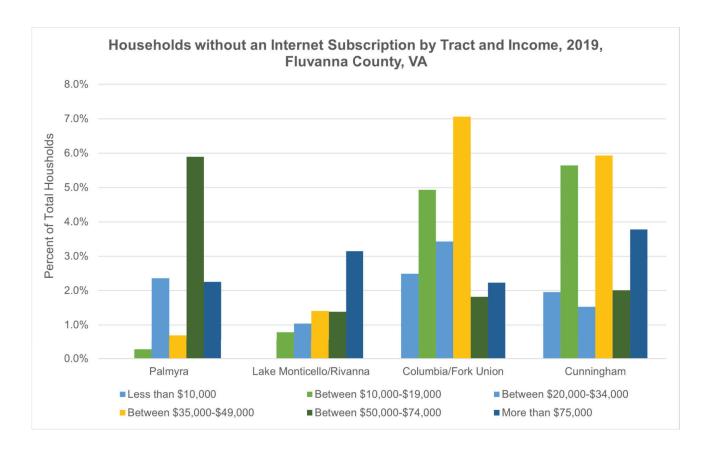


Figure F.22: Households without an internet subscription by income, 2019. (Source: ACS)

MOBILITY/TRANSPORTATION

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. 23). 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 have a lower rate of personal vehicle ownership than the surrounding tracts. Additionally, the eastern tracts of Bremo 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 is incredibly low, with values ranging from only 0.2 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. 24). 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 areas have significantly higher travel times. Again, more granular data is necessary to make informed reflections regarding travel time. 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 49 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.

Within Fluvanna County, the majority of public transit users have a median age of 58 years old. This facilitator of public transit is likely the JAUNT service which connects distant counties to the greater Charlottesville Area Transit (CAT) system. During the focus groups, a healthcare professional 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)."12

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 ride-sharing services or a regularly-scheduled public transportation system are not available, or would be prohibitively expensive to access.

Finally, Figure F.25 disaggregates various forms of commuter transportation for workers by sex. The three most-utilized 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, male and female workers are similarly likely to use any specific form of commuter transportation.

¹² Community health worker in focus group discussion with UVA graduate students, April 14, 2022.

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. In order to provide a public transportation service, it would likely be unreasonable to implement a regular bus schedule that served the entire community at an interval that would be useful. Options are limited for available transportation other than personally-owned vehicles (for residents who are capable of driving a vehicle), and this would suggest that in order to decrease barriers, vehicle access must be improved and access to an affordable form of shared transportation to 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-greatly impacted by transportation inequity. These assets involve all of the equity perspectives, including a minimum of access to mobile healthcare providers, farmer's markets and other food distribution networks, and employment/education outreach.

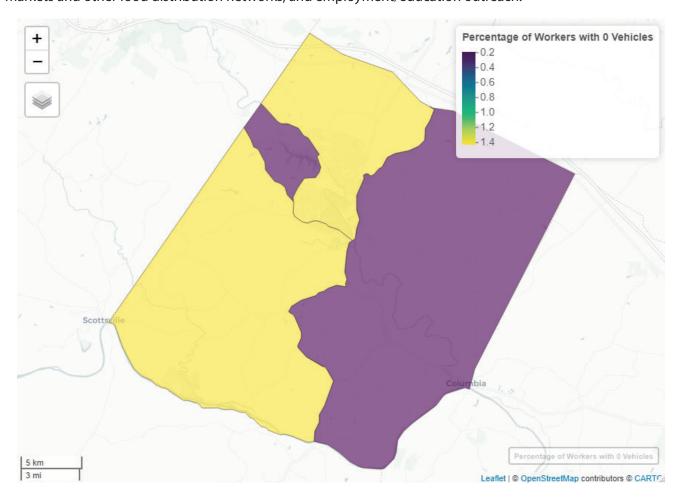


Figure F.23: Percent of workers who do not own a vehicle by tract, 2019. (Source: ACS)

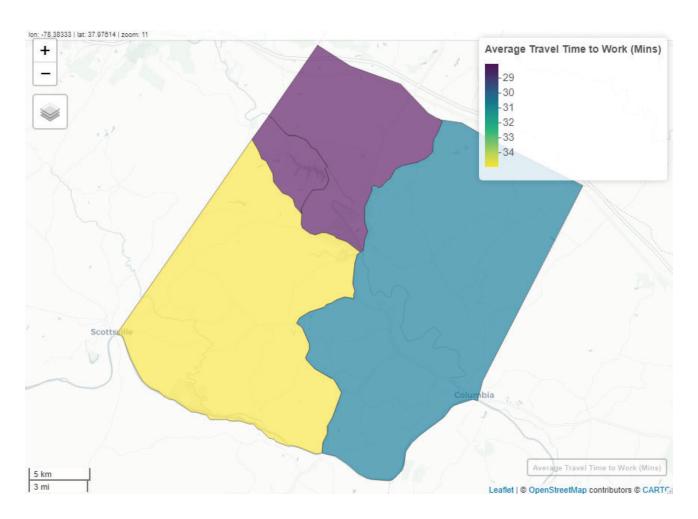


Figure F.24: Average worker commute by tract, in minutes, by tract, 2019. (Source: ACS)

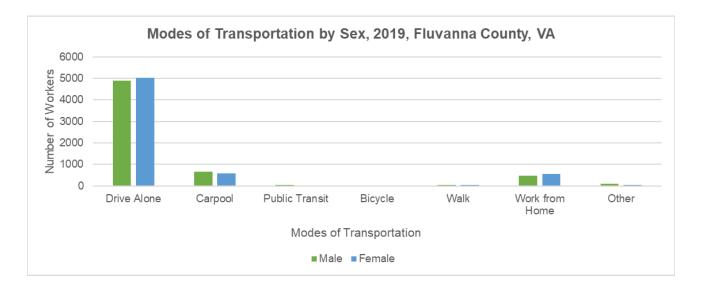


Figure F.25: Modes of transportation by sex, 2019. (Source: ACS)

LAND USE AND 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 in order to examine access to amenities and graphically establish the built, geographic, and ecological features of Fluvanna county. These features include developed land, forested areas, planted/cultivated land, and herbaceous areas. These features could influence a resident's 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, high density development versus other forms of development influence access to natural and important amenities. These maps and graphs visually display the developed versus rural divide mentioned within the focus group.

As shown in Figures F.26 and F.27, overall 67 percent of Fluvanna is forested, 13.93 percent is cultivated, 6.91 percent is developed, and 4.8 percent is herbaceous. Figure F.27 shows 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.

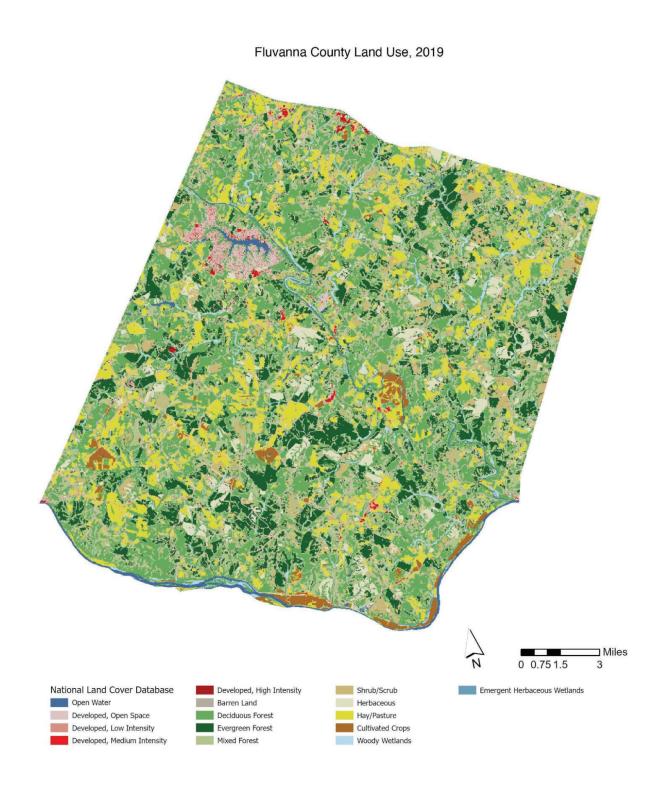


Figure F.26: Land cover map, 2019 (Source: MRLC & National Land Cover Database)

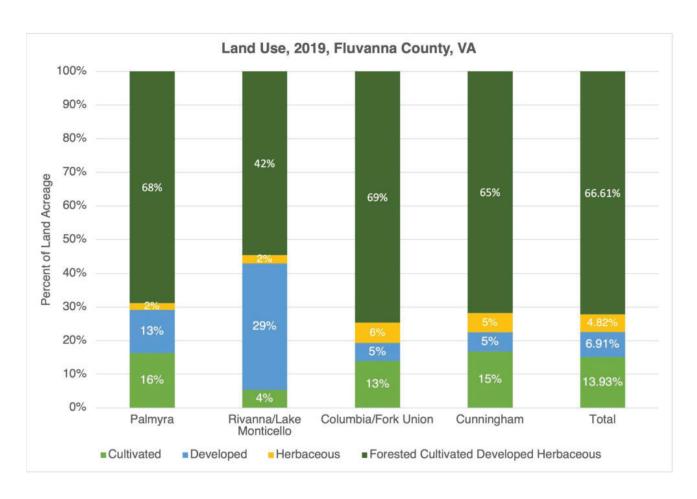


Figure F.27. Land classification, 2019 (Source: MRLC & National Land Cover database)

CONCLUSION/SUMMARY OF FINDINGS

The most glaring takeaway from the focus areas 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 county's 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 could improve their quality of life. As mentioned by members of the focus group, plans for services ought to consider rural communities within the county to ensure advancement towards equity.

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Source: Piedmont Environmental Council

GREENE COUNTY

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. Greene is part of the Charlottesville 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.¹ 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 With so much beautiful landscape, the county has placed approximately 8,700 acres or 8.5 percent of its total land within conservation easements, making protection and preservation a priority.⁴

- 1 County of Greene Virginia, "About Greene County."
- 2 Wikipedia, "Greene County Virginia."
- 3 Svoboda, Bart & Golon, Stephanie, "Greene County Comprehensive Plan."
- 4 Greene County Record, "Greene Landowners Protect 688 Acres."

There are four census tracts within Greene County, 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 outcommuting 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.

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 allows 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.

Throughout our research and interview process compiling the Regional Equity Profile, 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 was the idea of an urban and rural divide. Being a rural county, Greene residents 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 equitable 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."

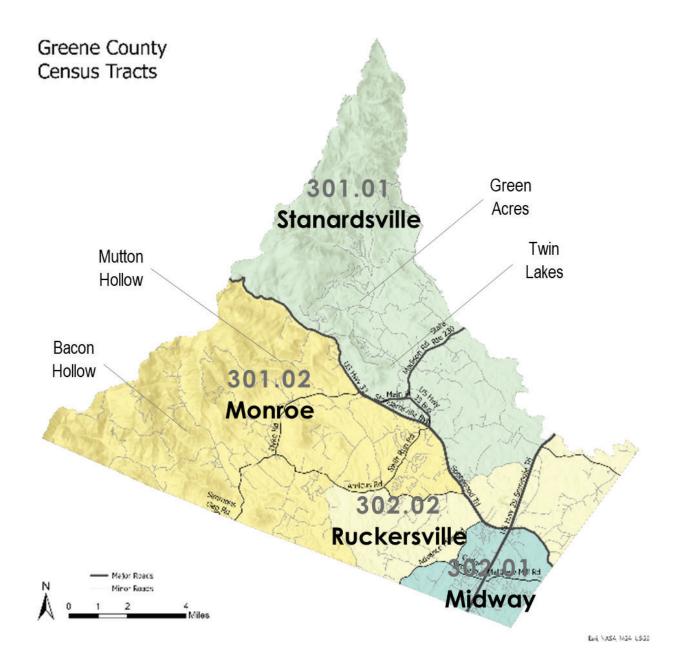
Through collaboration with key community members, this profile highlights the barriers and focus areas raised by stakeholders ranging from food insecurity, access to advanced medical care and funding deficiencies from low population counts. Residents face unprecedented accessibility concerns in a time 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 make 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.

COMMUNITY MAPPING EXERCISE

As part of our focus group discussion, 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. However, there are additional areas that have developed unique identifiers within the community which reflect the history, neighborhoods and pathways across the county. Within this report, census tract 301.01 is referred to as Stanardsville, tract 301.02 is referred to as Monroe, and census tracts 302.01 and 302.02 are combined as tract 302, referred to as Ruckersville/Midway.

⁵ Piedmont Environmental Council employee in interview with UVA graduate students, March 23, 2022.



Focus Group Census Tract Naming Exercise

DEMOGRAPHICS

RACE

Greene County contains a large white population with all three census tracts having a white population over 80 percent. The second highest racial demographic in Greene County is the Black population, which accounts for 10 percent or less for all tracts (Figure G.2.A). Due to the small minority population in Greene County, it is difficult to locate data sources disaggregated by race. Furthermore, data may not accurately show the vulnerability of specific minority groups in the county since data is divided by the total population rather than by each minority group.

The largest population of unemployed people identify as Black at 6.6 percent versus 4.4 percent for white residents. The dropout rate for Black students is 11.1 percent compared to just 1.19 percent for white students (Figure G.16). It is often difficult to provide services to smaller communities. A focus group respondent mentioned that 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 emphasized the importance of building trust with these communities to allow them to feel more comfortable asking for and receiving help in the future.⁶

⁶ Focus Group respondent in interview with UVA graduate students, April 14th, 2022

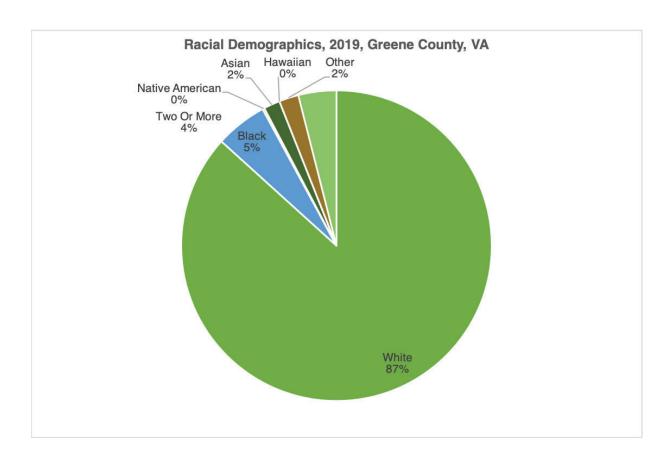


Figure G.1: Racial Demographics, 2019. (Source: ACS)

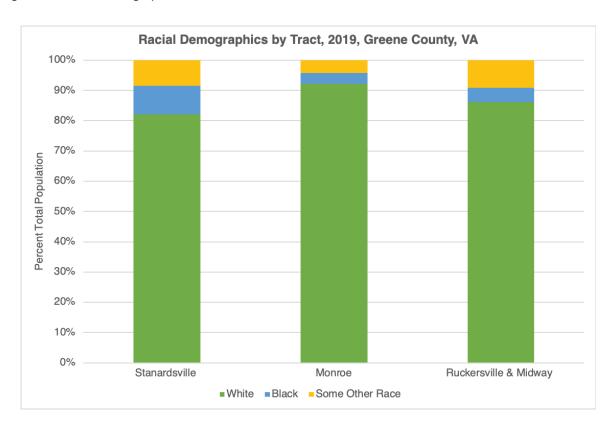


Figure G.2.A: Racial demographics by tract, 2019. (Source: ACS)

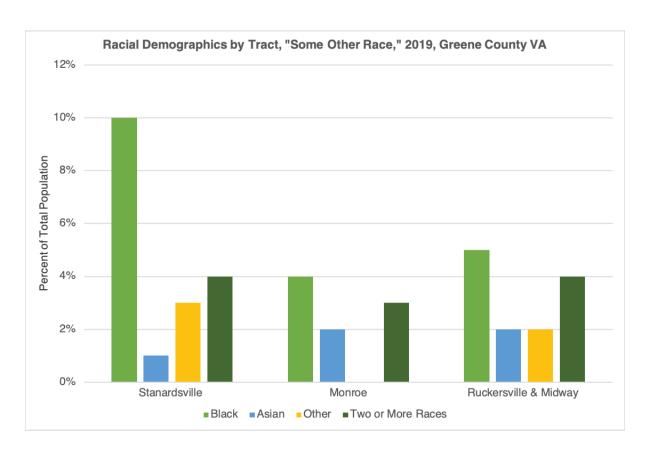


Figure G.2.B: Racial demographics by tract, "Some Other Race," 2019. (Source: ACS)

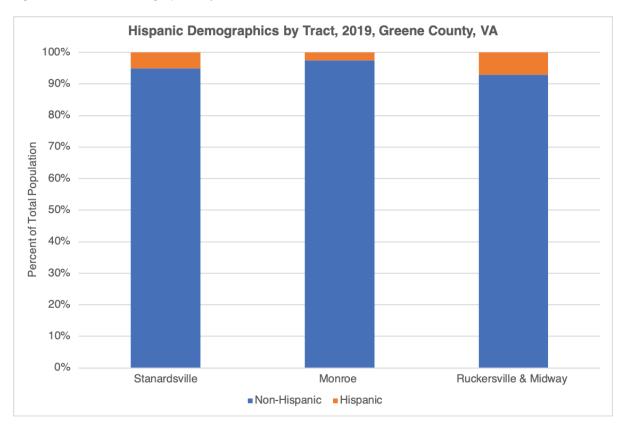


Figure G.3. Hispanic/Latino population by tract, 2019. (Source: ACS)

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 health.⁷ 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-19 pandemic.⁸

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.5 below, the Ruckersville-Midway and Monroe tracts rise over Stanardsville, with household incomes breaching the \$200,000 mark. The change between median household income levels, as seen in Figure G.4 below, also reflects this change with Ruckersville/Midway rising since 2010 most likely due to population growth, development and access to higher-paying jobs outside the county. 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 \$65,712.9 However, the average household income difference between Black, and Hispanic/Latino residents [for 2019] against white is at an astonishing 138 percent for Black residents and 153 percent for Hispanic/Latino residents. Figure G.5 demonstrates this disparity, showing the Ruckersville/Midway and Monroe tracts with noticeable differences within the household income levels compared to Stanardsville. The contrast between residents varies greatly, indicating a racial inequality that requires further analysis.

⁷ Livestories, "Economic Competitiveness: Median Household Income."

⁸ Data USA, "Greene County, VA Data."

⁹ Pew Research Center, "Trends in Income and Wealth Inequality."

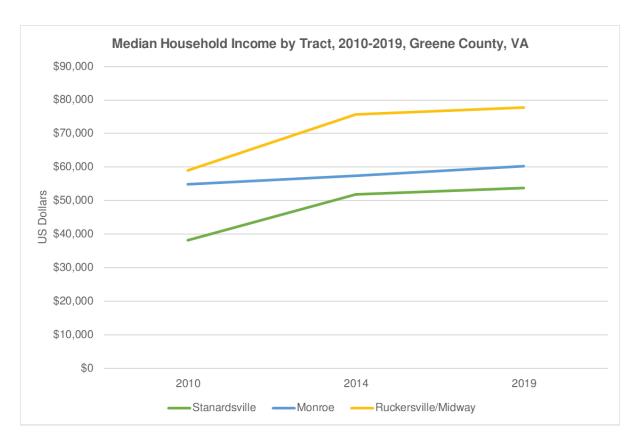


Figure G.4: Median household income, 2010-2019 (Source: ACS)

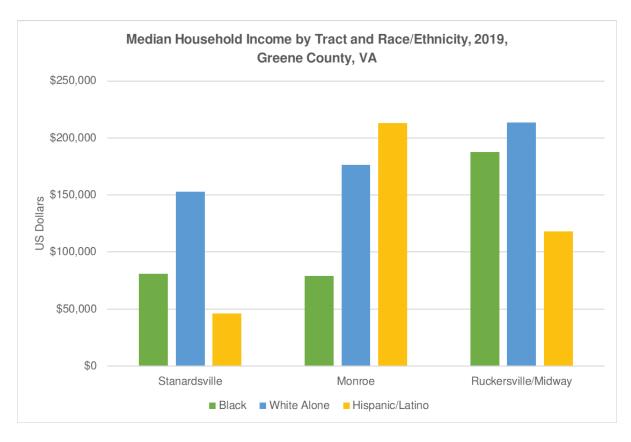


Figure G.5: Median household income by tract and race/ethnicity, 2019 (Source: ACS)

AGE

The median age in Greene County was 39.6 years old in 2019 (Figure G.6), 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.6: Percent of population by age, 2010 and 2019 (Source: ACS)

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 discrimination.¹⁰ 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 percent, making the program valuable to the approximately 1,550 food insecure people in [2019] Greene County.^{11,12}

While Greene County is making excellent strides at building inter-community 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.¹³ As of 2019, the proportion of families receiving SNAP benefits is largest within the Monroe census tract at thirteen percent and lowest in Ruckersville-Midway at nearly seven percent (Figure G.7).

Stanardsville and Ruckersville/Midway rose between 2010 and 2014 but then sharply decreased, most likely due to the improving economy after the Great Recession. However, only the Monroe tract saw an increase between 2014 and 2019, which may be due in part to the Mennonite community in and around Mutton Hollow who are often afraid to ask for help due to their belief system (Figure G.8). Additionally, the Hispanic/Latino community, who may be hesitant to ask for aid due to legalization status, sometimes do not take full access to resources available. An interview respondent from Feeding Greene noted the substantial effect of the COVID-19 pandemic. "The number of families that we serve now are unbelievably higher than pre-COVID. It's just crazy. We receive about 900 visits a month now to the pantry [in comparison to the 200 we served prior to the pandemic]."¹⁴

¹⁰ Feeding America, "What is Food Insecurity."

¹¹ Feeding America, "Food Insecurity in Greene County."

¹² Ratcliffe, Caroline & McKernan, Sugne-Mary, "How much Does SNAP Reduce Food Insecurity."

¹³ Feeding Greene respondent in interview with UVA graduate students, March 21, 2022.

¹⁴ Feeding Greene respondent in interview with UVA graduate students, March 21, 2022.

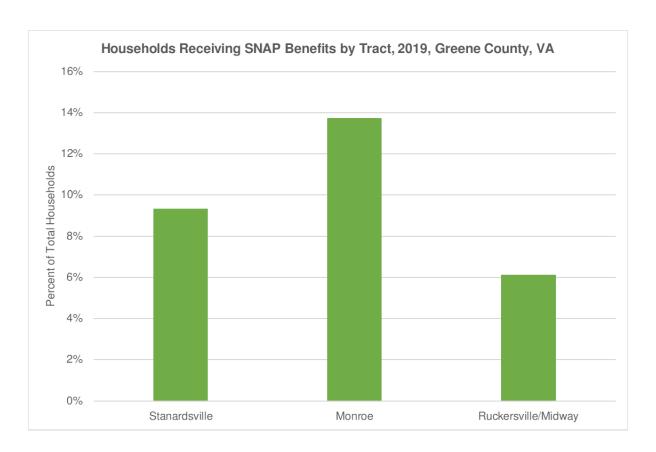


Figure G.7: Percent of households that received SNAP benefits, 2019 (Source: ACS)

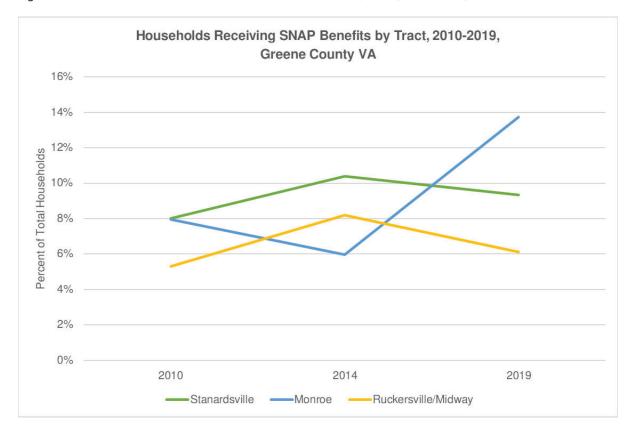


Figure G.8: Percent of households receiving SNAP benefits by tract, 2010-2019 (Source: ACS)

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 its close proximity to urban development areas.

Stakeholders described how not many individuals that work in Greene County actually live in the county itself, but commute from surrounding areas. Often, permanent residents do not have access to the jobs in their own communities because they face competition in a labor market saturated with outsiders. 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 sex to identify the health and access to individual demographic groups.

¹⁵ Focus Group respondent in interview with UVA graduate students, April 14th, 2022.

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 percent in 2014 and high of 69.5 percent in 2019 (Figure G.9). One promising trend we observed on the county-wide 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 percent 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.

Throughout the county all but two categories had employment rates higher than the county-wide average of 69.5 percent. The white alone population had an employment rate of 64.3 percent 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. Black residents experienced an unemployment rate of 6.6 percent in 2019, which is over two percentage points greater than the closest other group of white alone (Figure G.10).

In Greene County, the female employment rate is 70.3 percent, which is 17 percentage points less than the male employment rate of 87.2 percent. The female employment rate was also around two percentage points higher than the male employment rate (Figure G.11). It is possible that the jobs offered within the county can create a barrier for female access.

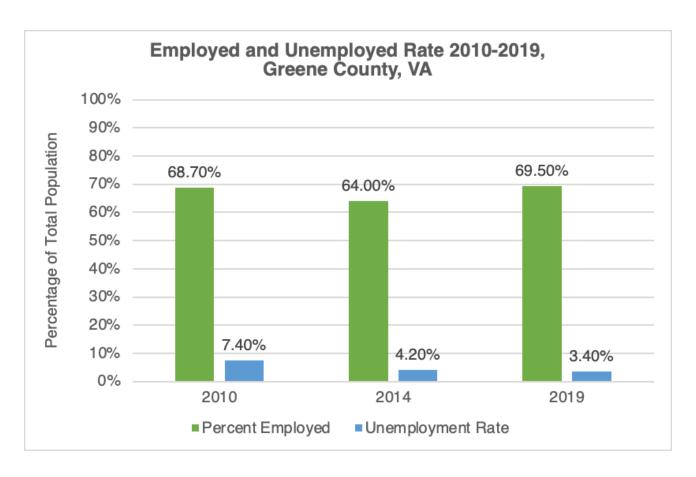


Figure G.9: Employment and unemployment rate, 2010 - 2019. (Source: ACS)

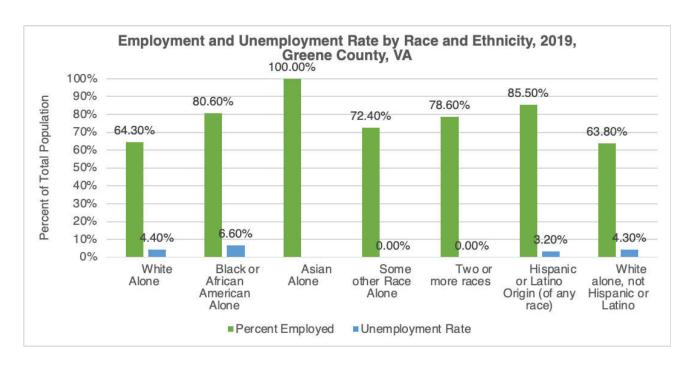


Figure G.10: Employment and unemployment rate by race and ethnicity, 2019 (Source: ACS)

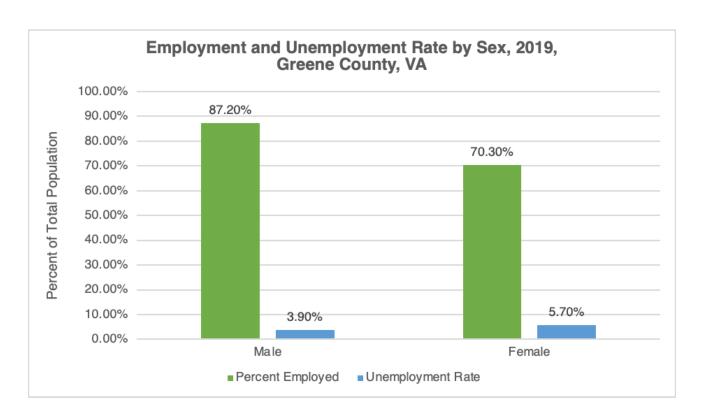


Figure G.11: Percent employed and unemployment rate by sex, 2019 (Source: ACS)

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 (Figures G.12 and G.13). In Ruckersville/Midway, the data revealed huge increases in median rent, but with a decrease in rent burdened households (Figures G.12 and G.14). In Monroe, housing characteristics were optimistic, with decreases in the percent of rent burdened households and increased home value (Figures G.12 and G.13).

Rent burden is defined as using more than one third of one's total gross income on living expenses. Overall, 32 percent 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 percent between 2014 and 2019. In Monroe and Ruckersville/Midway, the percentage of rent burdened households decreased to 23 and 28 percent in 2019, respectively. Generally, the percent of rent burdened households decreased in 2019 (Figure G.12).

Monroe is the only census tract that increased in median home value, with a nine percent increase. Both Stanardsville and Ruckersville/Midway decreased in median home value, by 12 and two percent, respectively. Median home values in Monroe and Ruckersville-Midway were similar in 2019 at just around \$250,000. In 2019, Stanardsville had a median home value of \$175,400 (Figure G.13).

In the Ruckersville/Midway area, median rent increased by 68.5 percent 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 one percent. In Monroe, the decrease in rent was slightly higher at 14.67 percent. The median gross rent in 2019 ranged from \$867 to \$1,316 per month (Figure G.14).

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." With patterns of increasing development and community growth along the 29 corridor and Ruckersville that stakeholders have pointed out in the focus group and interviews, housing equity will become progressively more crucial in the region. This is particularly poignant in conjunction with the changes in household income (Figure G.4).

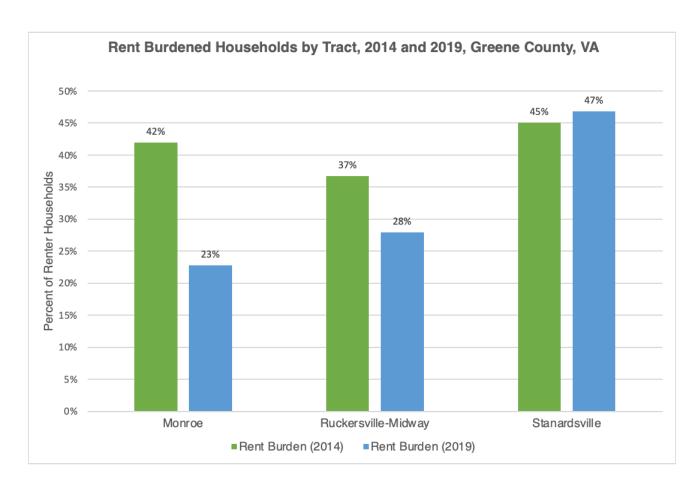


Figure G.12: Rent burdened households by census tract, 2014 and 2019 (Source: ACS)

¹⁶ Piedmont Environmental Council employee in interview with UVA graduate students, March 23, 2022

¹⁷ Feeding Greene respondent in interview with UVA graduate students, March 21, 2022.

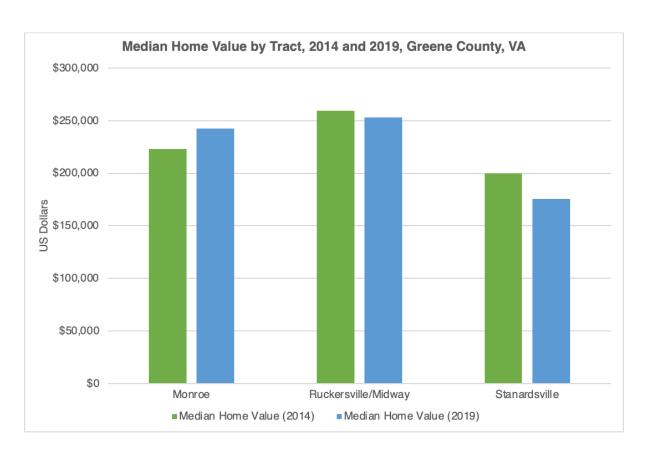


Figure G.13: Median home value by census tract, 2014 and 2019 (Source: ACS)

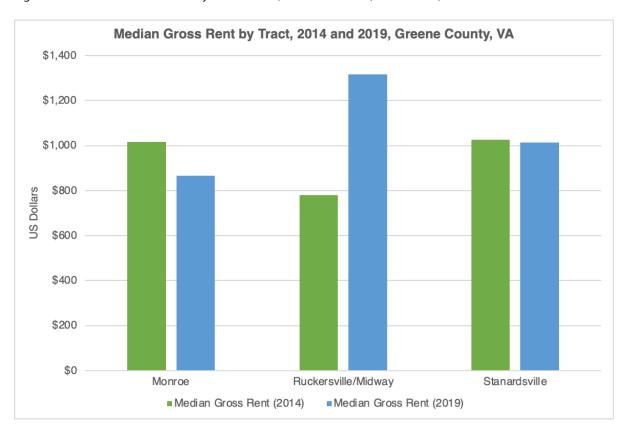


Figure G.14: Median gross rent, 2014 and 2019 (Source: ACS)

SCHOOL OUTCOMES/EDUCATION

Education and school outcomes often serve as the bedrock for future generations of communities. 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 concerns regarding Greene County students' access to quality post-high school education, whether through technical training or college-level degree access. Overall, the main topic of discussion through our research and interviewing process concerned 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 county-wide. 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 county-wide basis.

In the 2018-19 school year, Greene County had a high school graduation rate of 91.3 percent. This value is just 0.3 percentage points lower than the statewide average. The dropout rate for the same period in Greene County was 2.6 percent. Compared to the rest of the state, Greene does not have major issues with graduation and dropout rates (Figure G.15).

The white population of Greene had the highest graduation rate and lowest relative dropout rate (Figure G.16). The data represents an alarming trend among the Black populations of the community. At 11.11 percent, 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. Such a high rate could highlight possible barriers within that particular demographic group to access proper educational opportunities within the county.

Male students have lower graduation rates and higher dropout rates than females in both categories. Only 87.8 percent of males graduate compared to 98 percent of females (Figure G.17). Such a difference could highlight struggles or barriers experienced by high school aged male students within the county-wide public school network.

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. 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 two-year period. One alarming trend was the decline in perpupil funding per spending from 2018-2019 to 2019-2020, while the state average increased (Figure G.18). Such declines in funding or financial equity can have severe consequences on resources and services provided to students.

Another indicator important to student wellbeing was access and distribution of free and reduced lunches within the Greene County Public School system. Between 2011 and 2019, a steady increase in the distribution of free and reduced lunch can be observed with an increase of around three percent for the relative time period (Figure G.19). 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.

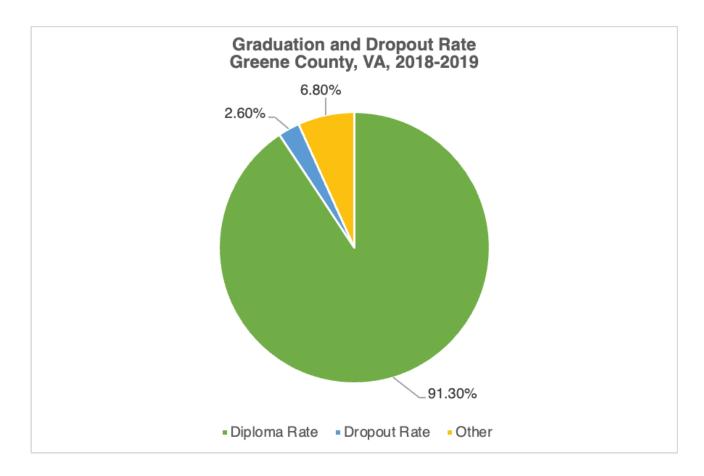


Figure G.15: High school graduation and dropout rates, 2018-2019 (Source: Virginia DOE)

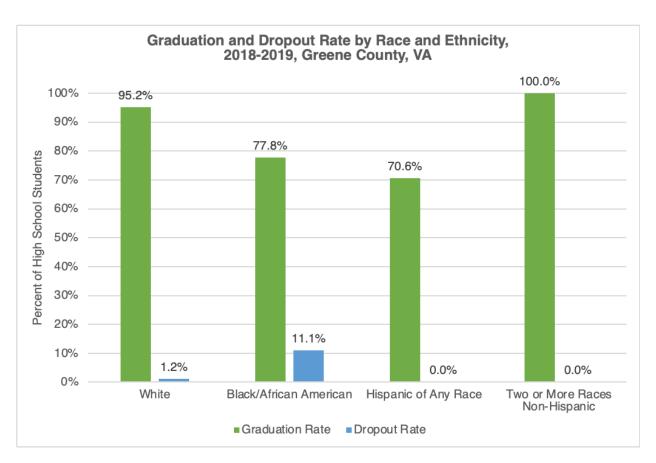


Figure G.16: High school graduation and dropout rates by race and ethnicity, 2018-2019 (Source: Virginia DOE)

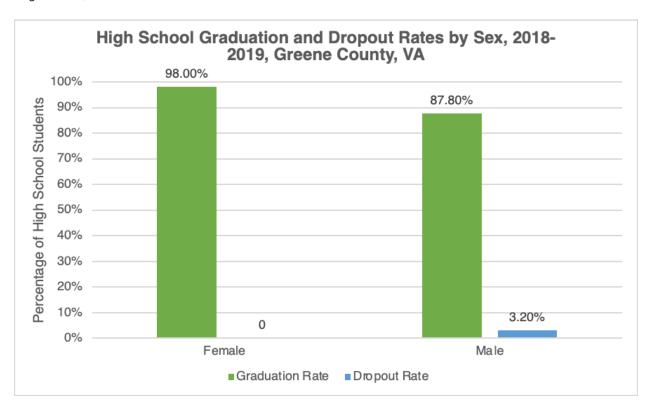


Figure G.17: High school graduation and dropout rates by sex, 2018-2019 (Source: Virginia DOE)

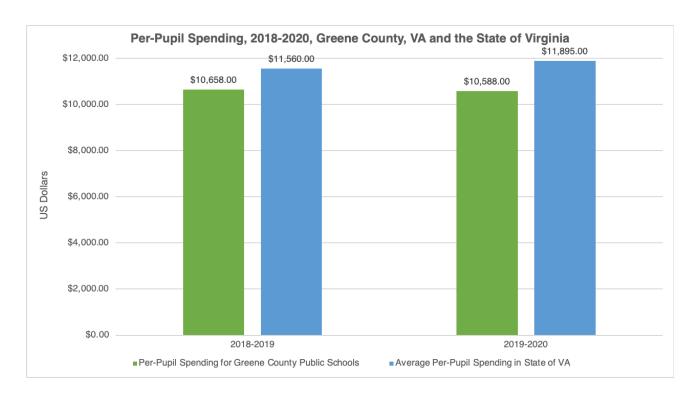


Figure G.18: Per-pupil spending, 2018-2020 (Source: Virginia DOE)

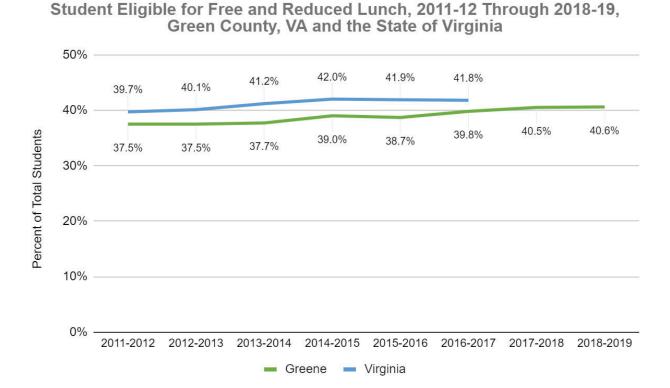


Figure G.19: Percent free and reduced lunch from the 2011-2012 school year to the 2019-2020 school year (Source: The Annie E. Casey Foundation) Note: Virginia state data unavailable after the 2016-17 school year.

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 the focus group, a community respondent spoke on the distinct shift along the 29 corridor in relation to healthcare services, but also broadband, stating "The 29 corridor gets good cell services, you know. And then in the rural communities, you don't. So I feel like there is that growing divide." 18

In Stanardsville, the percentage of households without access to a computer is as high as 24 percent (Figure G.20), and in Monroe 21 percent (Figure G.21) of white residents do not have an internet subscription. Although the county library provides computers for the public, individuals who are unfamiliar with using computers struggle to utilize these services. Interviewees emphasize the need for internet literacy opportunities in addition to providing proper digital access in the region.¹⁹

¹⁸ Focus Group respondent in interview with UVA graduate students, April 14th, 2022

¹⁹ Feeding Greene respondent in interview with UVA graduate students, March 21, 2022.

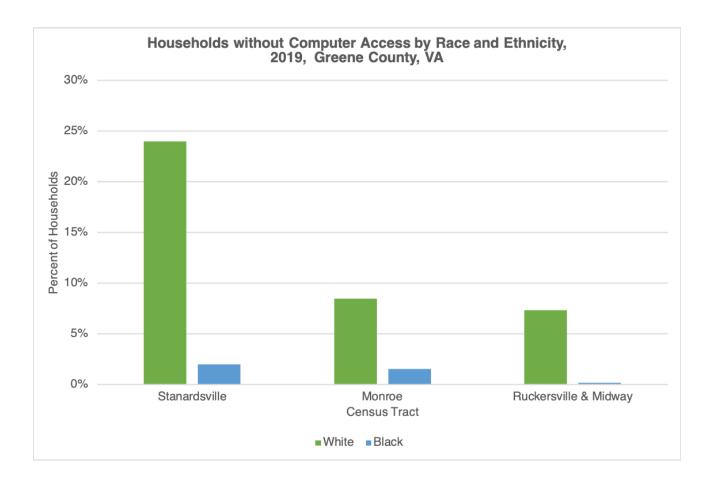


Figure G.20: Percent of households without computer access, 2019 (Source: ACS)

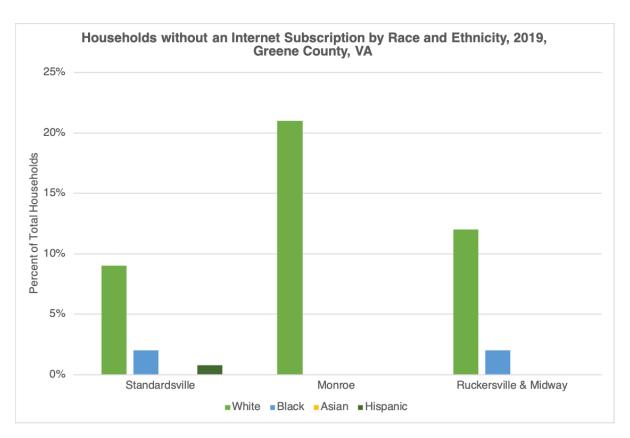


Figure G.21: Percent of households without an internet subscription by race and ethnicity, 2019. (Source: ACS)

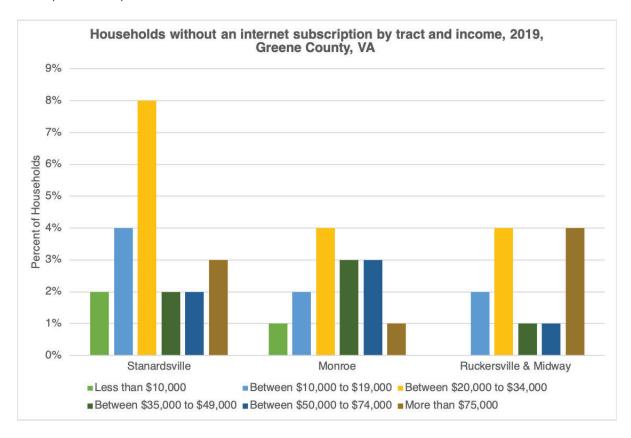


Figure G.22: Households without an internet subscription by income, 2019. (Source: ACS)

MOBILITY/TRANSPORTATION

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 and employment opportunities. For example, the opportunity cost of long 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 percent 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.

Monroe residents experience the highest travel times. As seen in figure G.23, most workers across Greene County have access to a personal vehicle, however the rate of workers without access to a personal vehicle is highest in Monroe county. Not only is Monroe the most rural area of the county, but predictably, its residents also experience the highest commute times. Travel time to work across Greene County's census tracts is slightly higher than the statewide average of 27.61 minutes.

The vast majority of all workers across Greene County utilize a private vehicle to get to work (Figure G.25). This reinforces the inextricable relationship between car ownership and employment in Greene County. 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.

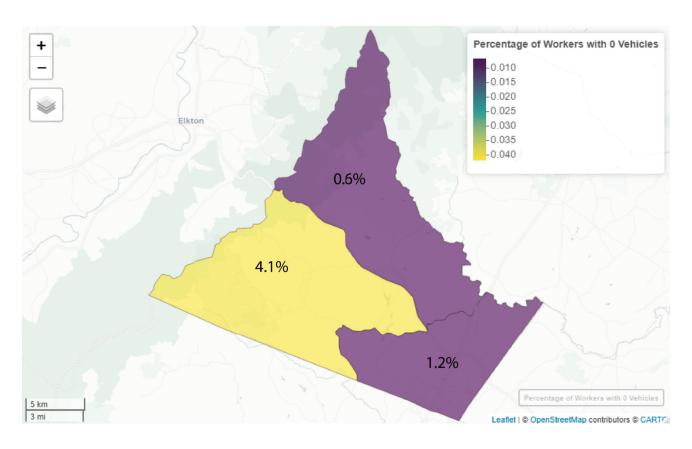


Figure G.23: Percent of workers who do not own a vehicle by tract, 2019. (Source: ACS)

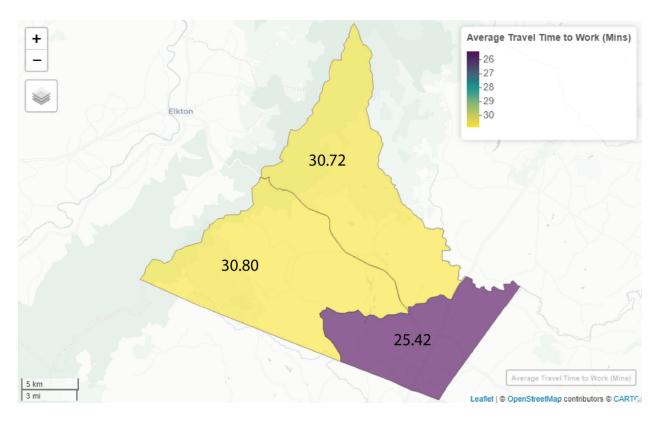


Figure G.24: Average worker commute by tract, in minutes, by tract, 2019. (Source: ACS)

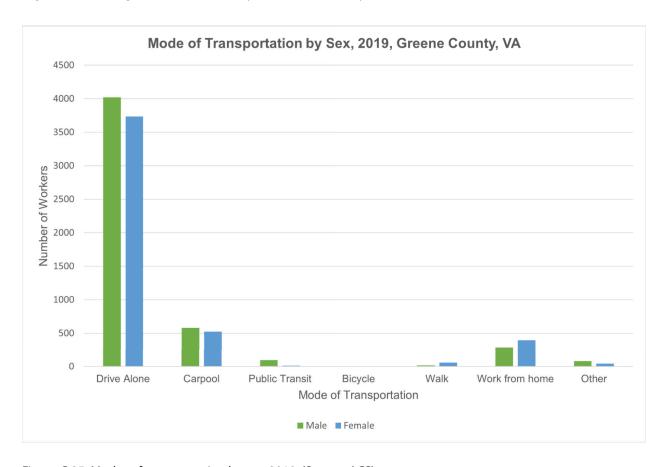


Figure G.25: Modes of transportation by sex, 2019. (Source: ACS)

LAND USE AND 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 percent of the total acreage in the county. Cultivated land is 23 percent, developed land is nine percent, and herbaceous land is less than one percent of the total acreage (Figure G.27). All three localities of Stanardsville, Monroe, and Ruckersville/Midway had similar distributions of land use. 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 percent. 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 percent 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 as key stakeholders have commented, this does not ensure that the residents have equal access to green spaces in the county. In an interview, a community respondent spoke on the invisible barriers to public and private land, noting that, "the outdoors itself can be a barrier for some people."²⁰

²⁰ Piedmont Environmental Council employee in interview with UVA graduate students, March 23, 2022.

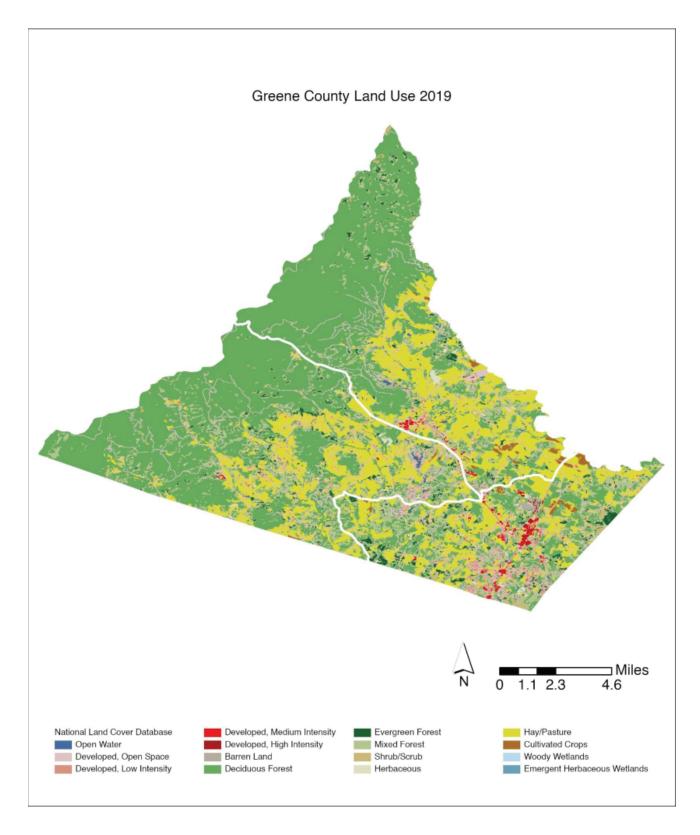


Figure G.26: Land cover map, 2019 (Source: MRLC & National Land Cover Database)

Lastly, while not a direct focus of this analysis, the impact of Shenandoah National Park is felt greatly in Greene County, resulting in a 2025 Tourism Strategic Plan. In addition to preserving rural scenery and natural beauty, the plan also emphasizes the importance of local resident participation in tourism opportunities to maximize the impact in the community. Tourism's contribution to the entire community, including the county's financial growth, is noted as a key value.²¹

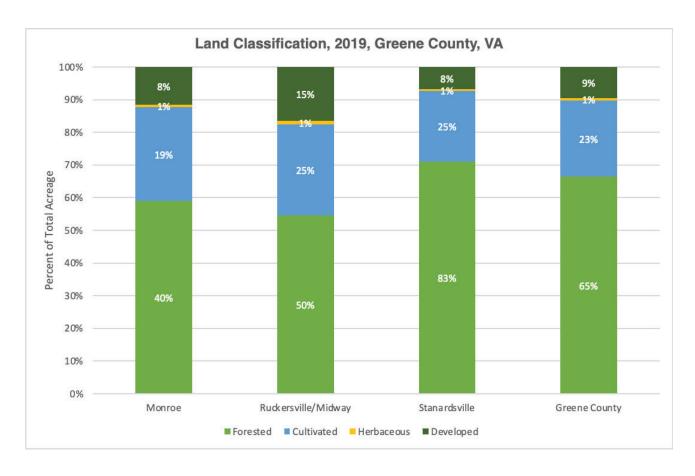


Figure G.27. Land classification, 2019 (Source: MRLC & National Land Cover database)

²¹ County of Greene Virginia, "Tourism 2025 Strategic Plan."

CONCLUSION/SUMMARY OF FINDINGS

Greene County is proud of its rural heritage and independent lifestyle, but accessibility proves to be a challenge, despite its proximity to Charlottesville and its services. Beginning to close 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, "...breaking down the geographical silos and recognizing people as citizens of the region, not just their individual county, will aid in the process." ²²

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. 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 increasing development happening along the 29 corridor, spurring distinctions between rural and developing areas. This emphasizes the importance of digital availability and automobile dependency within the county. The digital divide in rural areas 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 percent and 26 percent. 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.

²² Piedmont Environmental Council employee in interview with UVA graduate students, March 23, 2022.

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 in the focus group 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.

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.

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"Tourism 2025 Strategic Plan." County of Greene Virginia. Accessed May 6, 2022. https://www.greenecountyva.gov/forms/documents/edt/1568-tourism-2025-strategic-plan/file





Source: "Visit Louisa County", n.d.

LOUISA COUNTY

COUNTY INTRODUCTION

Founded in 1742, Louisa is a scenic county in central Virginia with a rich history. Louisa County was named after Princess Louise of Great Britain (1724-1751), the youngest daughter of King George II and Queen of Denmark and Norway. It was also once known as the 'Sun-Cured Tobacco Capital' of the world due to its role in the global tobacco market; today, the tobacco leaf forms part of the county seal in recognition of this influential plant.¹ As a result of its location, the County was the setting for several events during the American Revolution and Civil War. Today, Louisa County remains a mostly forested landscape with two major towns, the Town of Louisa and Mineral. The County is home to a number of regional businesses as well as a hub for tourism and natural recreation. Many visitors come to spend time at Lake Anna, one of the largest freshwater reserves in Virginia.²

^{1 &}quot;History of Louisa," Louisa County, accessed April 25, 2022.

^{2 &}quot;Lake Anna," Virginia is for Lovers, accessed May 6, 2022.

The overall population of Louisa County is 37,596 people according to the 2020 U.S. Census. At roughly 511 square miles of land and water, Louisa is a very large county nestled between Charlottesville and Richmond. It is often used as a thoroughfare between these cities, as it is intersected by several highways and interstates including US 250 and I-64.

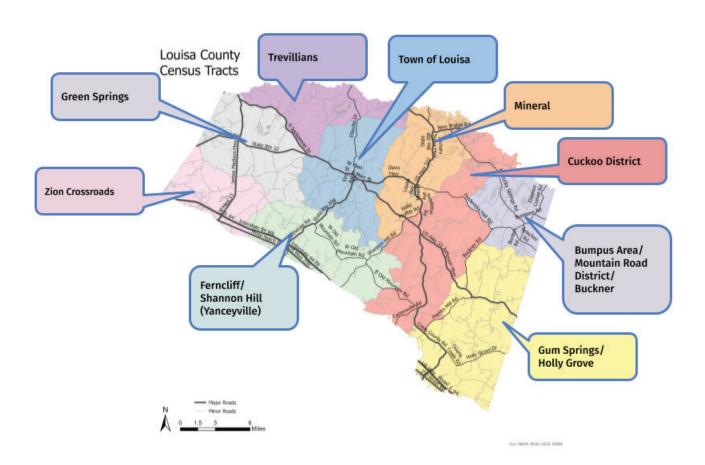
Louisa faces a number of challenges to equity and well-being. As a largely rural landscape, transportation and vehicle access are major barriers to equity as residents must often travel long distances to commute and reach services like healthcare and food. As in many counties in this region, there is a shortage of affordable and quality housing, particularly as land and home prices have increased in recent years. Finally, childcare and accessible greenspaces are challenges for many Louisa residents, often exacerbated by issues around mobility and income disparities.



Source: "Visit Louisa County", n.d.

COMMUNITY MAPPING EXERCISE

In our focus group conversation, we relied on community input to assign names to the nine census tracts in Louisa County. Our discussion resulted in roughly thirteen proposed community names, shown on the map below. These titles were then synthesized to correlate with the U.S. Census Bureau naming conventions. The tracts used in the mapping exercise come from 2020 U.S. 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 boundaries, of which there were only six, compared to the nine tracts that make up the 2020 census.



Focus Group Census Tract Naming Exercise

DEMOGRAPHICS

RACE

The racial/ethnic makeup of Louisa County is approximately 80 percent white, 15 percent Black, 1 percent Asian, and 4 percent identifying with two or more races or another race (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 percent of the population identifying as white (Figure L.2.B). This is significant when considering that the County's overall population is 80 percent white. Clearly, racial demographics vary by tract, which may in turn shed light on equity issues.

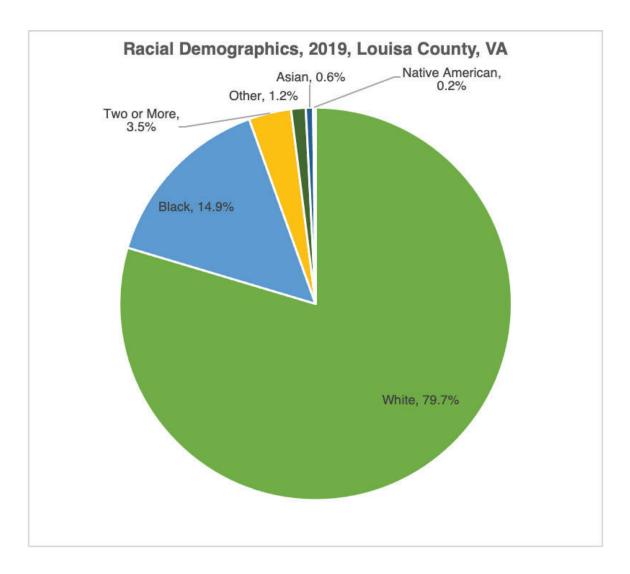


Figure L.1: Racial Demographics, 2019. (Source: ACS)

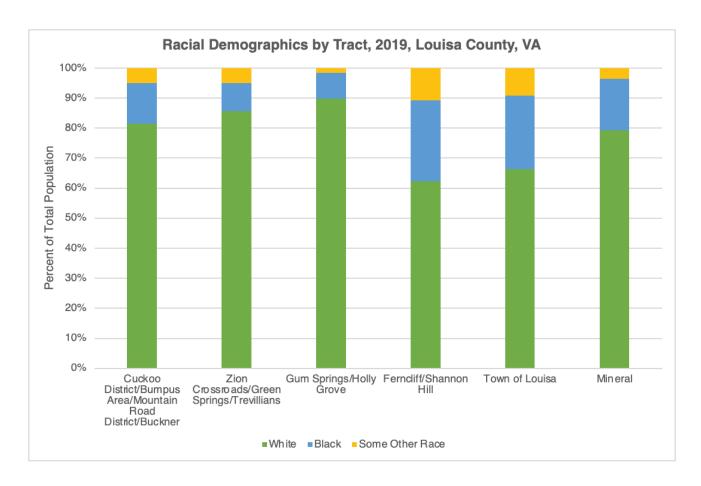


Figure L.2.A: Racial demographics by tract, 2019. (Source: ACS)

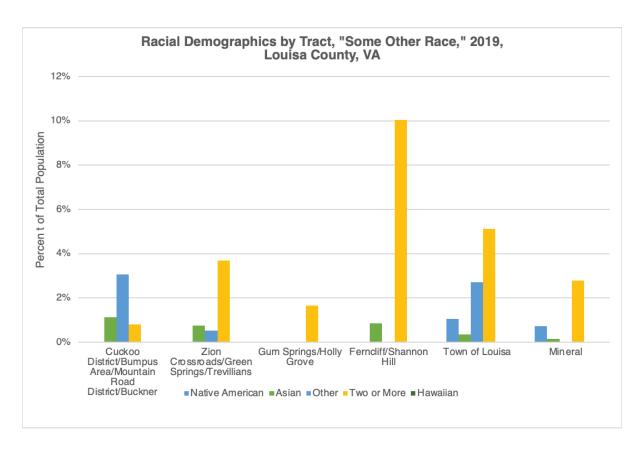


Figure L.2.B: Racial demographics by tract, "Some Other Race," 2019. (Source: ACS)

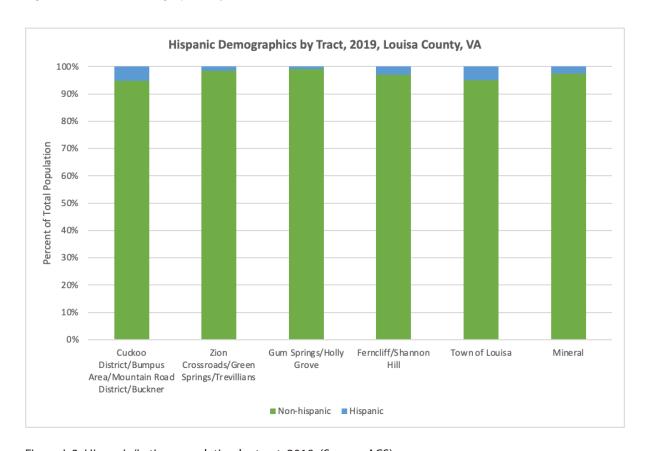


Figure L.3. Hispanic/Latino population by tract, 2019. (Source: ACS)

INCOME

According to the U.S. 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 \$67,027.3 Median household income has increased since 2010 across most neighborhoods in Louisa County, with the exception of Green Springs/Holly Grove and the Town of Louisa (Figure L.4). Household income of Black residents is lower than white residents across all neighborhoods except for Gum Springs/Holly Grove. Income data for Hispanic/Latino residents was only available for the Ferncliff/ Shannon Hill (Yanceyville) neighborhoods in 2019. Hispanic/Latino families in this tract had a median household income less than white residents but greater than Black families (Figure L.5).

In 2020, the percentage of persons living in poverty was 7.9 percent, which may not be fully representative of actual conditions within the county.⁴ Some of the community members that we interviewed suggested that population growth and an influx of more affluent residents during the pandemic may account for the decreased poverty rate across the overall population. "Poverty in Louisa dropped to less than eight percent for the first time ever... [but] 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."⁵

^{3 &}quot;QuickFacts: Louisa County," U.S. Census Bureau 2019, accessed April 26, 2022, https://www.census.gov/quickfacts/louisacountyvirginia

^{4 &}quot;QuickFacts: Louisa County," U.S. Census Bureau 2019, accessed April 26, 2022, https://www.census.gov/quickfacts/louisacountyvirginia

⁵ Social services worker in interview with UVA graduate students, March 30, 2022.

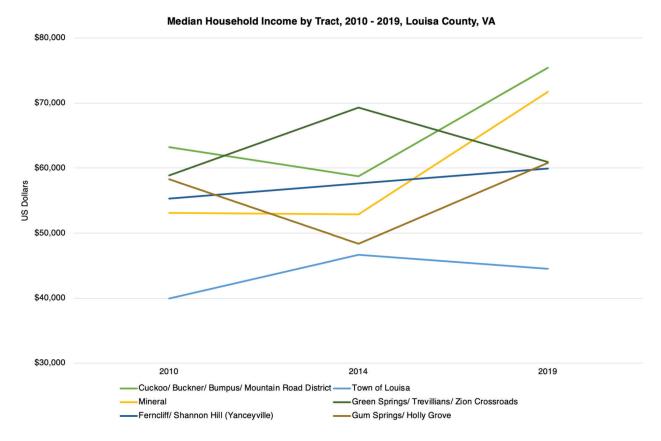


Figure L.4: Median household income, 2010-2019 (Source: ACS)

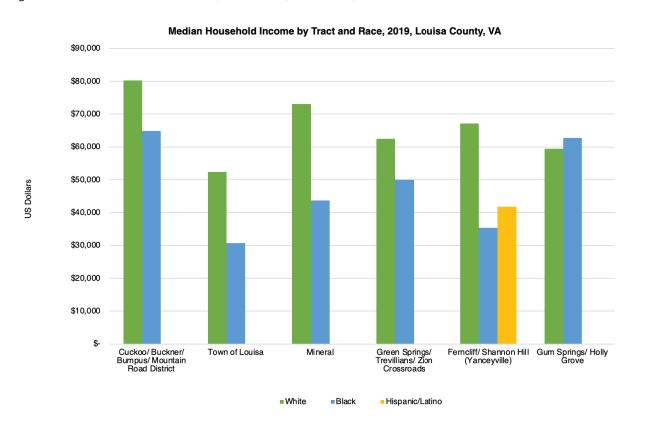


Figure L.5: Median household income by tract and race/ethnicity, 2019 (Source: ACS)

AGE

In Louisa, our data analysis indicates that the population is getting older (Figure L.6). 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. Access to timely health care and food also become more important considerations for aging populations with limited mobility, particularly in more rural areas of the county.

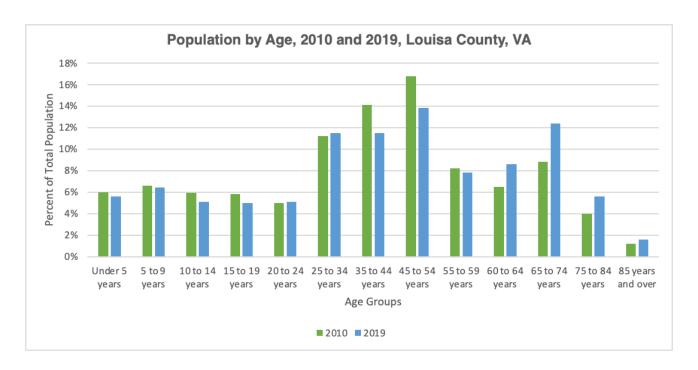


Figure L.6: Percent of population by age, 2010 and 2019 (Source: ACS)

FOOD INSECURITY

The Supplemental Nutrition Assistance Program (SNAP) helps families in Louisa County supplement their food budget and purchase healthy food. In Louisa, 11.6 percent of families utilized SNAP benefits in 2019. For comparison, the statewide average is 9 percent. Our analysis shows that the Mineral neighborhood utilized SNAP benefits at a higher rate than other neighborhoods in the county, followed closely by the Town of Louisa (Figure L.6). Food insecurity among children is also an issue in Louisa, with 13.8 percent of children in the county experiencing food insecurity in 2017 according to Feeding America.⁶ One of our community stakeholders remarked: "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." The percentage of households that received SNAP benefits varied between 2010 and 2019, with most tracts experiencing increases in SNAP recipients (Figure L.7).

Our conversations revealed that recent hikes in food prices have also posed a challenge for families in Louisa. "Food [prices] went up 7.3 percent in January alone. That's a huge burden on a family to buy food, especially if it's a large family. 7.3 percent in one month. 30 days. Huge."⁸ Fortunately, 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, among others. That said, food accessibility remains a key concern among residents and stakeholders, particularly as prices continue to be volatile.

^{6 &}quot;Child Hunger & Poverty in Louisa County, Virginia," Feeding America, accessed April 25, 2022, https://map. feedingamerica.org/county/2017/child/virginia/county/louisa

⁷ Social services worker in interview with UVA graduate students, March 30, 2022.

⁸ Social services worker in interview with UVA graduate students, March 30, 2022.

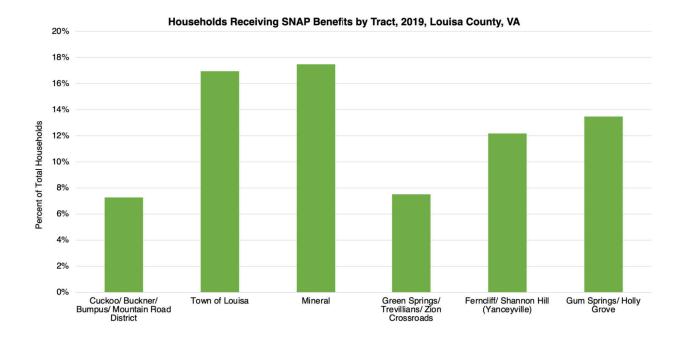


Figure L.7: Percent of households that received SNAP benefits, 2019 (Source: ACS)

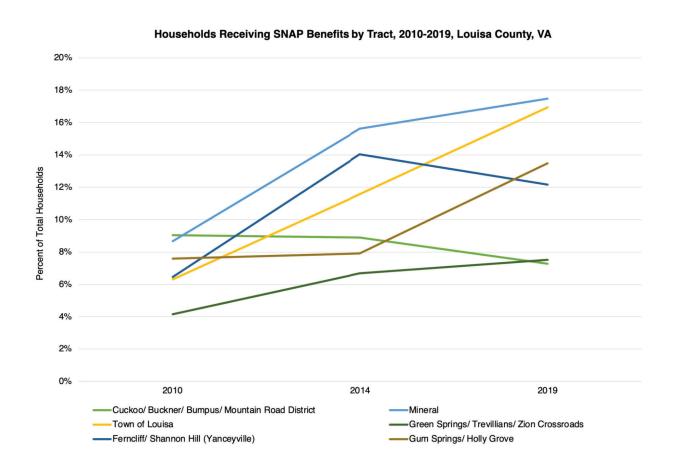


Figure L.8: Percent of households receiving SNAP benefits by tract, 2010-2019 (Source: ACS)

EMPLOYMENT

The focus group and stakeholder interviews shed light on some of the reasons for unemployment in Louisa. These included many secondary factors such as a lack of childcare services or transportation to and from work that could affect a person's ability to get or maintain employment. Community organizations like Sentara work to bridge some of these gaps by providing free classes and job placement to residents with barriers to employment such as a lack of a high school diploma or a criminal background. However, issues around mobility and child care remain challenges that many residents face when trying to work.

Figure L.9 shows that the general trend of percent employed in the population narrowly decreased from 2010 to 2019 (60.5 percent to 56.2 percent), and unemployed individuals made up just 5.4 percent of the population by 2019. Louisa is therefore on par with the rest of the United States, which had a national average employment rate of 60.2 percent and unemployment rate of 4.5 percent in 2019.9

Figures L.10 and L.11 show the percentage of Louisa's employed population and the unemployment rate disaggregated by sex, race, and ethnicity in 2019. The percentage of the population that was employed that year ranged from just 25.8 percent to a staggering 92.4 percent based on race and ethnicity. Unemployment rate was lowest for citizens who are Asian alone, Hispanic/Latino origin (of any race), and some other race alone at 0 percent. The unemployment rate was highest for citizens who identified as two or more races at 13.1 percent. For other races, most employment rates fell between 40 percent to 75 percent employed while most unemployment rates were around five percent.

The barriers to employment in Louisa County relate both to mobility and to childcare. Many organizations in Louisa, such as the Resource Council, are putting significant effort into improving conditions and continue to provide services to those who need assistance with securing employment.

⁹ U.S. Census Bureau, "Selected Economic Characteristics, ACS 2019 -- USA" Quick Facts, accessed May 5, 2022.

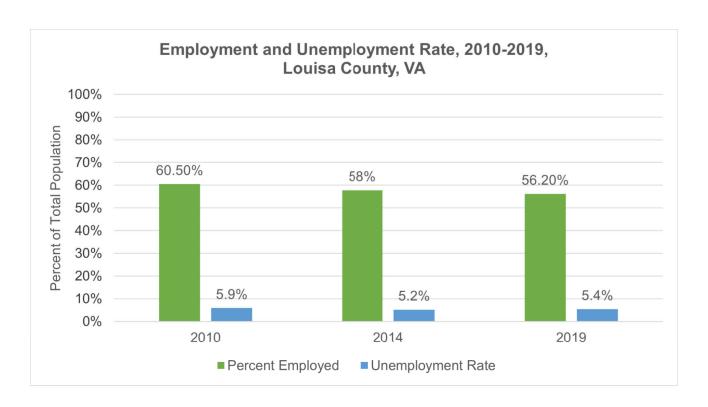


Figure L.9: Employment and unemployment rate, 2010 - 2019. (Source: ACS)

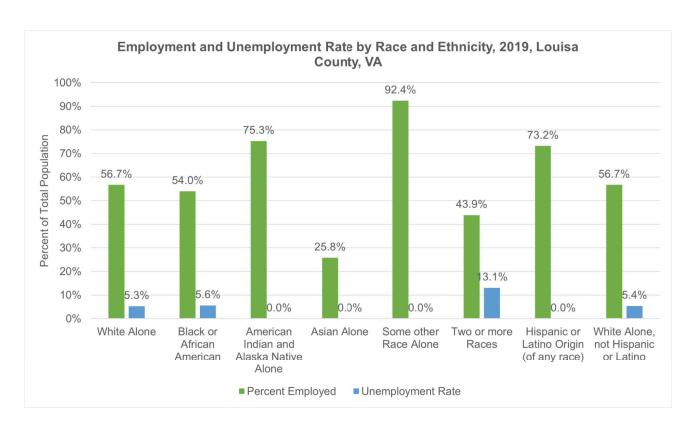


Figure L.10: Employment and unemployment rate by race and ethnicity, 2019 (Source: ACS)

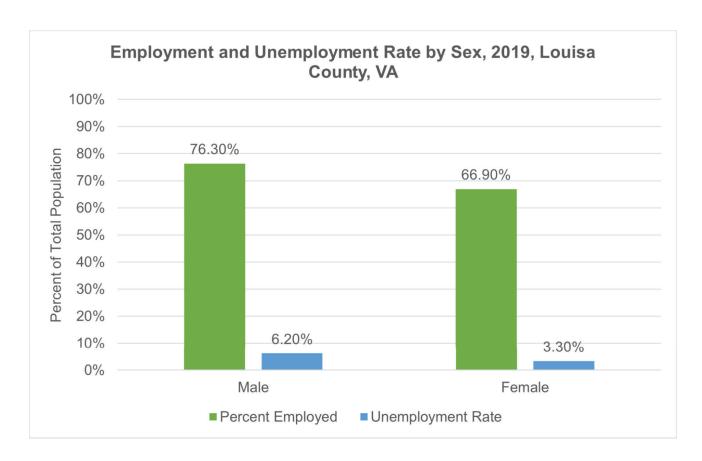


Figure L.11: Percent employed and unemployment rate by sex, 2019 (Source: ACS)

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, and median home value. By examining these factors, we are better positioned to understand various forms of housing available in Louisa County, as well as how they affect and serve as an indicator for equity.

Figure L.12 shows the full picture of the housing market and the various financial ramifications. In this chart, we can clearly see that rent burdened households increased in three of the six census tracts between 2014 and 2019. The Cuckoo 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, with 16 percent and 14 percent increases respectively. Meanwhile, Mineral had the sharpest decline in the percentage of rent burdened households, dropping from 65 percent to just 36 percent. Based on the year 2019 alone, 48.11 percent of households in Louisa County were rent burdened, meaning that these households were spending more than 30 percent of their income on housing expenses.

Figure L.13 illustrates an increase in median home value across five of the six census tracts from 2014 to 2019. The only tract that reported a decrease in the overall median home value was Zion Crossroads/Green Springs/Trevillians, which reported a 9.9 percent decrease between 2014 and 2019. Conversely, Ferncliff/Shannon Hill reported the most significant increase at 32.35 percent. Rising home values can serve as a barrier to entry for those who might be looking to purchase a home and invest long-term in the community.

Figure L.14 shows a growing divide in rent prices across Louisa County. Zion Crossroads/ GreenSprings/Trevillians reported a 10.25 percent decrease in median gross rent, while Ferncliff/Shannon Hill reported a 23.98 percent decrease in median gross rent. Other census tracts, like Mineral, soared with a 17.77 percent 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 between 2014 and 2019.

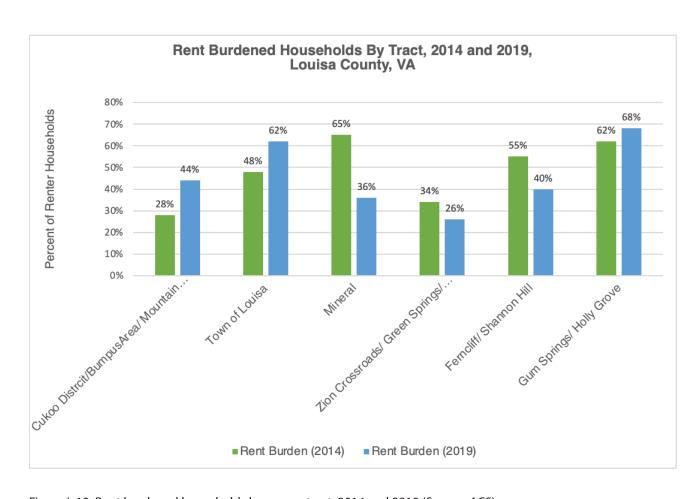


Figure L.12: Rent burdened households by census tract, 2014 and 2019 (Source: ACS)

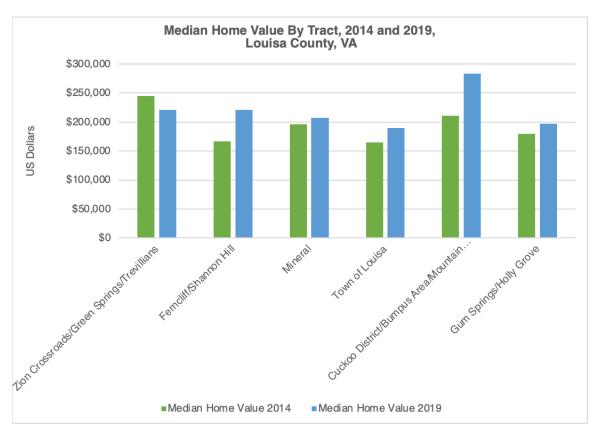


Figure L.13: Median home value by census tract, 2014 and 2019 (Source: ACS)

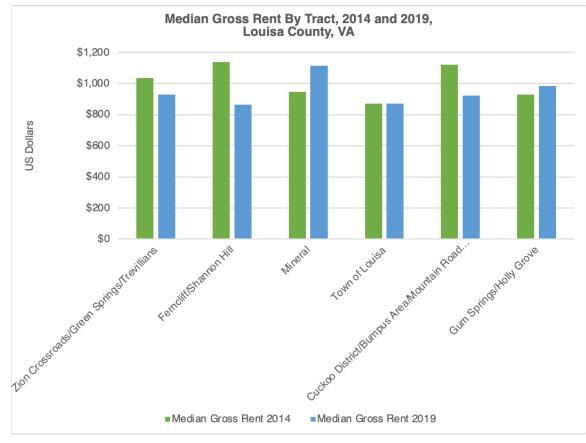


Figure L.14: Median gross rent, 2014 and 2019 (Source: ACS)

SCHOOL OUTCOMES/EDUCATION

Access to education is another 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 its boundaries, there are over a dozen colleges and universities within two hours driving distance, including the University of Virginia and the College of William & Mary.

Figures L.15, L.16, and L.17 show that graduation rates exceed 80 percent for all populations in 2019. When broken down by race and ethnicity, students of two or more races, non-Hispanic/Latino had the highest graduation rate at 100 percent (Figure L.15), while students who identify as Hispanic/Latino had the lowest graduation rate at 81 percent. The dropout rate was the highest (2.8 percent) among students who identified as white, while the overall average was two percent in 2019. Students who identified as female had a higher graduation rate and a lower dropout rate than students who identified as male, with a five percentage point difference for graduation rate and a three percentage point difference for dropout rate.

We also considered per-pupil spending and free/reduced lunch eligibility, which are a great indicator on whether students are receiving the resources they need to succeed. In Louisa, per-pupil spending in Louisa County for the 2018-2019 and 2019-2020 school years was less than the state average, but not considerably. In the 2018-2019, spending was about \$700 less than the state average, compared to about \$800 less than the state average in 2019-2020. Finally, Figure L.19 shows that students who received free and reduced lunch remained pretty constant between 2007 to 2020, ranging between 44 to 47 percent over the period. Across all years when data was available, the percentage of students receiving free and reduced lunch was higher than the state average.

Figure L.19: Percent free and reduced lunch from the 2011-2012 school year to the 2019-2020 school year (Source: The Annie E. Casey Foundation) Note: Virginia state data unavailable after the 2016-17 school year.

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, as most students don't live within walking distance and there isn't a reliable public transportation system. However, there is room for growth, and many of the stakeholders we interviewed spoke highly of Louisa's school system. A social worker cited the schools as a major force in improving life across Louisa: "I do see our community improving. I see our school system strengthening certain things in certain ways that are going to help across the spectrum." 10

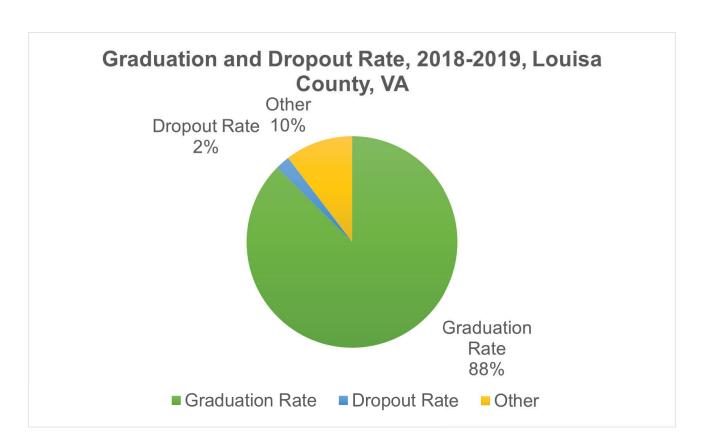


Figure L.15: High school graduation and dropout rates, 2018-2019 (Source: Virginia DOE)

¹⁰ Social services worker in interview with UVA graduate students, March 30, 2022.

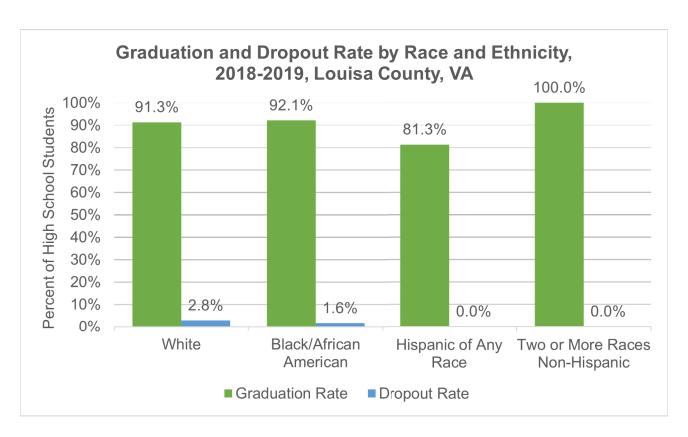


Figure L.16: High school graduation and dropout rates by race and ethnicity, 2018-2019 (Source: Virginia DOE)

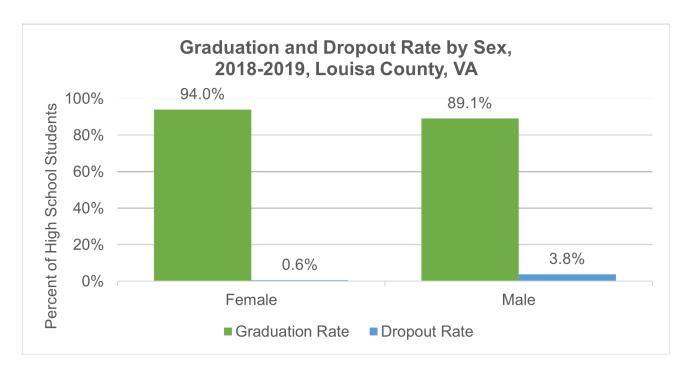


Figure L.17: High school graduation and dropout rates by sex, 2018-2019 (Source: Virginia DOE)

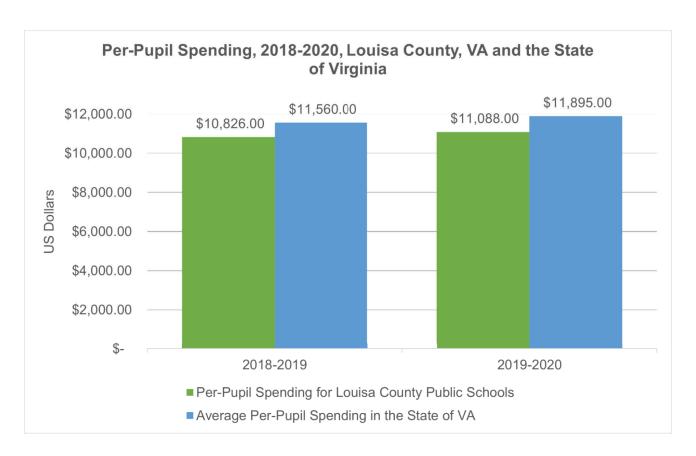


Figure L.18: Per-pupil spending, 2018-2020 (Source: Virginia DOE)

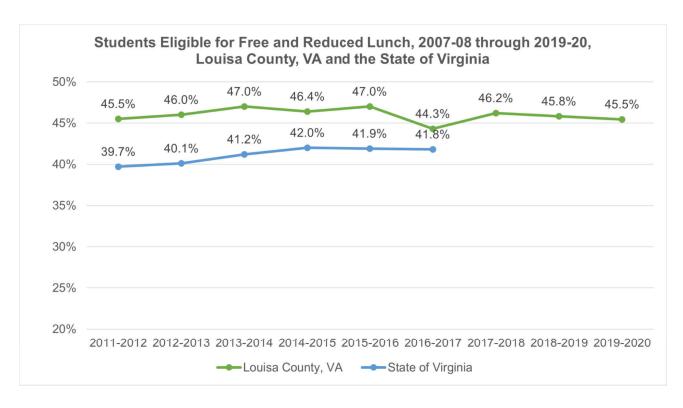


Figure L.19: Percent free and reduced lunch from the 2011-2012 school year to the 2019-2020 school year (Source: The Annie E. Casey Foundation) Note: Virginia state data unavailable after the 2016-17 school year.

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. This is important as digital access can serve as an indicator of inequity in other realms, such as job access, healthcare, and educational opportunities. In Louisa County in 2019, approximately 78 percent of the total population had access to the internet. The distribution of those who did not have an internet subscription varied across census tracts. It appears that overall, the percentage of those without a computer and/or internet subscriptions was higher in Ferncliff and Gum Springs than in other tracts.

The COVID-19 pandemic exacerbated these divides, as more people relied on technology for news, services, and socializing. Our stakeholders commented: "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."¹¹

One noticeable trend is the disproportionately high percentage of Black households without a computer in Ferncliff, the Town of Louisa, and Mineral (Figure L.20). Almost 25 percent of Black households in Ferncliff did not have a computer in the house, compared to only six percent of white households in the same tract. This trend does not appear to extend to internet access, revealing an interesting pattern (Figure L.21). In several tracts, Black households were less likely to have a computer, but white households appeared to have lower rates of internet access. We noticed what appeared to be a direct correlation between income and internet access. Surprisingly, it appears that the highest concentrations of households without internet access appeared to be within the middle income bracket (Figure L.22).

¹¹ After-school youth programming employee in interview with UVA graduate students, March 24, 2022.

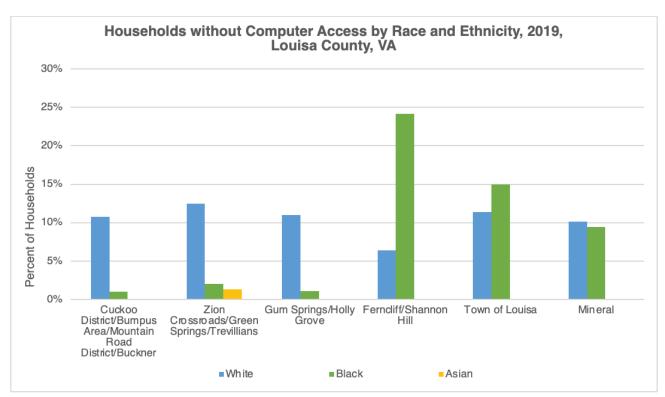


Figure L.20: Percent of households without computer access, 2019 (Source: ACS) Note: Hispanic/Latino, Hawaiian, Native American, Other, and Two or More population were reported as zero, and therefore are not included in this chart.

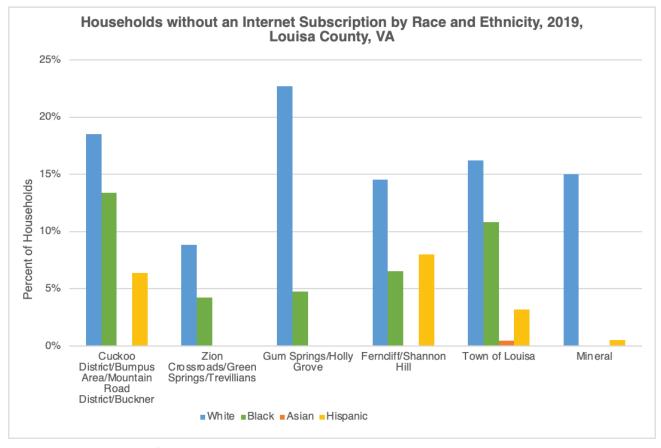


Figure L.21: Percent of households without an internet subscription by race and ethnicity, 2019. (Source: ACS)

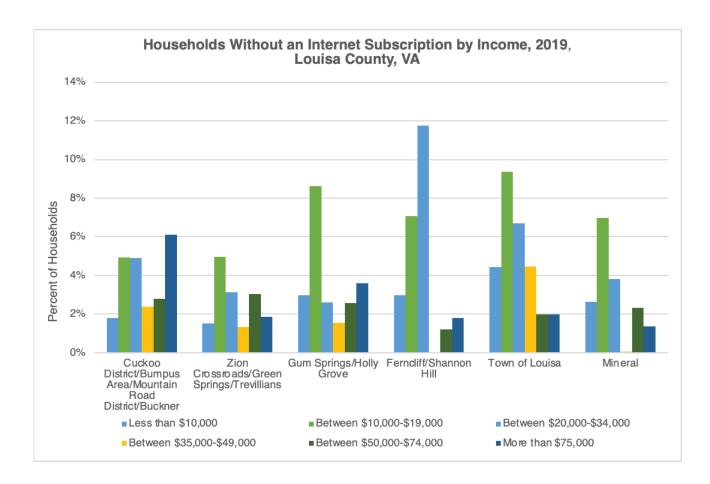


Figure L.22: Households without an internet subscription by income, 2019. (Source: ACS)

MOBILITY/TRANSPORTATION

With an area of 511 square miles, Louisa is large and predominantly rural. Several major highways run through the county, 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 vehicular 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 in Louisa did not own a car in 2019. The analysis below (Figure L.23) shows that more than 90 percent 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, at just between three and seven percent of the overall workforce.

Census data 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 captured in the 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 or unemployed, as well as migrant workers who may not be captured in the ACS surveys.

The travel time and modes of transportation to work data shows how workers in Louisa commute each day. Figure L.24 below illustrates the average time workers in the six census tracts spend commuting, ranging from roughly 30 to 40 minutes each way. This is longer than the average 2019 commute time in Virginia of 27.6 minutes (calculated internally), as well

as the U.S. average commute time in 2019 which was also 27.6 minutes.¹² In other words, most workers in Louisa spend more time commuting than the average American or Virginian.

Given Louisa's rural location, most workers rely on cars to get to and from work each day. Figure L.25 below shows the distribution of modes of transportation for workers, split by sex. Of Louisa's 21,251 workers in 2019, roughly 60 percent drove themselves to work. Another ten percent carpooled, 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, rode public transportation, or took 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.

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. One stakeholder described the daily impacts of not having a car. "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."¹³

¹² Burd, Burrows, and McKenzie, U.S. Census, March, 2021

¹³ Social services worker in interview with UVA graduate students, March 30, 2022.

Our discussions also confirmed that access to transportation has ripple effects that impact other areas of life, including opportunities for 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, as one focus group participant noted, 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."

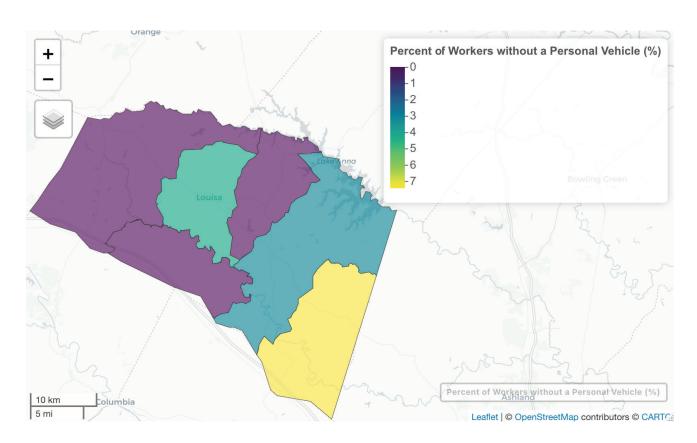


Figure L.23: Percent of workers who do not own a vehicle by tract, 2019. (Source: ACS)

¹⁴ Child healthcare worker in focus group, April 14, 2022.

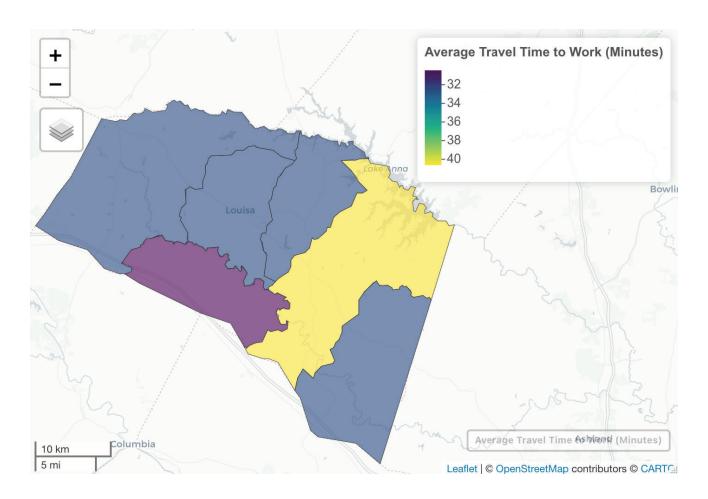


Figure L.24: Average worker commute by tract, in minutes, by tract, 2019. (Source: ACS)

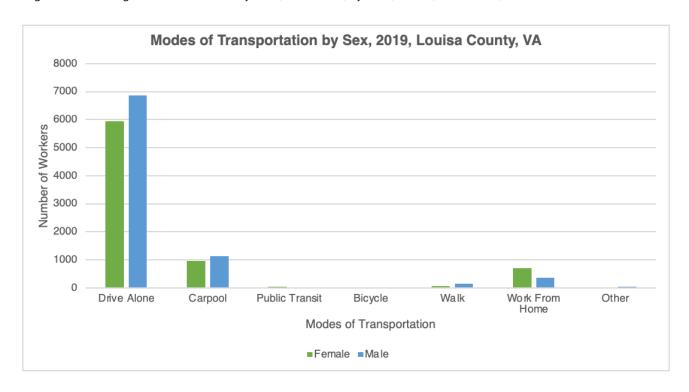


Figure L.25: Modes of transportation by sex, 2019. (Source: ACS)

LAND USE AND ENVIRONMENT

In order to fully understand land use and the environment in Louisa County, it is important to visualize the makeup of the county and the various types of land cover that exist. Through analyzing the county map, we can begin to explore issues of spatial equity and identify specific areas for opportunity. Lastly, by examining the various percentages of acreage by land cover, we can gain key insights in the context of spatial development (Figure L.26). The data was acquired from the Multi-Resolution Land Characteristics Consortium (MRLC) & National Land Cover Database (NLCD), then examined in the context of four various categories: Developed, Herbaceous, Planted/Cultivated, and Forested.

In Figure L.27, overall acreage by land classification in the year 2019 for the various census tracts within Louisa County is taken into account. Forested land makes up the most significant type of land cover in the county, accounting for 68 percent of all acreage in the town, or a total of 196,710,50 acres. Conversely, developed land only accounts for roughly eight percent of all acreage county wide. The Cuckoo District/Bumpus 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.

With so much undeveloped land, there are plenty of opportunities for community parks and green space. Indeed, our focus group revealed that Louisa does not really have an issue with the quantity or quality of parks, but rather of accessibility and utilization. "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? Just a healthy, fun space. Maybe get some kids or some families together to start a community garden? Something like that." ¹⁵

¹⁵ Community healthcare worker in focus group, April 14, 2022.

Although these are just some of the highlights of land cover and overall acreage in Louisa, we can clearly see that the vast majority of land is classified as forested. Through comparing the land cover maps against the overall acreage land classification, we can begin to examine Louisa County and its various census tracts in terms of spatial development as well as overall land cover types.

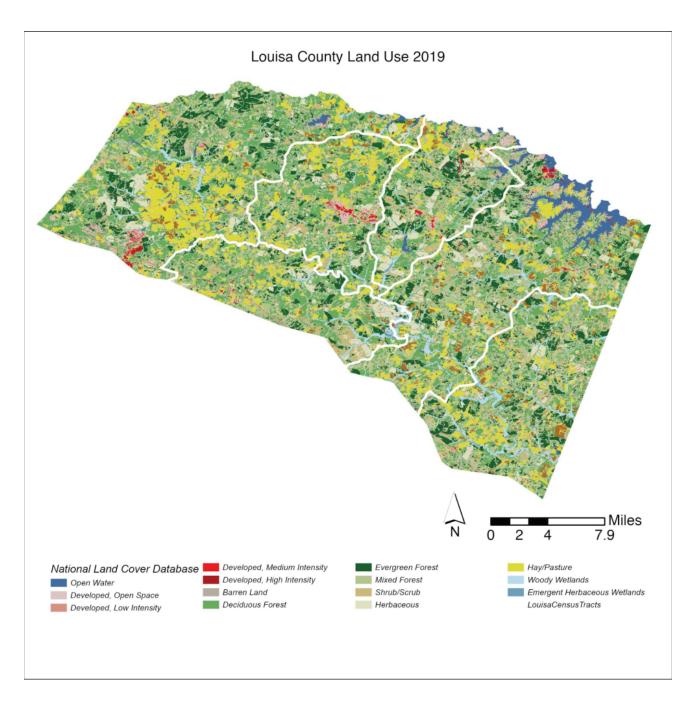


Figure L.26: Land cover map, 2019 (Source: MRLC & National Land Cover Database)

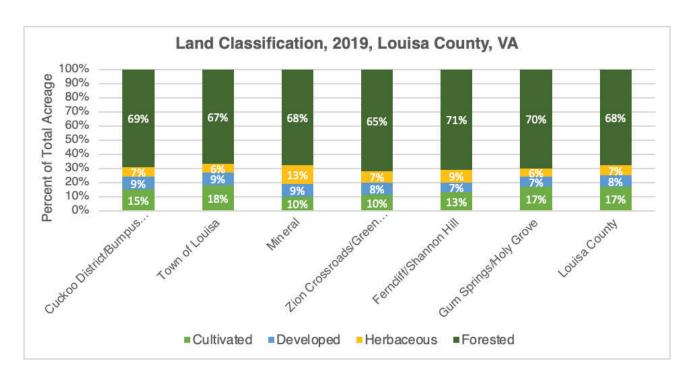


Figure L.27. Land classification, 2019 (Source: MRLC & National Land Cover database)

CONCLUSION/SUMMARY OF FINDINGS

Through quantitative analysis and qualitative research, Louisa County has proven to be a vibrant community with ample strengths and areas of opportunity. Residents and stakeholders are passionate about this community, and in the words of one interviewee, they are "Louisa Strong." Just some of the strengths of this County include steady employment, low unemployment rates, educational opportunities, and strong leadership and enthusiasm for this community. There are also many opportunities for growth to address some of the barriers that residents currently face. Some of the largest are finding ways to improve access to services, activities and greenspace, particularly by addressing limitations in mobility and transportation. Other important considerations are housing affordability and internet/computer access.

Many accessibility issues that we identified are related to transportation. While there are adequate employment opportunities in the County, many families get or retain jobs because they can't access child care or find reliable transportation to and from work. Education in Louisa is a strength; however, limitations in transportation likewise create hurdles for students trying to reach schools and after-school programs. Finally, while Louisa County has great natural resources, there is a need for further green space development for community-engaged uses, as well as programming and services to ensure these spaces are accessible and inviting so they might be enjoyed by the public.

One of the biggest opportunities noted by our focus group participants is that Louisa is fortunate to have a number of great organizations and strong community leaders who care 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. One focus group participant outlined her vision for the future: "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."¹⁶

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 about Louisa's resources, assets, and programs. While our research and analysis has only scratched the surface, we hope that this report might be useful to our community partners as they undertake this important work to improve access and equity across Louisa County. We look forward to continuing this work with you in the future!

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¹⁶ Community healthcare worker in focus group, April 14, 2022.





Source: Sotheby's International Realty.

NELSON COUNTY

COUNTY INTRODUCTION

Originally the home of the Monacan tribe, Nelson County, founded in 1807, is a rural community situated in the heart of Central Virginia.¹ Encompassing a section of the Blue Ridge Mountains and the foothills to the east, Nelson County offers acres of untouched natural areas and farmland. Many residents and visitors utilize the area for hiking, fishing and exploring award-winning wineries and breweries. Others frequent the largest ski resort in Virginia, Wintergreen Resort, which is on the eastern slopes of the Blue Ridge Mountains.

¹ Visit Nelson County, "About Nelson County".

Named after Thomas Nelson Jr, the third Governor and a signer of the Declaration of Independence, the County flourished in 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.² Currently, with the growth of its apple industry and the development of new wineries,³ tourism has been a driver for Nelson County's economy, earning about \$217.8 million in tourism revenue in 2019.⁴

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.⁵ 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.

COMMUNITY MAPPING EXERCISE

The focus group conducted a place-making naming exercise for Nelson County's 2021 census tracts. For consistency in time frames throughout this report, 2019 census tracts were used. Nelson County has five census tracts in 2021, as seen in Map 1, and in 2019 there are three census tracts. Therefore, names generated in the naming exercise were redistributed based on location for 2019 data. 2021 census tracts labeled Afton-Schuyler (blue area in naming exercise) and Wintergreen-Rockfish Valley (orange area in naming exercise1) were combined to Wintergreen-Schuyler to fit the needs of 2019 tracts.

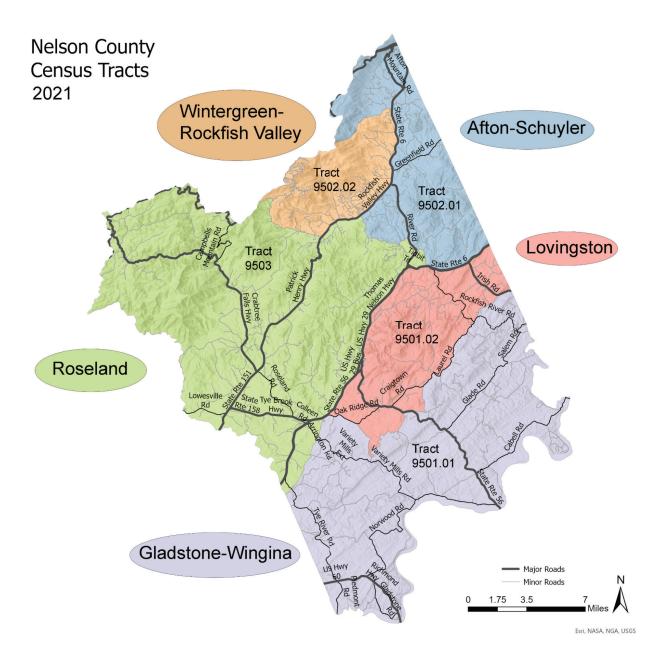
² Nelson County Historical Society, (29 April 2022).

³ Visit Nelson County, "About Nelson County".

⁴ Michael Caldwell, "Nelson County earned about \$217.8 million in tourism revenue in 2019", CBS19, (29 April 2022).

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

Additionally, the two tracts labeled Lovingston (red area in naming exercise) and Wingina-Gladstone (purple area naming exercise) in 2021 were synthesized to Gladstone-Lovingston to more appropriately label another 2019 tract. The names created for the 2021 Census tracts by focus group attendees will be used in future reports.



Focus Group Census Tract Naming Exercise

DEMOGRAPHICS

RACE

An overview of race and ethnicity patterns at the level of the household creates an important context for the examination of equity in the County. As a metric, it frames access to various dimensions of life and liveability in the County including access to employment, education, and transportation.

For the purpose of this study, 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 Hispanic/Latino residents by comparison, as shown in Figures N.1 and N.2.

The County has negligible percentages of Native American, Asian, Native Hawaiian, and other races, as shown in Figure N.2.B. When compared to the qualitative data collected for this project, it is evident that the observations made by interview respondents are reflected by these statistics, particularly with regard to the white population in the County. Additionally, while the data does not reflect transient groups of individuals, interview respondents emphasized the significance of Hispanic/Latino 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.

An interview from a community organization in the County emphasized in his interview the significance of funding in improving social services: "Through this [Central Farmworkers] initiative which we've funded, we were able, for example, to help over 95 percent 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."

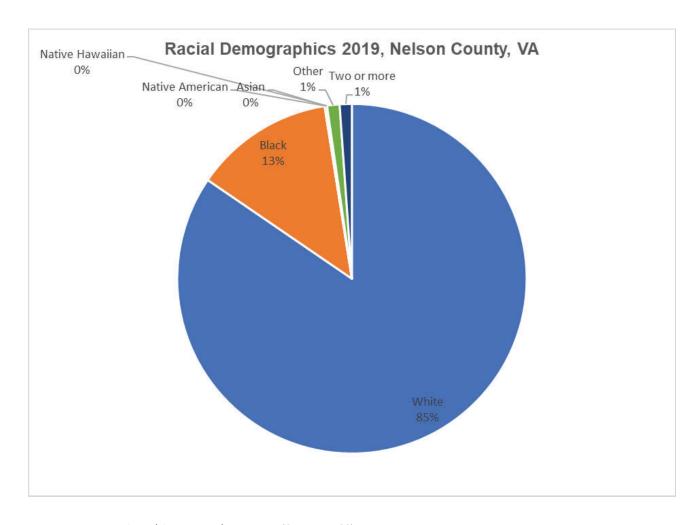


Figure N.1: Racial Demographics, 2019. (Source: ACS)

⁶ Nelson County Community Fund (NCCF), March 14, 2022.

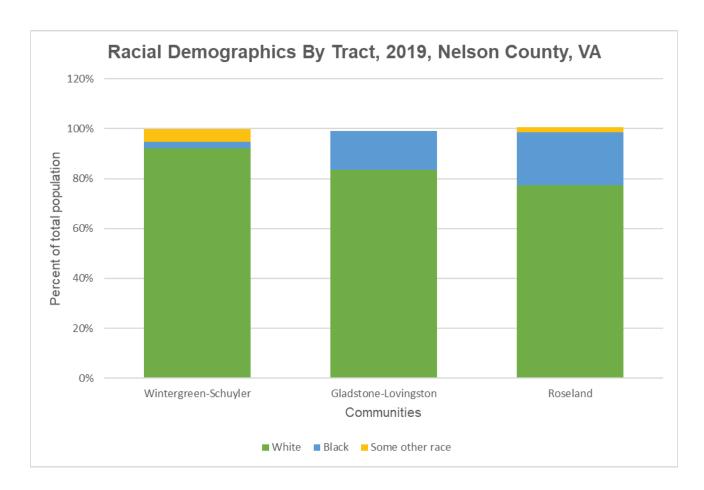


Figure N.2.A: Racial demographics by tract, 2019. (Source: ACS)

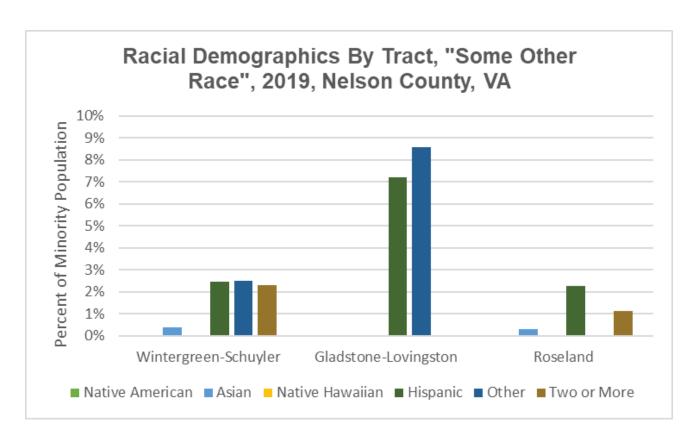


Figure N.2.B: Racial demographics by tract, "Some Other Race," 2019. (Source: ACS)

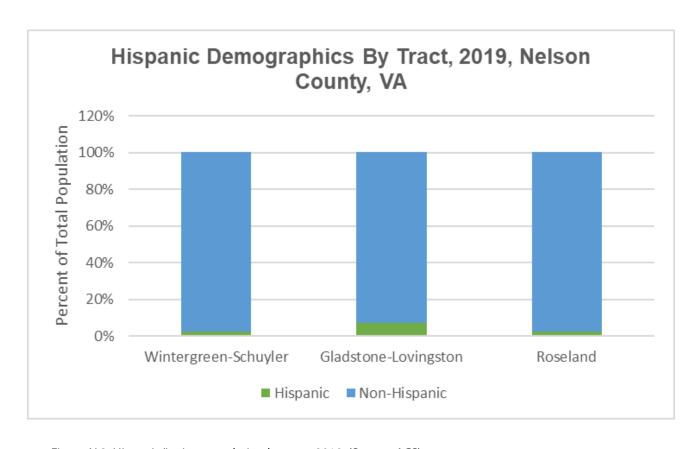


Figure N.3. Hispanic/Latino population by tract, 2019. (Source: ACS)

INCOME

Median Household Income increased overall for Nelson County from 2014 to 2019. Wintergreen-Schuyler experienced a 39 percent increase in median household income. Median household income in Roseland remained relatively similar from 2010-2014, and saw a significant increase of 62 percent from 2014-2019. Gladstone-Lovingston median household income increased from \$45,161 to \$49,389 across 2010-2014, and decreased to \$47,073 in 2019, an overall four percent increase from 2010-2019 (Fig. N.4).

Income disparities within each census tract were mentioned throughout the conversation of the Nelson County focus group. One participant mentioned that along" [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."

Median household income could be correlated with recently built expensive housing, and possibly higher income people moving into Nelson County based on the focus group's mention of retirement communities, and those moving to the area for second homes. 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 participant with UVA graduate students, April 14, 2022.

⁸ Nelson County focus group participant with UVA graduate students, April 14, 2022.

Based on the 2019 American Community Survey data, Figure N.5 shows Nelson County's reported median 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 all areas. The population of Nelson County is predominantly white and this population shows a moderate range of income levels across the County.

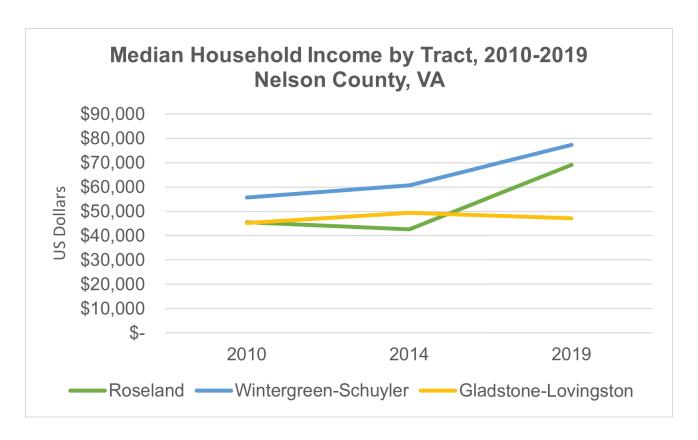


Figure N.4: Median household income, 2010-2019 (Source: ACS)

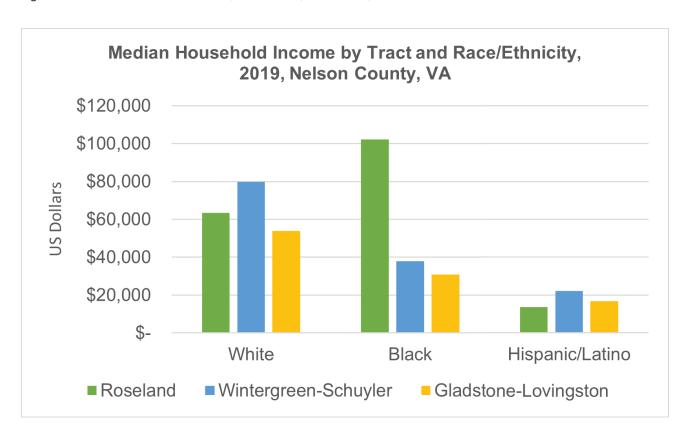


Figure N.5: Median household income by tract and race/ethnicity, 2019 (Source: ACS)

AGE

Nelson County has a total population of 14,831 people, with the majority of the population between ages 25 and 54.9 In 2010, the highest percentage of the population was between ages 44 to 54, and in 2019 the highest percentage of the population was between ages 64 to 74 (Figure N.6). Interviews with community organizations and members characterize Nelson County as a place that has experienced slow growth and retains older populations, consistent with the data that displays the increase in ages 60 to 84 from 2010 to 2019 (Figure N.6).

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 is 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.

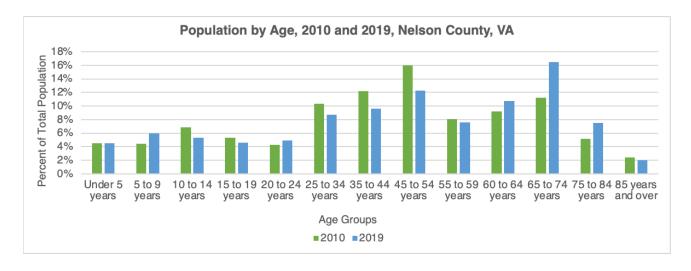


Figure N.6: Percent of population by age, 2010 and 2019 (Source: ACS)

⁹ U.S. Census Bureau; American Community Survey, 2010 and 2019 American Community Survey 5-Year Estimates, Table B01001; using data.census.gov; (26 April 2022).

FOOD INSECURITY

Between 2010-2019, total Supplemental Nutritional Assistance Program (SNAP) recipients in Nelson County remained between 35-50 percent, 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 don't think it's 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."10 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.8).

¹⁰ Nelson County focus group participant with UVA graduate students, April 14, 2022.

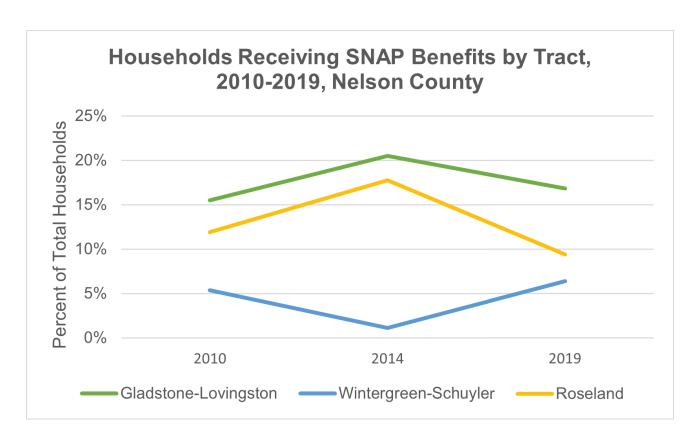


Figure N.7: Percent of households that received SNAP benefits, 2019 (Source: ACS)

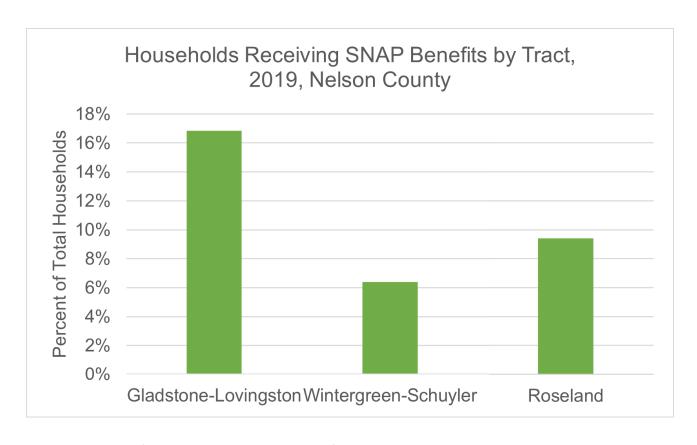


Figure N.8: Percent of households receiving SNAP benefits by tract, 2010-2019 (Source: ACS)

EMPLOYMENT

Analyzing the employment rate in the County 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.9 below depicts that from 2010 to 2014, the total percentage of people employed in the civilian labor force decreased from 57.5 percent to 54.4 percent, then slightly increased to 55.9 percent in 2019. The unemployment rate had a similar fluctuation from the unemployment rate in 2010 at 3.1 percent that jumped up to a rate of 6.2 percent in 2014, which then bounced back to around 3.4 percent in 2019. However, with the pandemic, employment opportunities are continuing to recover with many jobs needing to be filled.

In an interview with the president of the Nelson County Community Fund, they discussed the growth of Nelson and its employment opportunities. The NCCF stated that there is continued growth in commercial agriculture, vineyards, wineries, breweries, and distilleries in Nelson County because of its "strong growth industry". However, many enterprises are having trouble finding people to work.¹¹ In an interview with the President and Economic Director the Central Virginia Partnership for Economic Development at Development, they mentioned the same information off filling jobs, which relates to their role of assisting people to find and fill jobs. They primarily help Nelson County residents retain their county's companies and help them grow. They mentioned that currently "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" in employment in Nelson County.¹²

¹¹ Nelson County Community Fund (NCCF), March 14, 2022.

¹² Central Virginia Partnership for Economic Development, March 23, 2022.

Figure N.10 illustrates the percentage of people employed and the unemployment rate disaggregated by race. Those of two or more races had the highest percentage of people employed in 2019 with a percentage of 78.4 percent and an unemployment rate of zero percent. The unemployment rates for the Asian and Black population of Nelson are also zero percent. However, the employment rates for the same residents are only 57.6 percent and 59.6 percent, respectively. Following these groups with the lowest employment percentages are white, Hispanic/Latino, and other races with percentages of employment of 55.3 percent, 53.2 percent, and 50.5 percent, respectively.

Although residents who identify as white exhibit an unemployment rate of 3.6 percent and those who identify as Hispanic/Latino exhibit an unemployment rate of 13.9 percent, the highest unemployment rate of 38.3 percent was exhibited by those who identify as Some Other Race. Part of the employment and unemployment rates of those who identify as Some Other Race and Two or More Races could be related to the large immigrant community that resides in Nelson.

The District Director from the 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 to make sure we always have translation services available". The President of the Nelson County Community Fund mentioned a similar issue, stating that "Wintergreen often itself brings in a lot of international kids to help run the restaurants because they can't recruit locally." It is evident that Nelson has connected with the non-English speaking community and is working with them, but this group still needs support to dissipate inequities in employment.

¹³ Virginia Department of Health (VDH), March 18, 2022.

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

The percent employed and the unemployment rates are also disaggregated by gender in Figure N.11 below. By looking at the graph, it is evident that the male employment percentage is higher than female. The percent employed of residents who identify as male in 2019 was 81.1 percent compared to the percent employed of those who identify as female at only 64.3 percent. However, both males and females have the same unemployment rate of 4.2 percent. From the focus group and interviews, it seems 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 low employment percentage.

In the interview with the Central Virginia Partnership for Economic Development, they shared a story of a woman who had trouble keeping her job due to a lack of child care. However, even though this woman had trouble finding childcare, another equity limitation she experienced was her sudden salary increase. Her salary increase meant that she had to lose other employment benefits that she needed, making it even harder to make ends meet. "Our... benefits are established so that as somebody that's trying to get out of a lower income situation, they can't do it because they almost have to give up their job in order to qualify for what they need for their kids" stated the Director at the Central Virginia Partnership for Economic Development. This story goes to show that child care isn't the only barrier to employment and that the way employment benefits are established based on income can also cause serious limitations to economic freedom.

¹⁵ Central Virginia Partnership for Economic Development, March 23, 2022.

From employment and economic recovery after the COVID-19 pandemic and by attracting companies to Nelson and finding opportunities for people, growth in employment will continue to increase. Especially since Nelson has the goal of "attracting companies that have values similar to ours." However, from these analyses and interviews, it is evident that it is not necessarily about getting a job or finding someone to fill a job opportunity. The employment discrepancies are possibly part of the reason Nelson companies are having trouble finding people to work. This could be caused by equity barriers to employment, like the lack of child care and the qualifications of established employment benefits.

Employment and Unemployment Rate, 2010 - 2019, Nelson County, VA

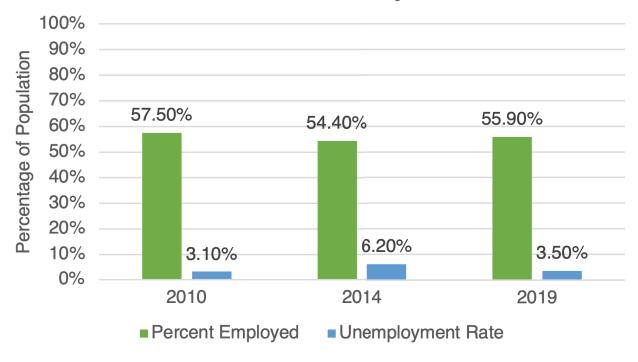


Figure N.9: Employment and unemployment rate, 2010 - 2019. (Source: ACS)

¹⁶ Central Virginia Partnership for Economic Development, March 23, 2022.

Employment and Unemployment Rate by Race and Ethnicity, 2019, Nelson, VA

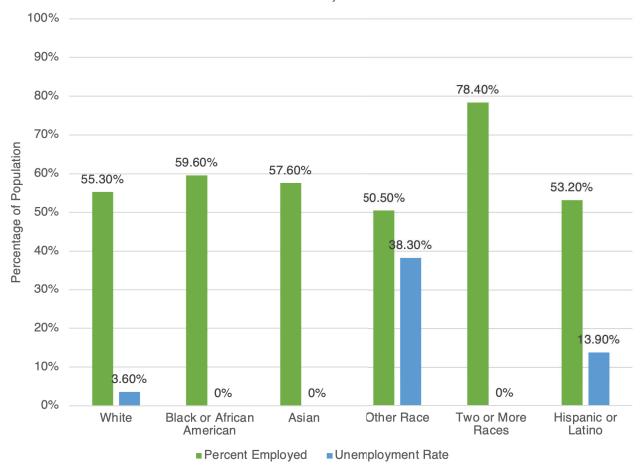


Figure N.10: Employment and unemployment rate by race and ethnicity, 2019 (Source: ACS)

Employment and Unemployment Rate by Gender, 2019, Nelson, VA

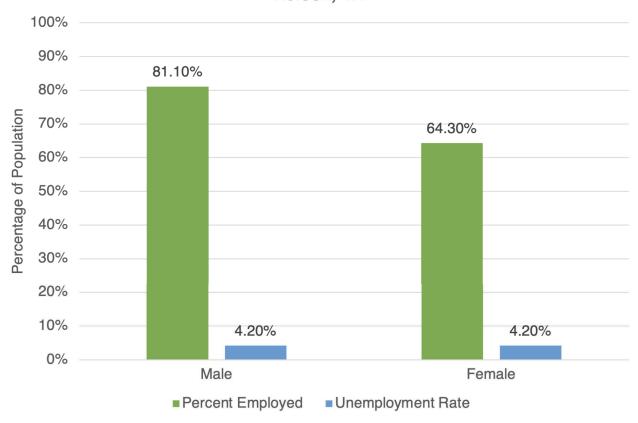


Figure N.11: Percent employed and unemployment rate by sex, 2019 (Source: ACS)

HOUSING

A resident or household that spends more than 30 percent of their household income on rent is considered to be rent burdened.¹⁷ 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 percent of households in Nelson County were rent burdened, placing Nelson County in the middle percentage compared to other counties in the region.¹⁸ According to Figure N.12, rent burden has increased 19.3 percent since 2014 in Roseland, which also has the highest rent burden of Nelson County's census tracts at 56.9 percent. This poses an equity concern because more than half of the census tract is rent burdened, which 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." ¹⁹

Residents of a focus group expressed that housing available, even if it is in the name of affordable housing, still is not affordable to many residents.²⁰ As income disparity increases, this issue will only get worse. This resonates with a community leader within the Virginia Department of Health, who believes with the lack of a middle class, there will be a population of low-income residents limited on affordable housing options. Even if these individuals wanted to leave the county to find other housing options, they would not be able to afford to move.²¹

¹⁷ Pew Research, "American Families Face a Growing Rent Burden", April 19, 2018.

¹⁸ U.S. Census Bureau; American Community Survey, 2010 and 2019 American Community Survey 5-Year Estimates, Table B25070; using data.census.gov; (26 April 2022).

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

²⁰ Nelson County focus group participant with UVA graduate students, April 14, 2022.

²¹ Denise Bonds, Virginia Department of Health (VDH), March 18, 2022.

Figure L.13 depicts the median home value of owner-occupied housing units in the County and census tracts. According to 2019 ACS data, the median home value in Nelson County was \$235,000. This is comparable to the other counties in the region, except for Albemarle County, where the median home value was \$356,100 in 2019.²²

According to Figure N.13, the average median home value increased 24 percent from 2014 to 2019 across Nelson County's census tracts. Gladstone-Lovingstone had a 19 percent decrease in median home value from 2014 to 2019. Wintergreen-Schuyler had a 8.9 percent increase in median home value from 2014 to 2019. Roseland had a 40.2 percent increase in median home value from 2014 to 2019. Wintergreen-Schuyler remains the highest home value at \$296,900. Perhaps this increase can be attributed to elevated median household incomes in this tract. As presented in the income section of Nelson County's report, this census tract has the highest median household income.

A conversation with the President of a local community fund organization indicated that this tract is home to Wintergreen Resort and Stoney Creek, which attracts several hundred families with higher incomes than those in surrounding rural areas. Many are retired from places like Richmond or Northern Virginia.²³ 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".²⁴ This range of housing likely reflects the income variability within the County.

Figure N.14 represents the median contracted rent plus the estimated cost of utilities. This 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 percent

²² U.S. Census Bureau; American Community Survey, 2010 and 2019 American Community Survey 5-Year Estimates, Table B25064; using data.census.gov; (26 April 2022).

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

²⁴ Nelson County focus group participant with UVA graduate students, April 14, 2022.

between 2014-2019.²⁵ According to Figure N.14, during the same time period, the census tracts experienced the following increases in median gross rent: Gladstone-Lovingstone 54.5 percent, Wintergreen-Schuyler 54.9 percent, and Roseland 19.1 percent. Wintergreen-Schuyler remains exhibiting the highest average rent at \$1,057 a month.

Our dialogue with the President of a local community fund organization suggests that the reason for higher average rent is Wintergreen Resort. The mountaintop resort is known for skiing, snowboarding, and other outdoor activities, making it a desirable location to stay. Hundreds of units are rented out, and only some are occupied year-round.²⁶

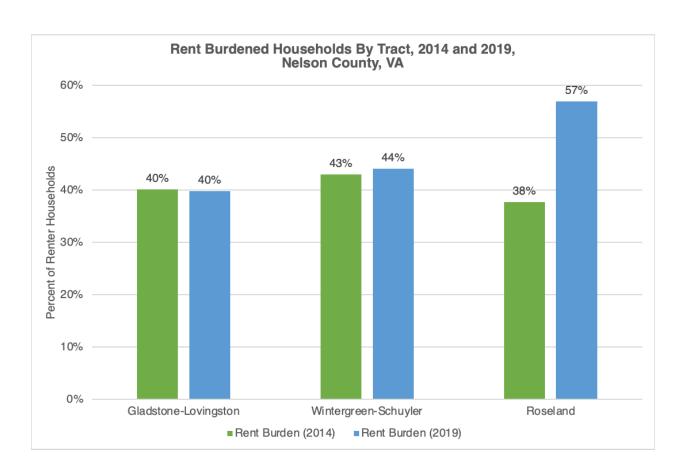


Figure N.12: Rent burdened households by census tract, 2014 and 2019 (Source: ACS)

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

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

Our data in Figure N.14 suggests that median gross rent has increased more in the census tracts that 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 making a larger impact on housing values on the north side of Nelson (from Nellysford and north) than on the County's south side (Roseland).

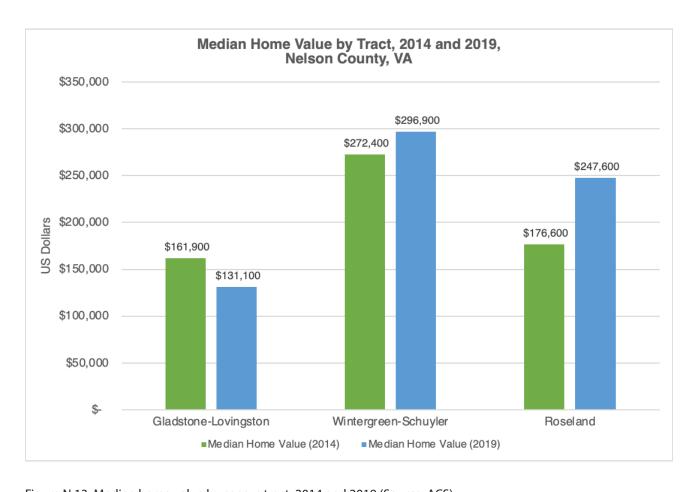


Figure N.13: Median home value by census tract, 2014 and 2019 (Source: ACS)

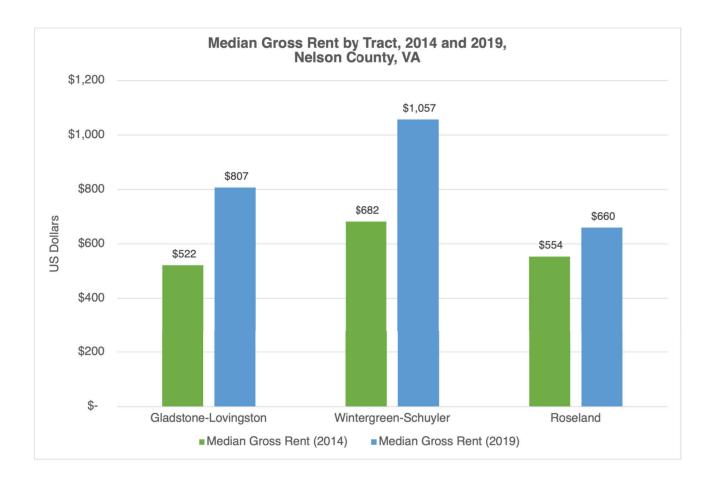


Figure N.14: Median gross rent, 2014 and 2019 (Source: ACS)

SCHOOL OUTCOMES/EDUCATION

Research in Nelson County's school outcomes, specifically the County public high schools, shows that although the County does receive large amounts of funding and graduation rates are high, there are still inequities within the County's school system.

The graduation rate for the County's public high schools is considered high, as shown in Figure N.15. However, the graduation rate is lower in comparison to the state of Virginia's average graduation rate of 91.5 percent in 2019. In Nelson County, the graduation rate was 89.6 percent, with a dropout rate of 3.9 percent. The dropout rate is lower than the average state dropout rate, which was 5.6 percent in 2019. Outside of graduation and dropout rates, the rate of other reasons for not completing graduation was 14.1 percent in 2019. One factor that could play a role in the high graduation rates is having the University of Virginia nearby. In an interview with the president of the Nelson County Community Fund, he explains that because of UVA, there is a heavy emphasis on education which he believes is regional and not just County wide.²⁷

In Figure N.16 and Figure N.17, the 2019 graduation rate is disaggregated by race and then by gender. In both figures, it is evident that there are disparities between races and genders when it comes to graduating high school. Figure N.16 shows only data on Black and white students as there was no other race data in the 2019 graduation and drop out data from the Virginia Department of Education. Even with this disparity, the 2019 graduation rate shows that Black students had a higher graduation rate at 95.8 percent while white students had a graduation rate of 87.9 percent. However, the dropout rates between the two races are similar and are 4.2 percent for Black students and 4.03 for white students.

²⁷ Nelson County Community Fund (NCCF), March 14, 2022.

The graduation rate disparity in the County's high schools continues with gender in Figure N.17. While the female graduation rate is high, the male graduation rate is almost 8 percent lower at 85.05 percent compared to the female graduation rate at 93.51 percent. However, the female dropout rate is almost 0.4 percent higher than the male dropout rate, with the female dropout rate at 3.9 percent while the male dropout rate is 3.49 percent.

Figure N.18 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 per student was \$13,185 and increased to \$13,600 in 2019. However, the State's average did not increase as much and remained within the \$11,600 to \$11,900 range. Having a higher quantity of spending than the state's average for the County's schools could play a significant role in the graduation rates of the Nelson County Public High schools.

Figure N.19 shows the total percentage of students in Kindergarten through twelfth grade approved for free or reduced prices for school lunches between 2011 and 2020. The drop in the percentage of students approved from 2014 to 2017 is surprising. However, according to the Virginia Department of Education, in 2014, Virginia school districts began to participate in a Community Eligibility option. The option allowed 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. Therefore, the new federal program includes students who would otherwise not qualify for free and reduced meals so it is possible that the number of students after 2014 may not be the most accurate indicator of approved students for free or reduced lunch.

Although free and reduced price lunch supports low-income families and their children, the President of the Nelson County Community Fund discussed in their interview that there are families who also are not able to afford nutritious meals outside of school or on the weekends because of this, 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 ... might reach 100 or 150 children

directly"²⁸. Although there is a program that helps to support low-income families with food for their children that does create a difference and impact, the disparities are sill serious. The inequity of nutritious food programs at schools, especially within the past couple years as the percentage of approved students has decreased, need more attention as every child should have access to nutritious food.

Although there are discrepancies within the Nelson County high schools in graduation rates and free and reduced lunch programs, local community members revealed the need for services to younger children in Nelson County. In an interview with the district health director at the Virginia Department of Health mentioned that the county is "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." In another interview with the Central Virginia Partnership for Economic Development 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... but we have also got to figure out... that those that are disadvantaged, have access to better resources and tools".30

²⁸ Nelson County Community Fund (NCCF), March 14, 2022.

²⁹ Virginia Department of Health (VDH), March 18, 2022.

³⁰ Helen Cauthen, Candace Spence, Central Virginia Partnership for Economic Development, March 23, 2022.

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

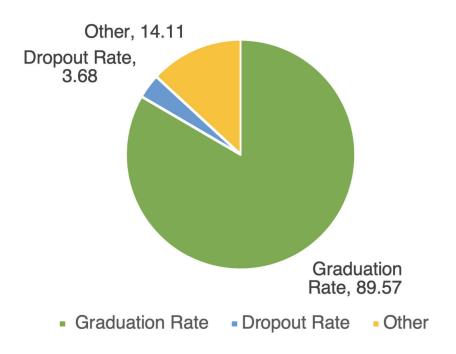


Figure N.15: High school graduation and dropout rates, 2018-2019 (Source: Virginia DOE)

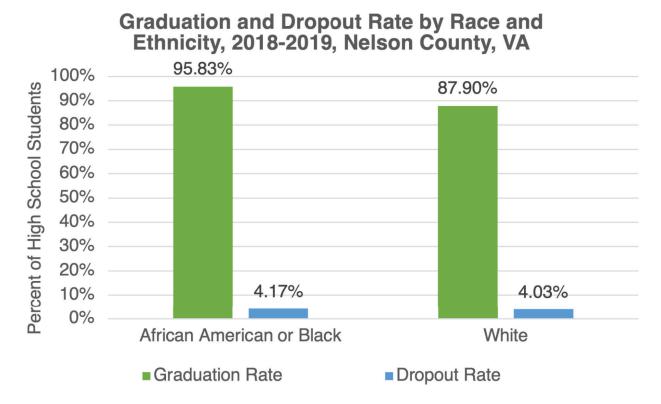


Figure N.16: High school graduation and dropout rates by race and ethnicity, 2018-2019 (Source: Virginia DOE)

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

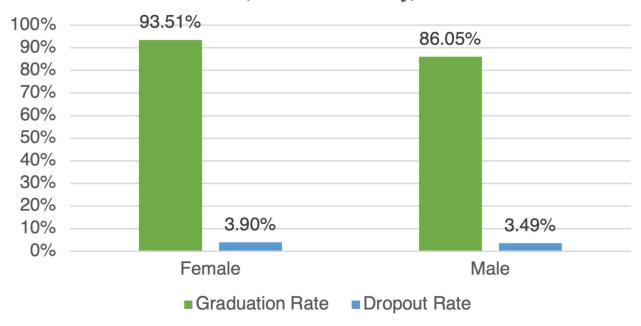
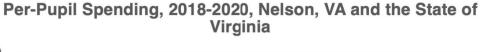


Figure N.17: High school graduation and dropout rates by sex, 2018-2019 (Source: Virginia DOE)



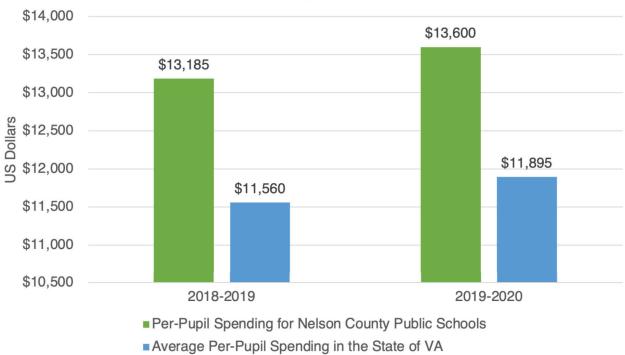


Figure N.18: Per-pupil spending, 2018-2020 (Source: Virginia DOE)

Students Eligible for Free and Reduced Lunch, 2007-08 through 2019-20, Nelson County, VA and the State of Virginia

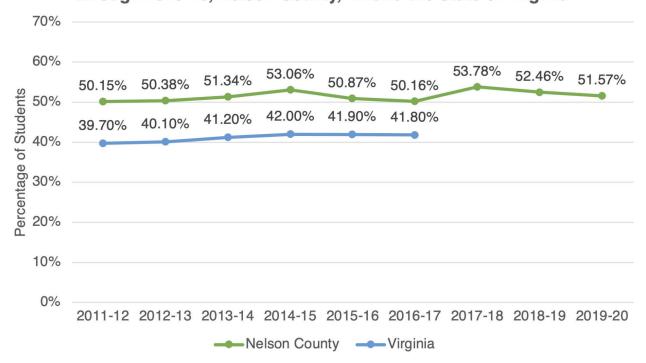


Figure N.19: Percent free and reduced lunch from the 2011-2012 school year to the 2019-2020 school year (Source: The Annie E. Casey Foundation) Note: Virginia state data unavailable after the 2016-17 school year.

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. The Black and Hispanic/Latino population have 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 N.20.

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 in the state working remotely in 2019 with equivalently high internet demands.³¹ 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-Lovingston as shown in Figure N.21.

Figure N.22 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 Hispanic/Latino 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 a community organization 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

³¹ 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)

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". However, there are 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.

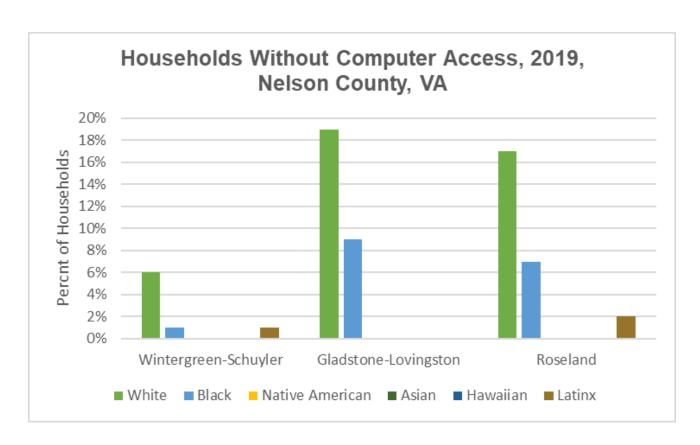


Figure N.20: Percent of households without computer access, 2019 (Source: ACS)

³² Nelson County Community Fund (NCCF), March14, 2022.

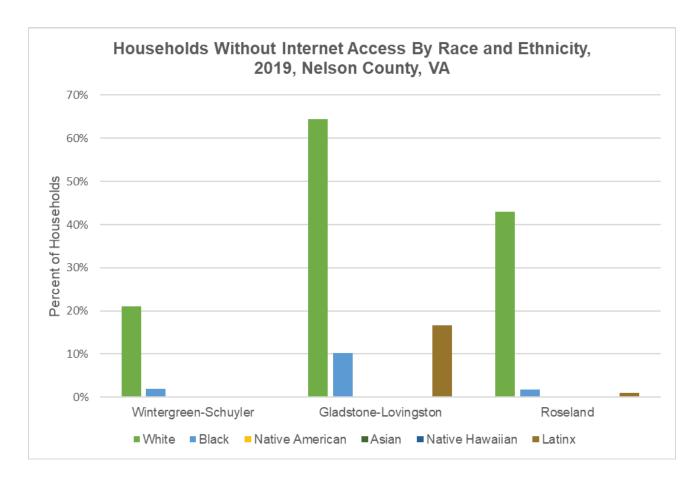


Figure N.21: Percent of households without an internet subscription by race and ethnicity, 2019. (Source: ACS)

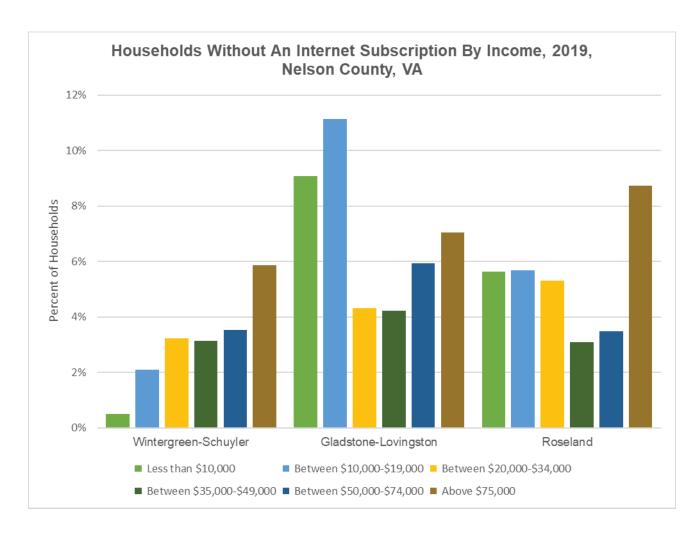


Figure N.22: Households without an internet subscription by income, 2019. (Source: ACS)

MOBILITY/TRANSPORTATION

The topic of transportation and mobility is crucial to understanding quality of life in Nelson County. Transportation patterns show how people are connected to services that support human flourishing: employment, grocery stores, health centers, and more. 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 U.S. 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 percent 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.22. As a rural area, Nelson County workers commute to places of employment, ranging between a 24 and 32 minute commute across census tracts (Figure N.23). When traveling to work, driving alone and carpooling were the most frequented modes of transportation whereas public transit and bicycling had zero commuters (Figure N.24).

Dependence on cars extends beyond transportation. 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 "Age" section.

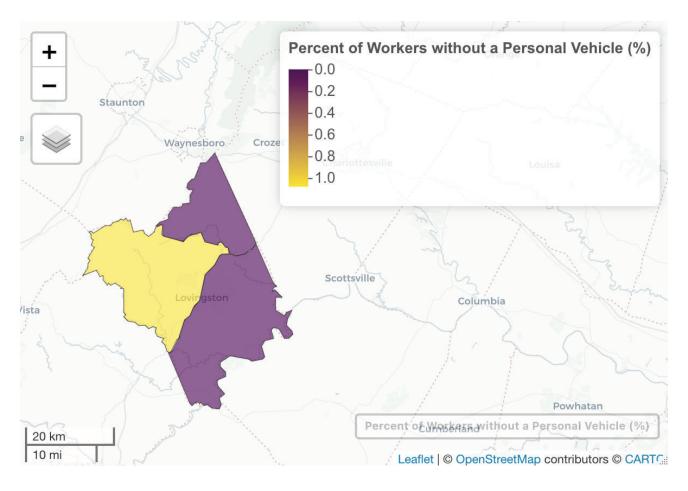


Figure N.23: Percent of workers who do not own a vehicle by tract, 2019. (Source: ACS)

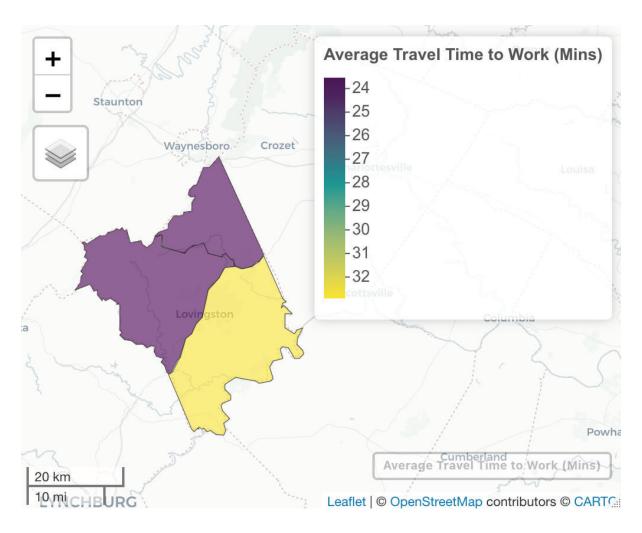


Figure N.24: Average worker commute by tract, in minutes, by tract, 2019. (Source: ACS)

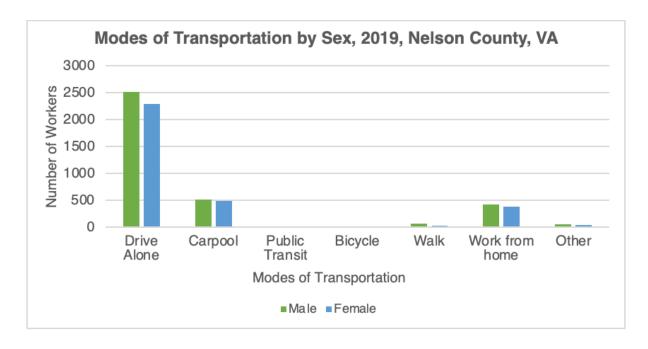


Figure N.25: Modes of transportation by sex, 2019. (Source: ACS)

LAND USE AND ENVIRONMENT

The Multi-Resolution Land Characteristics (MRLC) National Land Cover 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 (N.26).

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 and by census tract (Figure N.27). Forested areas dominated every census tract in Nelson County ranging between 60 percent to 78 percent (30,820.8 to 94,561.7 acres) of the total acreage per census tract. In Roseland, cultivated land was twice the size of land use at 30 percent compared to Wintergreen-Schuyler and Gladstone-Lovingston's 13 percent and 10 percent respectively. Developed land and herbaceous land was not as prominent as forested land. Developed land ranged from six percent to 10 percent of land per census tract. Herbaceous land amounted to six percent in Gladstone-Lovingston while Wintergreen-Schuyler and Roseland only had one percent of their land categorized 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."³³ Folks in Nelson County are aware of the natural barriers that strain connectivity, but Nelson is a motivated community that seeks to get services, like internet access, more readily available to all.

³³ Nelson County focus group participant with UVA graduate students, April 14, 2022.

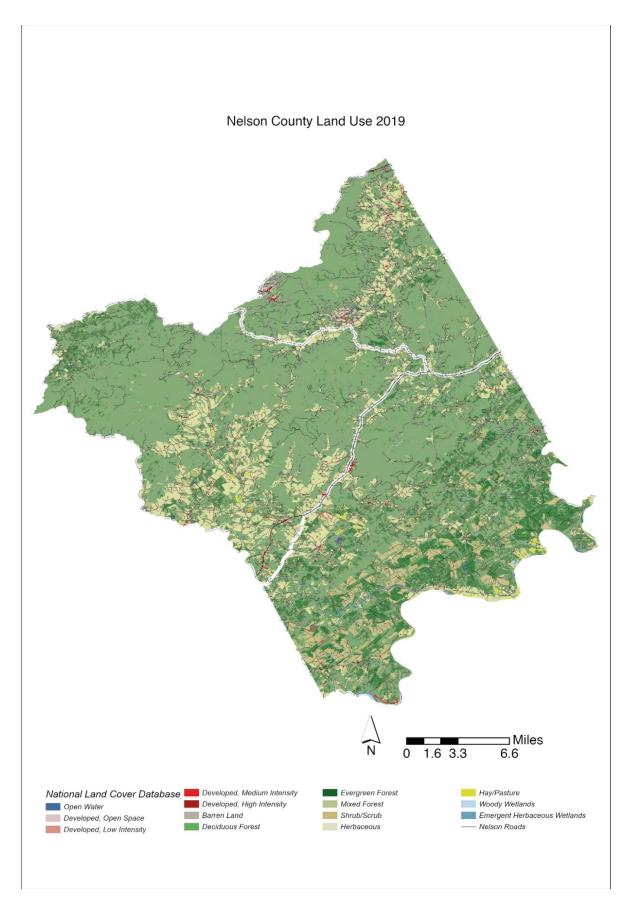


Figure N.26: Land cover map, 2019 (Source: MRLC & National Land Cover Database)

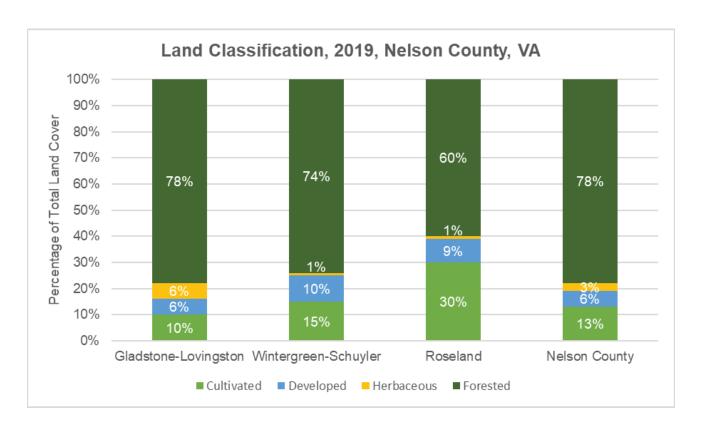


Figure N.27. Land classification, 2019 (Source: MRLC & National Land Cover database)

CONCLUSION/SUMMARY OF FINDINGS

Although Nelson County is growing with industries catering towards 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 need greater access to internet and cellular connection than what is currently available. 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, [are] 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". Additionally, Nelson County 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 focus group participant with UVA graduate students, April 14, 2022.

³⁵ Nelson County focus group participant with UVA graduate students, April 14, 2022.

Nelson County has seen an increase in median household income from 2010 to 2019, particularly in Roseland and Wintergreen-Schuyler. 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 advocate for the funding necessary to keep Nelson on the path towards connectivity for all.

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Source: Virginia's Blue Ridge.

LOOKING FORWARD

Our hope is that the metrics detailed in this Regional Equity Profile, both qualitative and quantitative, will provide the foundation needed to corroborate the lived experiences of all residents in these communities. It should serve as a tool to support and empower current and future work being done by stakeholders throughout the region by outlining analytical evidence of the inequities that they are working to address. Without evidence and data to point to, striving for policy change is difficult. Much of what was identified in this report demonstrates the continued importance of recognizing the unique needs of particular communities within the region's greater community. Beyond that, it is important to recognize that the factors that contribute to a high quality of life and well-being may not be evenly distributed throughout the individual communities.

This report developed an equity profile for each locality individually, but in looking forward, a next step for continued research is a synthesis of the entire region. By further analyzing and understanding the connections between the various factors and the influence localities

have on each other and the region as a whole, solutions to the demonstrated inequities can be better implemented. For example, it is important to recognize the influence of the City of Charlottesville hosting the two major hospital systems that serve the entire region and how that relates to the health inequities apparent in other localities and throughout the region. This is just one instance of the need for a more regional synthesis. Additionally, it may be useful to research other areas around the United States that are facing similar trends, such as the urban-rural divide, that affect quality of life and well-being in their communities. Other places may have implemented successful strategies that could provide a framework for addressing similar inequities here in Central Virginia.

Finally, we would like to thank all of the participants in the individual interviews as well as the focus groups. This report would not have been possible without their insights and contributions. Our hope is that this work contributes to their personal and organizational missions and leads to improved quality of life and well being for all residents throughout the Thomas Jefferson Planning District.

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