

ANALYSIS AND SCENARIO PLANNING



21

**Fairland and Briggs Chaney,
Montgomery County, Maryland**

ACKNOWLEDGEMENTS

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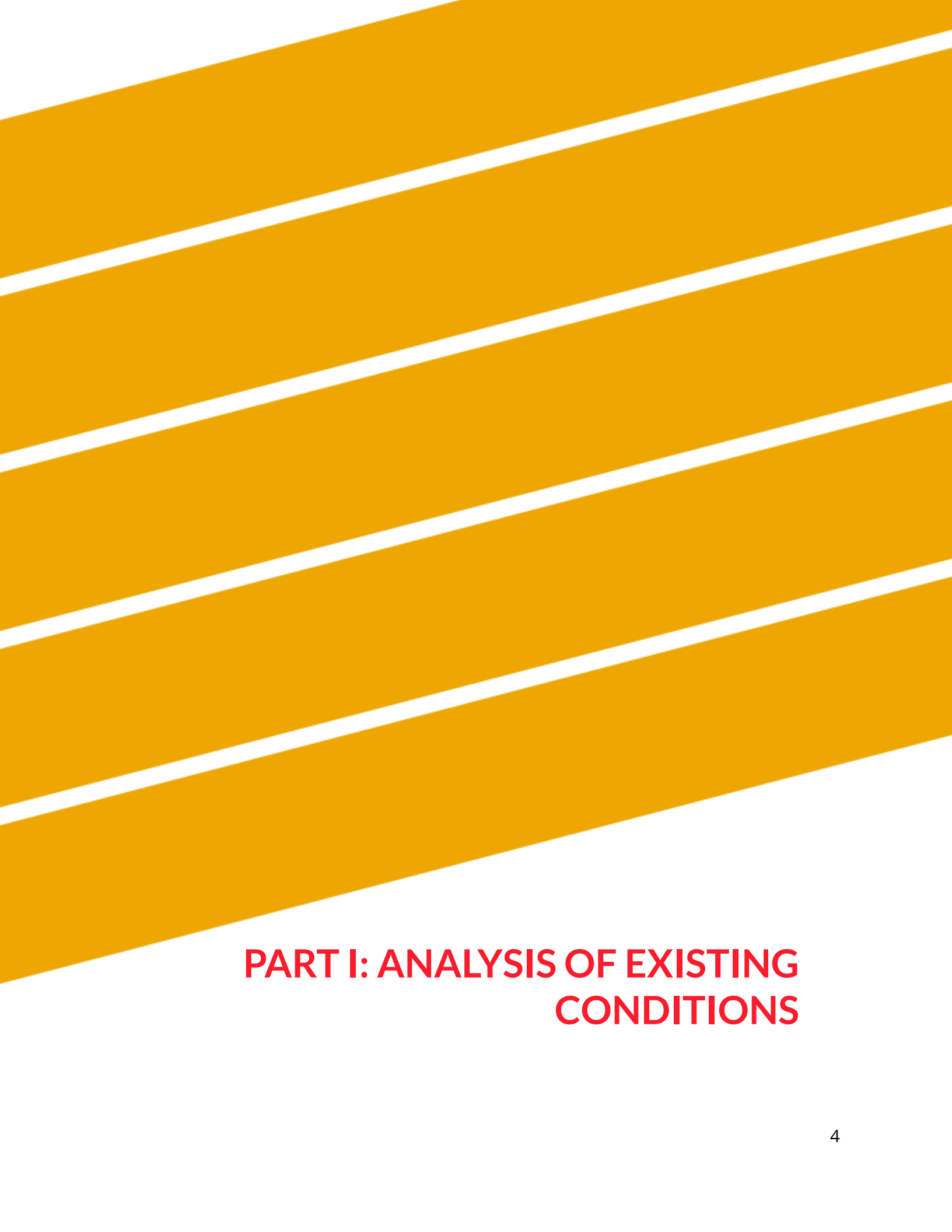
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PART I: ANALYSIS OF EXISTING CONDITIONS

Introduction

This report is the output of the Fall 2021 Urban Studies and Planning studio at the University of Maryland, College Park. Through the Partnership for Action Learning in Sustainability (PALS), our class partnered with Montgomery County's Planning Department to provide a planning sector analysis and scenario plans to aid in the development of the new Fairland and Briggs Chaney Master Plan, which is organized and guided by the draft general plan for the county, *Thrive Montgomery 2050*. The scope of work included analysis of existing conditions within the plan boundaries and the provision of three scenario plans ranging from no change to high levels of change."

We concentrated our attention within three thematic areas of emphasis: climate change adaptation and mitigation, economic and community development, and housing. Moreover, our central guiding principle for this project was justice; it informs everything we present here, and we hope that our work will contribute to its achievement. The report is organized into two major parts. In part I, in analysis of existing conditions, we

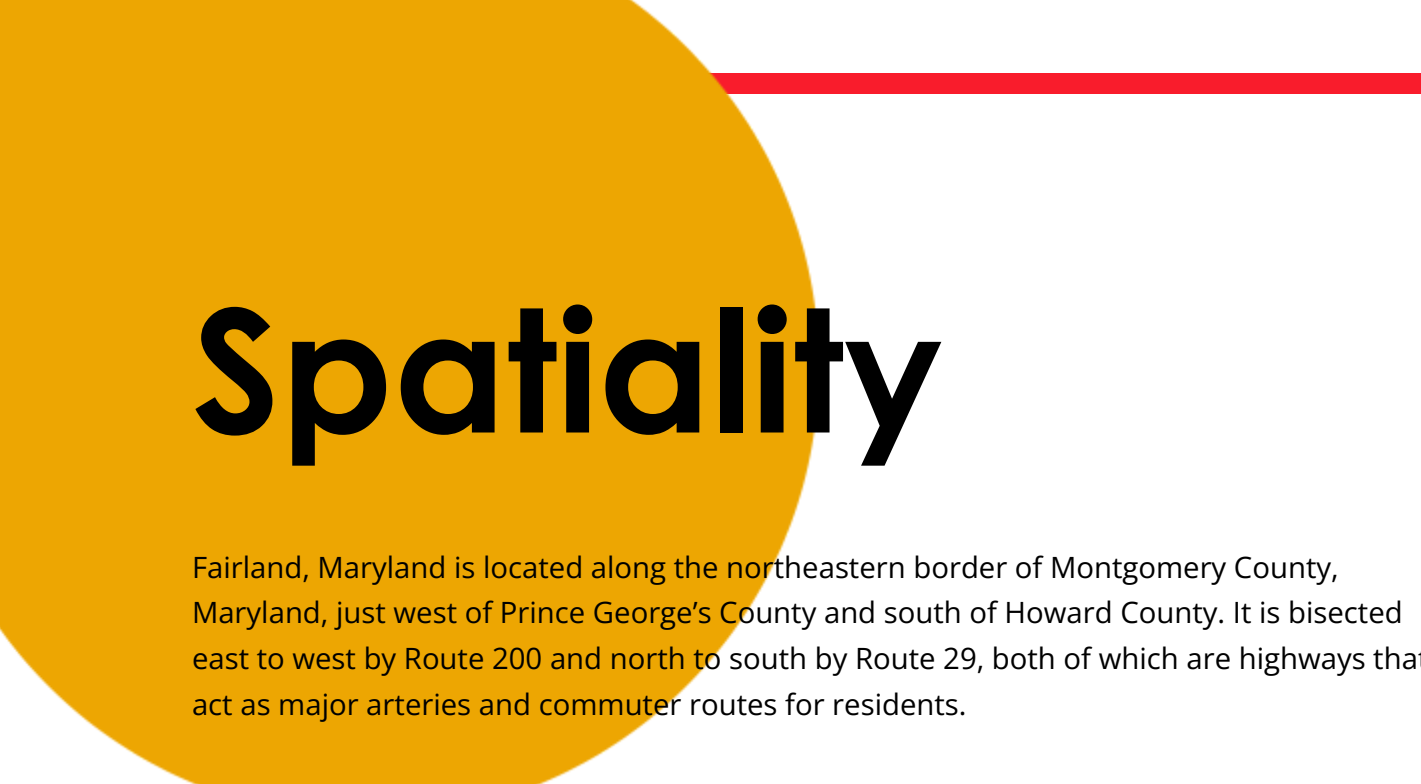
cover a wide range of planning topics, including the history of the plan-area and special considerations related to our thematic areas of emphasis. In Part II, we present three scenarios of alternative futures for the plan-area: status quo, reform, and revolution.

Part I of this report analyzes the existing conditions of the Fairland and Briggs Chaney plan-area and study area as defined by the Montgomery County Department of Planning. We gathered the data presented here in order to understand the conditions of the plan and study area. We guided our analysis using three thematic areas of emphasis: housing, community and economic development, and climate change adaptation and mitigation. We chose these thematic areas in response to the concerns and draft concepts presented by our project interlocutors at the Maryland-National Capital Park and Planning Commission (M-NCPPC). In addition to the service this project provides to our interlocutors and their planning process, our mission as a class is to contribute to the achievement of justice in the plan-area. To that end, Part I



seeks to identify the extent to which just patterns of

development exist in the study area with respect to our thematic areas in order for us to more fully explore the imaginative realization of justice through scenario planning, which we describe in Part II of this report. This part of the report surveys quantitative data and planning history for the plan-area, then concludes with an analysis of meaningful planning precedents inspired by our themes that we consider relevant to the plan-area.



Spatiality

Fairland, Maryland is located along the northeastern border of Montgomery County, Maryland, just west of Prince George's County and south of Howard County. It is bisected east to west by Route 200 and north to south by Route 29, both of which are highways that act as major arteries and commuter routes for residents.

For the purposes of this report, two boundary areas are of importance: the approved plan boundary, and the approved study area, as seen in Figure 1 above. The approved plan boundary refers to the boundary of the in-progress master plan, while the approved study area refers to a larger surrounding area that encompasses the plan-area and contextual neighborhoods. The additional study area regions are important to include in this research because the residents that live there access the resources that are under review within the plan boundary.

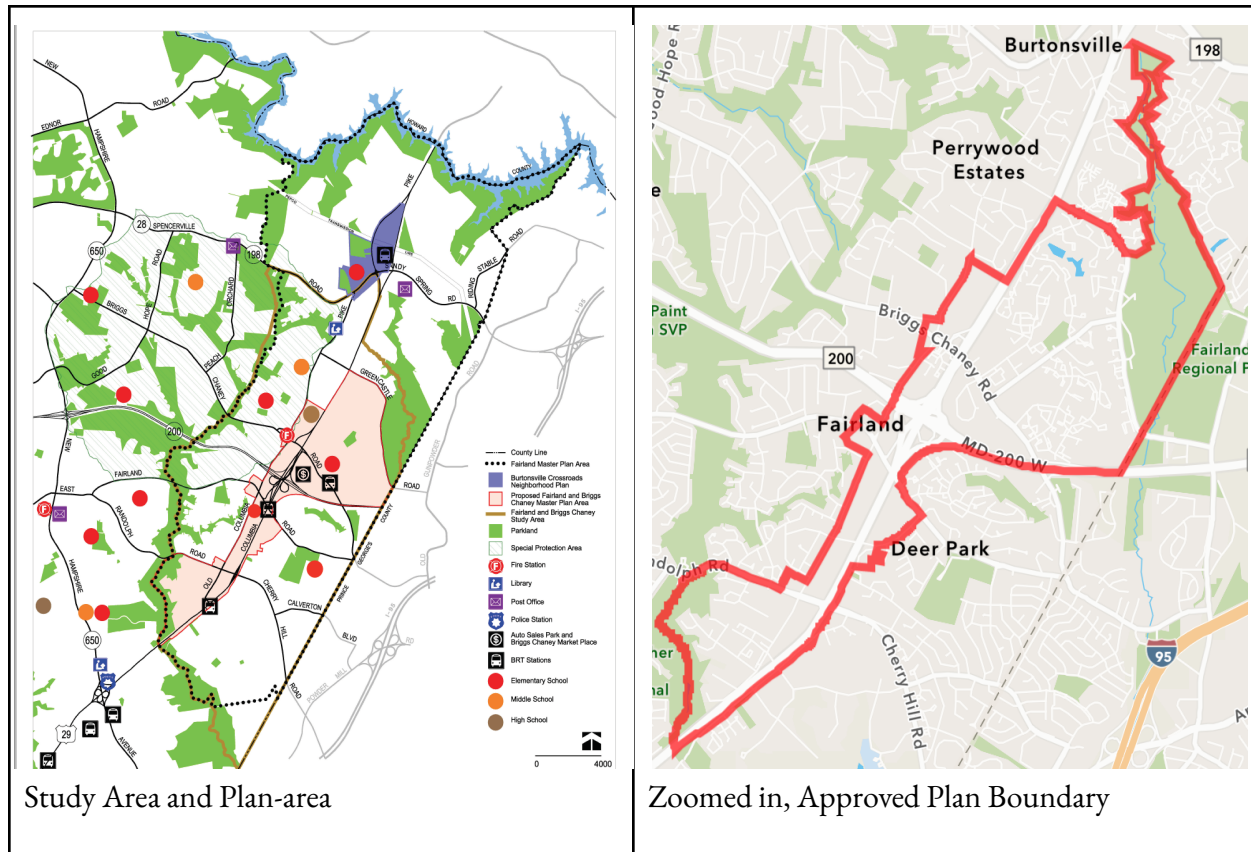


Figure 1: Fairland and Briggs Chaney study area (left) and plan-area (right). Source: M-NCPPC.

As seen in the study area map above, the original 1997 *Fairland Master Plan* included a much larger region that encompassed Calverton, Burtonsville, and parts of Colesville and Silver Spring. This is the most recent master plan for the area, and this analysis is an effort to inform the work being done by the Montgomery Planning Department to update this plan. Relatedly, the new approved plan-area, as seen in red, is much smaller and covers only a portion of Fairland, MD.

In our analysis, the study area boundary was used primarily for demographic information to ensure we consider all residents accessing resources within the plan-area. The plan-area boundary refers to the boundary that Montgomery County has delineated for their updated Master Plan, and therefore was used in our spatial analysis, which looked at more specific spatial information such as land use, transportation resources, community resources, and housing statistics, and in our scenario planning proposals. The primary dataset for our analysis is based on the American Community Survey (ACS) 2019 5-year Estimates by census tracts and census block groups. In some cases where ACS 2019 5-year Estimates were not available at those specific geographies, Fairland as a census-designated place was used as a geography.

History

Historically, the Fairland and Briggs Chaney area was a rural, agricultural region. Situated in eastern Montgomery County, MD, the region's main crop was tobacco. Tobacco farms in Montgomery County were smaller than their counterparts along the eastern shore or south due to their thin soil and rocky terrain. However, this geology was beneficial for extractive sectors such as gravel and quarries. Several such locations existed in the Fairland region directly adjacent to Prince George's County (Kelly, 2011; M-NCPPC, 1964). Today, a cement supply company exists along Cherry Hill Road, just southeast of the plan-area. Farther north in Laurel, MD, an asphalt company and a recycling facility are located west of I-95. Such industries have largely disappeared in the area, replaced by commercial and residential development.

The area's rural roots were not well-connected to the urban centers of Baltimore and Washington, D.C. (Kelly, 2011). While the D.C.-adjacent portion of the county saw suburban development beginning in the early 1940s, the Fairland and Briggs Chaney region remained largely rural and vacant (M-NCPPC, 1997). This point is emphasized in Figure 2, which shows the streetcar tracks that spread from D.C. in the late 1800s into the early 1900s. The tracks extended well into Montgomery County to the west, toward Frederick, but did not reach north to the Fairland and Briggs Chaney area. This detached nature contributed to the region's rural character that continued through the middle half of the 20th century (Kelly, 2011).

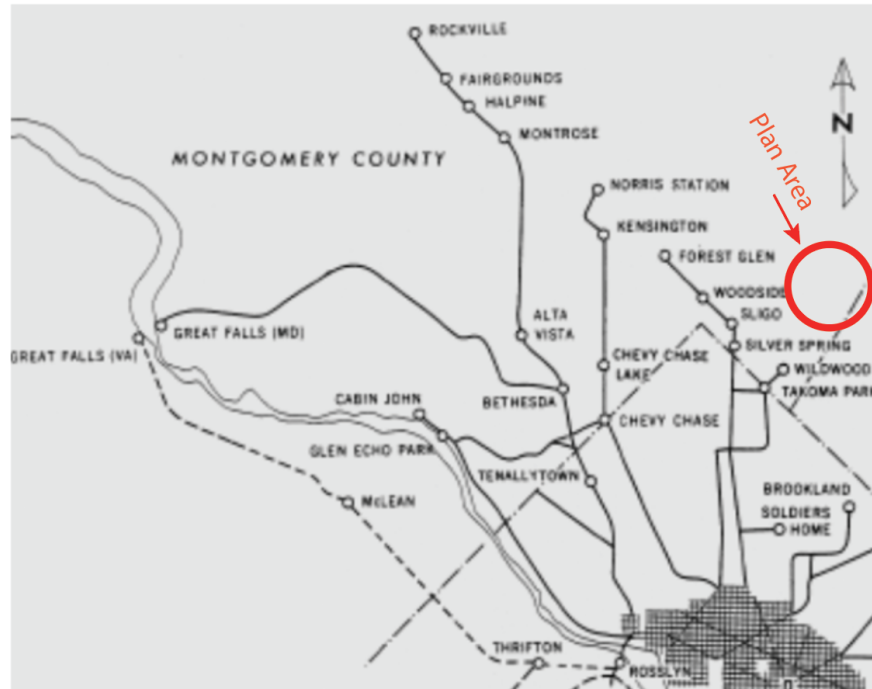


Figure 2: Streetcar connections from Washington, D.C., 1920. Source: Kelly, 2011

Moving from the historic agricultural roots of Fairland and Briggs Chaney, the trajectory toward a suburban environment began with the opening of US 29 in 1956. This replaced Old Columbia Pike as the main north-south arterial road in the study area, connecting Silver Spring to Columbia, MD. Interstate 95 construction was completed in the 1960s, providing another express north-south connection to Baltimore and D.C. The Maryland-National Capital Park and Planning Commission identified I-95 as a corridor along which denser development could occur (M-NCPPC, 1964). The roadway construction at the time was representative of the national emphasis on roadways, largely brought on by the 1956 Federal-Aid Highway Act, which matched local dollars for freeway construction (Weingroff, 1996). Still, even with roadway expansion locally and regionally, Fairland and Briggs Chaney held on to its rural roots — in 1981 over 50% of the Fairland area was farmland or vacant, and less than one-third included residential development (M-NCPPC, 1997).

Despite having a generally rural character, commercial development in the 1960s marked the beginning of a shifting landscape in Fairland and Briggs Chaney. Specifically, the Verizon Data Center located on US 29 constructed in 1965 and the Briggs Chaney Marketplace shopping center and Auto Sales Park that opened in the 1980s define much of the study area's space and character today. Much of the additional office space that currently exists in the study area was also constructed in the 1980s (Maryland Historical Trust; M-NCPPC,



1997).

The 1980s represented the peak of the study area's growth, permanently changing the character from rural to suburban. From 1980-1990, the housing stock doubled and employment tripled (M-NCPPC, 1997). The Fairland Census Designated Place (CDP) saw a 285% population increase during this period, far outpacing the growth of Montgomery County and the overall United States (U.S. Census Bureau). While population growth leveled off to single-digits in the 1990s and beyond, the area experienced steady growth that continues today.

More recently, the Intercounty Connector was constructed in 2011. The ICC connects US 1 to I-270 in an east-west direction. It drives through the study area and interacts with US 29 via a cloverleaf interchange (Maryland Transportation Authority, year?). The Flash Bus Rapid Transit (BRT) line opened in October 2020, bringing frequent service to the US 29 corridor. Flash operates two lines, one between Burtonsville and Silver Spring, and another between the Briggs Chaney Park and Ride Station and Silver Spring. Flash BRT emphasizes US 29 as a key corridor and hopes to bring better connectivity to the region (Montgomery County Department of Transportation, year; Lazo, 2020). These major developments contributed to the current suburban character of the Fairland and Briggs Chaney area today. The existing suburban environment impacts the possible futures that can be envisioned through scenario planning.

Demographics

Since 2006, there has been substantial population growth due to suburban development. The Fairland and Briggs Chaney study area population consisted of 37,284 people in 2019, accounting for 3% of the total Montgomery County population (Social Explorer, 2019). Although most are native-born, 37.2% of the study area population is foreign born, which is higher than Montgomery County and national metrics. Most of the foreign-born population migrated into the area between the years 2000 and 2009, with 41.6% of the population in the study area coming from Africa compared to 38.0% of Montgomery County coming from Latin American countries, meaning an increasingly diverse population resides in the area (Social Explorer, 2019). Although 58.5% of the study area's population is exclusively English-speaking, other spoken languages are important to mention. Approximately 10.6% of the population speak other languages such as Amharic or other African languages, followed by 9.4% Spanish, and 6.9% French (Social Explorer, 2019). This leads us to suggest that community outreach should be performed in multiple languages so all residents can feel part of the community. Figure 3 summarizes these demographic statistics

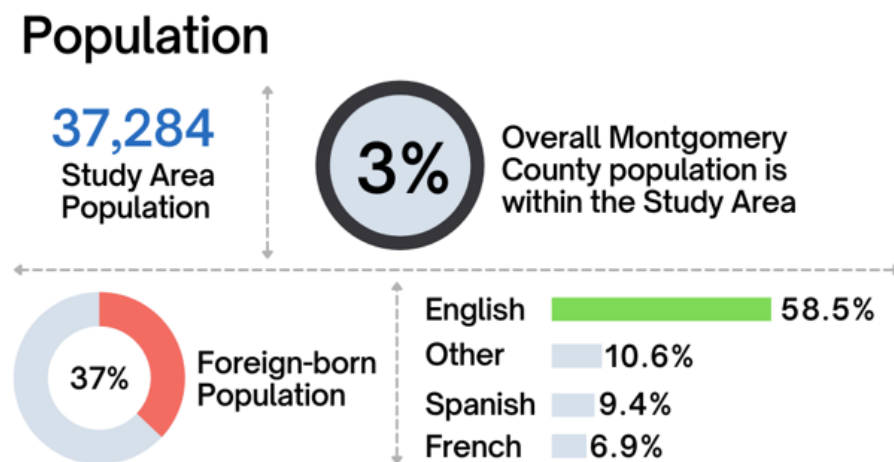


Figure 3: Population, Foreign-born, Languages spoken in the Study Area. Source: Social Explorer, 2019.

The gender breakdown for the study area indicates that females make up a majority of the population at 54.4%, compared to males at 45.6%. Although 51.8% of the study area's population is Black or African American, other racial groups are important to mention: Approximately 24.1% of the population is white, followed by 15.3% Asian, 5.3% other race, 3.4% two or more races, and 0.2% Native Hawaiian and other Pacific Islanders (Social Explorer, 2019). This demonstrates that the study area is a diverse community with different cultural backgrounds. The age breakdown for the study area indicates that 39% of the population is between 35 and 64, which are prime working years, yet acknowledging and addressing other age demographics is important because these populations have different needs—23% of young children need education, 22% of young adults need training for jobs, and 16% of the older population need a good place to retire and special health services. An infographic is presented in Figure 4.

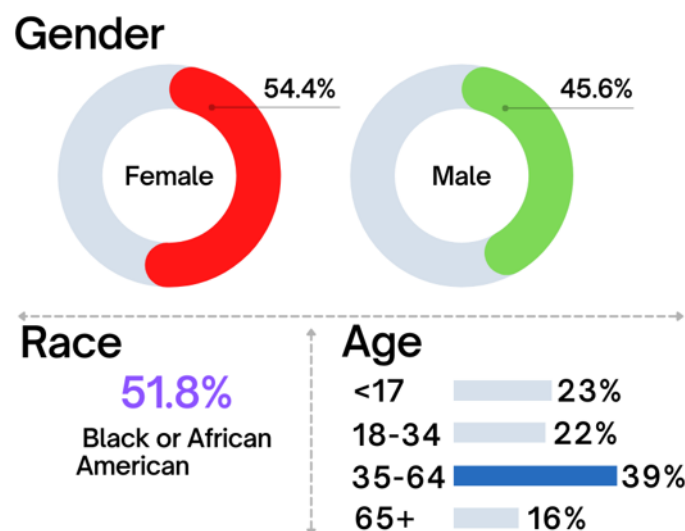


Figure 4: Gender, Race, and Age in the Study Area. Source: Social Explorer, 2019.

The Fairland and Briggs Chaney study area's and the overall nation's highest educational attainment level is some college education, meaning that there is a lot of college educated population with whom to sustain a substantial job economy, while Montgomery County accounts for post-graduate degrees (masters/Ph.D.) as their highest education level. Public school students in the study area account for 86.1%, making it slightly higher than Montgomery County and nationally, in part explained by to high private education costs (Social Explorer, 2019).

To analyze household income data, we used four income categories: under \$50,000, \$50,000-100,000, \$100,000-200,000, and over \$200,000. Although the largest household income for the study area and county falls between \$100,000-200,000, with approximately 33.8% of the population making this amount, 25% of the population in the study area earn less than \$50,000 and 75% earn over \$50,000. Nationally, 40% of the population in the US earn less than \$50,000 and 60% earn over \$50,000. Thus, the study area and Montgomery County population make more income per household, yet there is higher cost of living in the area compared to the nation. However, the study area median household income is approximately \$89,338, which is slightly lower than Montgomery County's with \$110,178 (Social Explorer, 2019).

Consistent with the rest of the county, the study area has one of the highest median household incomes in the county. About 41% of the Black or African American population in the study area contributes to the aggregate of the overall area household income, despite the Black or African American population having the lowest incomes in the study area. In contrast, the Asian population holds the highest average household income in the study area with \$121,225, demonstrating income inequalities among races within the study area. Today, professional and related occupations in the study area account for 31% of the population's employment, a highly professional workforce with a mix of local businesses, office jobs at the Verizon Communications complex and the Auto Mall, and the biotechnology industry nearby. See Figure 5.

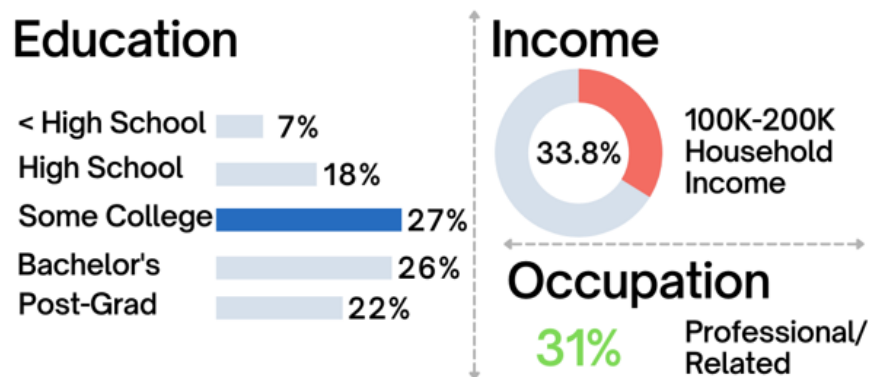


Figure 5: Education, Income, and Occupation infographics for the Study Area. Source: Social Explorer, 2019.

Past and Current Plans

Over time, multiple plans have impacted both Montgomery County and its Fairland and Briggs Chaney area. Given their impact on the Fairland and Briggs Chaney area, the past plans we focus on are: *On Wedges and Corridors* (1964), the *Fairland-Beltsville Plan* (1968), the *Master Plan for Eastern Montgomery Planning Area* (1981), and the *Fairland Master Plan* (1997).

On Wedges and Corridors, 1964

The General Plan *On Wedges and Corridors* was adopted in 1964. It forwarded a vision of development that avoided sprawl and the loss of open space and agricultural land. The goals of this plan were to designate space for growth by population, employment, and other needed services and amenities. It established contemporary zoning practices. Rather than only considering conflicting land uses for zoning and rezoning, the authors of the plan as a holistic approach to zoning and planning.

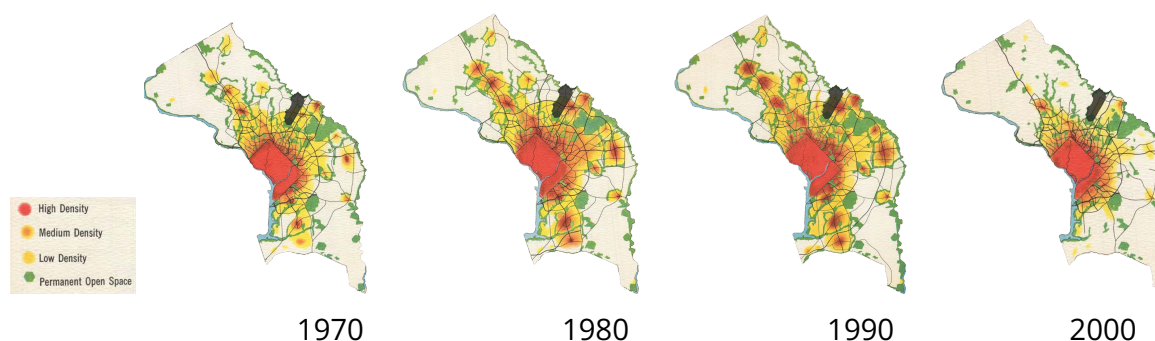


Figure 6: Washington Metropolitan Area Density Map Projections. Source: *On Wedges and Corridors, 1964*.

The density maps in Figure 6 indicate that *On Wedges and Corridors* focused on projected



growth and development along corridors while preserving open spaces and rural areas. One can see the study area marked in context to the growth patterns. This growth pattern development was guided by five essential functions: (1) Preventing the uneconomic scattering of suburban housing in the wedges and permitting corollary savings and conveniences by concentrating development within the urban corridors; (2) giving contrast and interest to the Regional District through the creation of distinctive variations in the character and density of development; (3) protecting the rural environment as a source of natural resource business; (4) assuring adequate open space for outdoor recreation; and (5) protecting public water supplies.

Fairland-Beltsville Plan, 1968

In the 1964 *On Wedges and Corridors Plan*, Fairland was depicted “as the edge of a corridor city to be located on the I-95 corridor in Prince George’s County” (*Fairland Master Plan*, 1997). The *Fairland-Beltsville Plan* further developed the concept of Fairland as a corridor city and offered land use, zoning, and transportation recommendations. Higher density development, such as apartment buildings and townhomes, were planned for around the city’s core.

Master Plan for Eastern Montgomery Planning Area, 1981

The adopted *On Wedges and Corridors* and the *Fairland-Beltsville Plan* of 1968 established the Fairland and Briggs Chaney area as a “corridor city” and had land use and zoning recommendations for the area. The 1981 *Master Plan for Eastern Montgomery Planning Area* plan eliminated Fairland and Briggs Chaney as a “corridor city” and planned for it to be a suburban area, detaching it from I-95. This plan has four counterparts covering the areas of Cloverly, Fairland, White Oak, and Four Oak, drafted concurrently.

Prior to 1981, less than one-third of the area was developed while the rest was the open space or rural area that the General Plan intended to preserve. With the “corridor city” concept dropped in favor of a more suburban Fairland and Briggs Chaney, this plan incorporated multiple county policies and encouraged different types of housing types and densities, including Moderately Priced Dwelling Units (MPDUs). The plan incorporated the “need for affordable housing, preservation of agricultural land, and environmental protection” (*Fairland Master Plan*, 1997). This plan also introduced and encouraged a concept of transit serviceability, which emphasized density and employment centers near transit hubs.



Fairland Master Plan, 1997

After the 1981 *Master Plan for Eastern Montgomery County Planning Area*, there was a dramatic increase in growth in the study area, but “sometimes without the timely provision of matching infrastructure” (*Fairland Master Plan*, 1997). The goal of the 1997 Plan was to reshape land use and zoning to be consistent with the General Plan, providing safety for pedestrians and bicyclists crossing US 29 to reach facilities or communities and emphasizing single-family detached housing developments. There were seven goals of the General Plan that the *Fairland Master Plan* supported:

- *Land Use*: achieve a variety of land uses and development densities consistent with the Wedges and Corridors’ pattern.
- *Housing*: encourage and maintain a wide choice of housing types and neighborhoods for people of all incomes, ages, lifestyles, and physical capabilities at appropriate densities and locations.
- *Economic Activity*: promote a healthy economy, including a broad range of business, service, and employment opportunities at appropriate locations.
- *Transportation*: enhance mobility by providing a safe and efficient transportation system, offering a wide range of alternatives that serve the environmental, economic, social, and land use needs of the County and provide a framework for development.
- *Environment*: conserve and protect natural resources to provide a healthy and beautiful environment for present and future generations; and manage the impacts of human activity on our natural resources in a balanced manner to sustain human, plant, and animal life.
- *Community Identity*: provide for attractive land uses that encourage opportunity for social interaction and promote community identity.
- *Regionalism*: promote regional cooperation and solutions of mutual concern to Montgomery County, its neighbors, and internal municipalities.

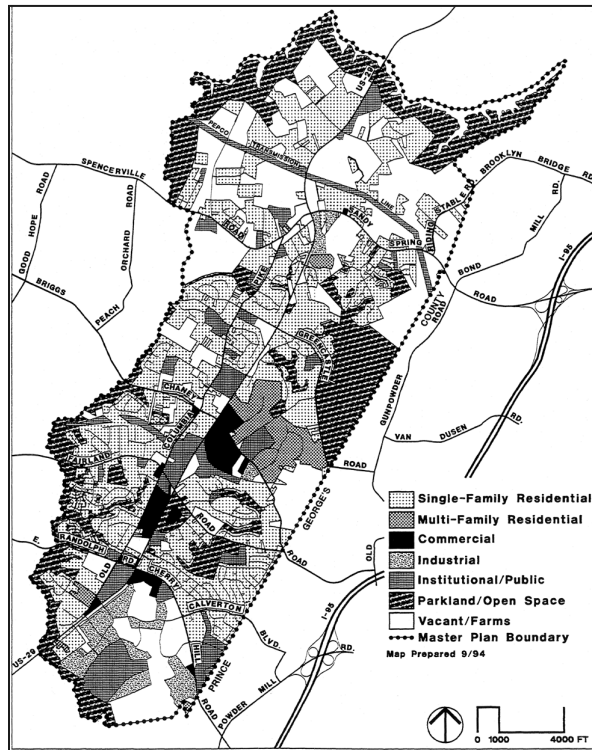


Figure 7: Existing Land Use Map. Source: *Fairland Master Plan* (1997).

The 1997 plan promoted the visions of the adopted *On Wedges and Corridors* plan. When discussing land use, the *Fairland Master Plan* established medium densities in suburban communities and low densities in residential wedges while directing future growth to the I-270 Corridor. This plan also proposed a wide range of housing densities and recommended designating undeveloped areas for detached single-family units. To promote economic activity, the plan sought to enhance existing employment centers by recommending additional uses in the area and improve connections from there to residential areas. On transportation, the plan emphasized east-west travel. One of the major ways this plan promotes community identity was by improving connections between communities.

Thrive Montgomery 2050

The 2021 draft plan *Thrive Montgomery 2050* amends the 1964 General Plan *On Wedges and Corridors* with a 30-year planning horizon. Both plans discuss compact growth, corridor development, and preservation of open space, though the methods and reasons for mentioning these approaches differ between the two plans. While *On Wedges and Corridors* progressed ideas of compact, transit-oriented development, the plan failed to advocate for mixed uses. In addition, the plan utilized buffers between land uses deemed incompatible (*Thrive Montgomery 2050*, 2021). In contrast, *Thrive Montgomery 2050* encourages mixed uses.

Thrive Montgomery 2050 uses the major themes listed below to achieve a more equitable, economically stable, culturally rich, and mobile Montgomery County.

- Compact Growth
- Complete Communities
- Design, Arts, and Culture
- Transportation and Communication Networks
- Affordable and Attainable Housing
- Parks and Recreation for an Increasingly Urban Community

Similar to *On Wedges and Corridors*, *Thrive Montgomery 2050* is concerned with compact growth. However, the plan approaches this problem with new methods, focusing instead on growth in downtowns, centers of intensive development, town centers, and rural villages. The purpose of controlling development to some degree helps create fewer sprawling development projects. Infill development is identified as a preferred method to efficiently use land. Encouraging compact growth will also help achieve 'complete communities' in Montgomery County.

We emphasize complete communities as identified in *Thrive Montgomery 2050* for their relevance to the plan-area. Complete communities are defined as "walkable places with a variety of land uses, infrastructure, services and amenities that meet a wide range of needs for the residents and workers" (Montgomery County Planning, "Complete Communities," 2021). These communities are also based on the idea of the "15-minute city," which strives to have daily amenities within a 15-minute walk or bike ride. Complete communities are meant to strengthen pre-existing communities, as new greenfield development opportunities are scarce within the county (*Thrive Montgomery 2050*, 2021). The Fairland



and Briggs Chaney plan-area is similarly built out.

The Design, Arts, and Culture section of the plan discusses urban design principles for the county and the importance of functional aesthetics. Relating back to mixed-use development, the plan encourages infill, reuse, and retrofitting of commercial sites. The plan highlights the creation of cultural and public art hubs in the areas identified for complete communities and corridors (*Thrive Montgomery 2050*, 2021). This plan section also supports a more equitable and inclusive dispersal of arts and culture throughout the county, with a focus on places that have been traditionally underserved in this area. Woven throughout the section is a clear desire for the arts to be an economic driver for the county as well. Strengthening the arts and building off pre-existing cultural amenities in the Fairland and Briggs Chaney area could be a means of economic and community development. This would require places and spaces set aside for the arts, perhaps existing public spaces, and parks, or redesigned commercial centers in the Plan-area.

Transportation and communication network improvements involve addressing concerns about how residents get around the county and how they communicate virtually. Transportation in *Thrive Montgomery 2050* is multimodal, focusing on public transit and encouraging walking, rolling, and biking. This requires an improved street network, which the plan addresses through creating shorter blocks through street grid expansion, making the pedestrian realm a priority, using 'complete streets' techniques, ending the construction of new highways and major street widening, and the conversion of existing roadways into pedestrian-friendly areas (*Thrive Montgomery 2050*, 2021).

For communication networks there is a focus on communications investments, fiber optics, and supporting telework. For the Fairland and Briggs Chaney area, the existence of major roadways US 29 and MD 200 can pose a threat to a multimodal, pedestrian-friendly reality. However, the BRT services partially address transit needs and there is a clear interest in a more pedestrian focused future. Communication networks may also pose a challenge for the plan-area, and it is important to consider how many residents currently telework and will telework in the future, and how to support the growth of this national and global trend within the Fairland and Briggs Chaney area.

In terms of housing, affordable and attainable housing are major concerns for the county. Montgomery County plans to address these issues through creating more housing and increasing the variety of housing typologies available. Through these methods, racial and socioeconomic inequality can also be addressed. This is essential for Fairland and Briggs Chaney, due to the needs of large groups of lower-income residents of color. New housing



should be located near amenities, jobs, and transit (*Thrive Montgomery 2050*, 2021). Diversification of the housing stock will also increase the mix of incomes, further supporting housing equity in neighborhoods. In addition, more housing types will allow for the realization of 'complete communities' (*Thrive Montgomery 2050*, 2021).

As Montgomery County's population grows, the pressures for retaining parks and open spaces also grow. To create more parks, the county plans to acquire lands in urban centers. This may prove to be a challenge, due to the lack of leftover greenfields. In addition, capitalizing on the presence of privately owned public spaces to increase park access and amount is a method recommended in the plan. Environmental concerns, including sustainability and climate change, are also addressed in the plan. Due to Fairland and Briggs Chaney's need for more parks and open space, redevelopment of existing areas, such as strip malls and parking lots may be a good option.

Current Land Use

The plan-area's current zoning is illustrated in Figure 8. The zoning can be divided into two sections. The eastern half of the planning area mainly allows multi-family residential and townhome residential development with some scattered commercial zoning, whereas the western half of the plan-area is made up mostly of single family residential zoning.

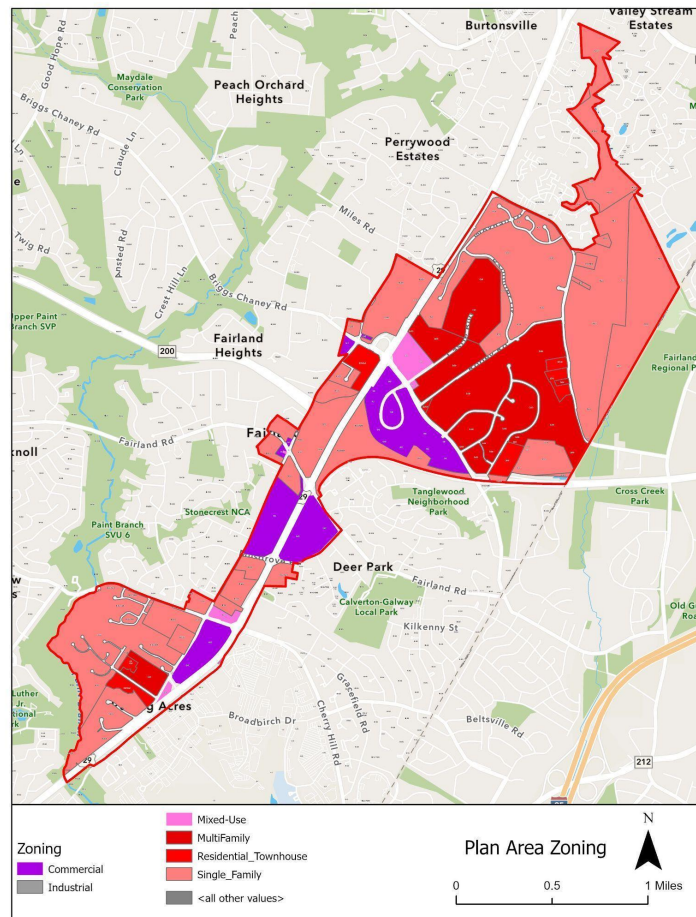


Figure 8: Current zoning of the plan-area. Source: M-NCPPC.

The plan-area also has two abutting overlay zones. Overlay zones provide additional regulations on top of the existing zoning. Overlay zones are generally more flexible and easily implemented than traditional zoning. Fairland and Briggs Chaney's two overlay zones are the Paint Branch Overlay Zone, which limits impervious surfaces and regulates development, and the Burtonsville Employment Overlay Zone which allows a mix of land uses and implements design guidelines. The Burtonsville Employment Overlay Zone also sets restrictions for what type of businesses can be located inside this zone and which ones cannot.

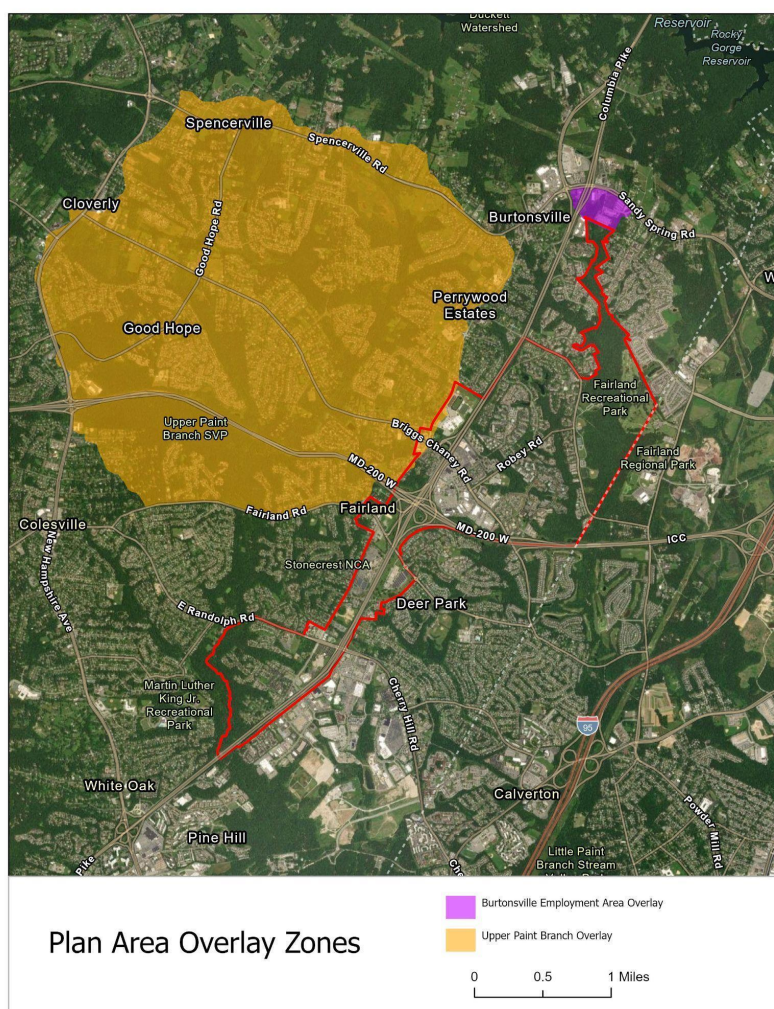


Figure 9: Overlay zones abutting the plan-area. Source: M-NCPPC.

Typology of Other Uses

The overall typology and quality of other uses can be distinguished between the intensity of development, scale and grain, land use, and movement network characteristics (Redbridge, 2013). The planning area includes core, big-box, and mixed-used outlier typologies. Core typology is the focal point where residential communities meet, usually located along major arterial streets or intersections. Big-box typology is large-scale non-residential, located close to major infrastructure. Mixed-use outlier typology is medium to large-scale clusters of community services located within walking distance near residential neighborhoods alongside a defined landmark. Figure 10 displays the typology comparison.



Figure 10: Core, Big-Box, and Mixed-Use Outliner Typologies for the Planning Area. Source: Redbridge, 2013

The quadrant northeast of MD 200 is zoned as a core typology, providing the heart and focal point of a town center for the surrounding communities. The core is along the aerial street Briggs Chaney Rd. carrying large numbers of traffic and vehicles from the MD 200 and US 29 intersection. The urban core includes the Auto Sales Park, Briggs Chaney Marketplace shopping center, and office spaces. The core area brings employment and revenue to the community. This area has relatively dense development with retail, commercial, office, and industrial land uses. Core areas have finer grain plot sizes and scale, building layouts that face each other along the streets, and streets that give access to both pedestrians and vehicles. Figure 11 displays the core typology north of MD 200 in the planning area.



Figure 11: Core Typology in the Planning Area, North of MD 200. Source: Google Maps, 2021.

The area south of MD 200 is recognized as a big-box typology, providing a large scale of non-residential development. The big-box area is located along highway US 29 carrying substantial office developments known as the two Verizon Communication properties. Although such development is along the edge of US 29, it is not accessible from either side. The big-box area offers substantial employment in the Verizon Communication properties. This area has high to medium-density office land use with surface car parking. The plot sizes and scale of the big box area are large urban grain surrounded by large parking lots, large floor plan building layouts, and are vehicle-dominated, not accessible for pedestrians and cyclists from a single access road (Redbridge, 2013). Figure 12 displays the big-box typology south of MD 200 in the planning area.

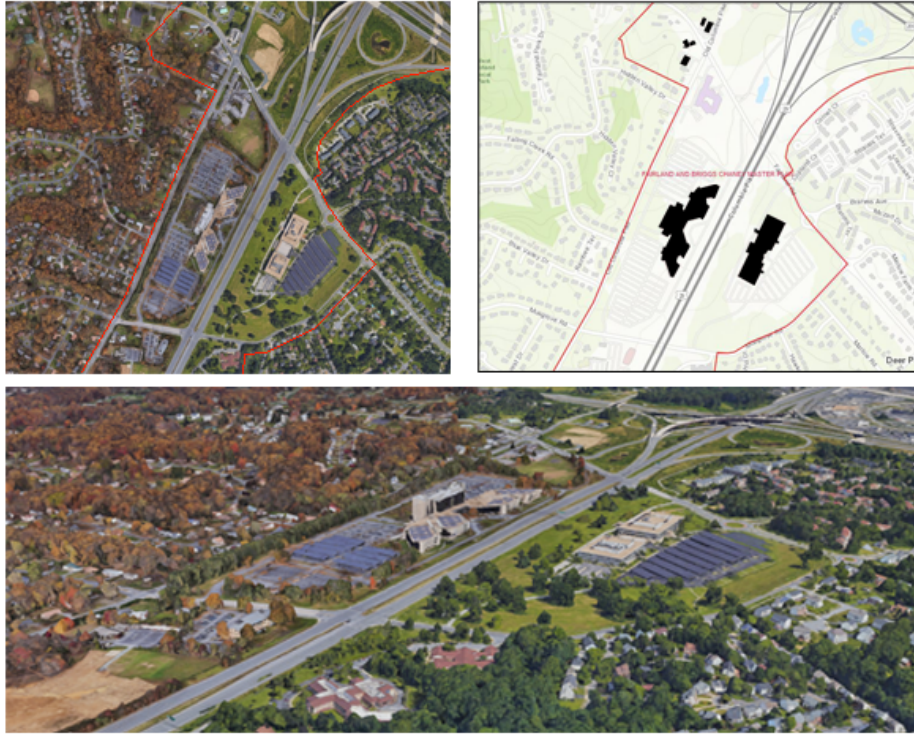


Figure 12: Big-Box Typology in the Planning Area, South of MD 200. Source: Google Maps, 2021.

Moving south along US 29, the typology is recognized as a mixed-use outlier, providing a cluster of facilities surrounding a defined landmark. The mixed-use outlier is located along the primary street Old Columbia Pike, providing services within walking distance to the south neighborhood of E Randolph Rd. The mixed-use outlier includes the General Conference of Seventh-day Adventists Headquarters, Silver Spring Pediatrics, and Exxon gas station, which provide many benefits to the surrounding neighborhood. The mixed-use outlier area brings potential services to the church, clinic, and gas station. This area has a relatively medium density with commercial and office land uses. The plot sizes and scale of the mixed-use outlier area are medium to large grain, services face the street edge, and there is medium pedestrian and vehicular access serving the community needs. Figure 13 displays the Mixed-Use Outliner typology along US 29 in the planning area.



Figure 13: Mixed -Use Outliner Typology in the Planning Area, Along US 29. *Source: Google Maps, 2021.*

Major Landmarks

The Fairland and Briggs Chaney planning area consists of many landmarks along the Route 29 corridor. The area encompasses the Briggs Chaney Marketplace, Auto Sales Park, Verizon Communications Properties, and the Seventh-day Adventist Church general headquarters.

In the northeastern quadrant area along Briggs Chaney Road lies the Briggs Chaney Marketplace. In 1982, the shopping center was built, providing a variety of retail options such as a Global Food grocery store, Ross Dress for Less clothing store, and fast-food chain restaurants Subway, Dunkin Donuts, and McDonald's (Saul Centers Inc, 2021). Although there are various stores in the Briggs Chaney Marketplace, Global Food is the only grocery store within the planning area. More grocery store locations and adequate food accessibility are required to provide all residents equitable access to healthy and affordable food and adequate food choices for meeting culturally appropriate nutrition.

Across from the Marketplace shopping center is the Auto Sales Park. Since 1968, the Auto Sales Park has increased to approximately 11 automobile dealerships such as Chevrolet, Ford, Volvo, Porsche, BMW, and more. Today, the auto mall provides various open showrooms and service centers for most car brands in one central location. In response to changes in transportation and consumer behaviors, there is an opportunity to shift to digital automotive retailing while reducing a large amount of surface parking to improve the heat island effect.

Passing underneath MD 200, lies the Verizon Communications Properties on both sides of US 29. Although not pedestrian-friendly, the Verizon Communications properties became a large, recognized office hub. In 1965, the first east Verizon building was built, followed by the west Verizon building built 31 years later. Verizon Communications Properties provides many jobs for Montgomery residents and regionally is a crucial employment for the planning area (M-NCPPC, 2021).

South along US 29, a glass building to the right is the Seventh-day Adventist Church's general headquarters. Since 1989, the church headquarters has evolved as a tourist location for church members and church staff. The Adventist general headquarters has increased to nearly 800 employees, featuring committee events/meetings for the community and the public (General Conference Adventist, 2021). As church needs continued to grow, more building additions have been built to accommodate church members and their fast-growing population. Figure 14 (next page) provides a detailed map of the major landmarks for the planning area.



Figure 14: Major Landmarks in the Planning Area, Along US 29. Source: MCAtlas, 2019.

Public Spaces

The planning area includes public spaces, yet most spaces are isolated from one another. There are two parks within the planning area, Fairland Recreational Park and Edgewood Neighborhood Park. These parks are northeast of the planning area, north of MD 200. Despite the Greencastle Trail in Fairland Recreational Park's connectivity to its surrounding residential neighborhoods, recreational facilities (sports fields, playground, courts) along Greencastle Road require walking paths between recreational areas. Fairland Recreational Park is isolated compared to the whole planning area, providing limited access to the neighborhood area south of MD 200. New park locations (like Edgewood Neighborhood Park) should be near existing or new office and commercial spaces to encourage proper accommodation of the needs of different age groups of the local population.

There are two dispersed public schools in the planning area, Greencastle Elementary School and Paint Branch High School. Greencastle Elementary School is a great example of a community integrated school, including attractive and well-maintained sports fields, nearby bus stops, visible pedestrian crosswalks, and ADA-accessible sidewalks to the neighborhood north of MD 200. Paint Branch High School has pedestrian route connectivity to buildings and sports fields in one large area, nearby walking paths, and visible crosswalks, but less pedestrian traffic due to the overpass along Briggs Chaney Road. High school students living in the neighborhood east of US 29, would have to take a vehicle or bus as a safer alternative to get to the school. Aside from the elementary and middle schools, there is no middle school within the planning area. Benjamin Banneker Middle School is the only middle school in the study area with inconvenient accessibility to middle school students south of MD 200.

Two centers are within the planning area, East County Community Center and Fairland Center. Both centers are located across US 29 but are only accessible by vehicle from one neighborhood to the other. Although the centers have connectivity to the surrounding neighborhoods and bus stops, more centers are necessary to accommodate the population growth. Newer centers should have defined crosswalks and sidewalks with public plazas where residents can gather.

There are five places of worship, Southern Asian Seventh-day Adventists, General Conference of Seventh-day Adventists, United Telegu of Seventh-day Adventists, Guru Nanak, and Allen Chapel AME Church. It is assumed that the majority of residents of the planning area subscribe to the Protestant Christianity religion due to the prominence of these places of worship. All places of worship are located south of MD 200 along US 29, surrounding the General Conference Seventh-day Adventists headquarters. Guru Nanak & Allen Chapel AME Church need well-connected sidewalks, visible crossings, and signage.

The Burtonsville Volunteer Fire Department is the only fire station in the planning area. The fire station has accessible ADA sidewalks, crossings, and bus stops for emergencies. Although the fire station is along a major arterial road, it forces residents who live across US 29 to walk along Briggs Chaney Road. More public services such as police stations, hospitals, and clinics are needed in the planning area to serve all people and strengthen the economy. Figure 15 shows a map of the main public and community spaces in the planning area.

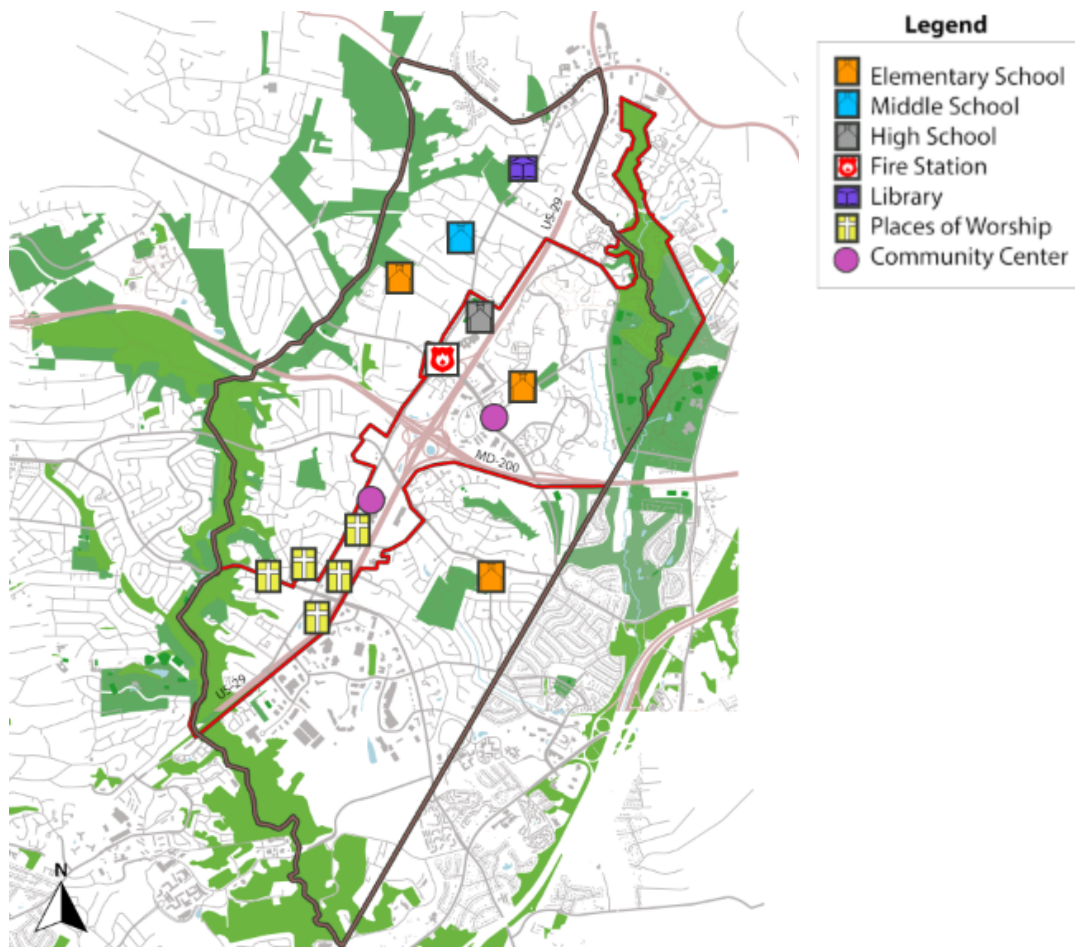


Figure 15: Public Spaces in the Planning Area. Source: MCAAtlas, 2019.



Community Assets

Looking beyond physical landmarks, community assets are institutions, structures, spaces, experiences, or networks that help to enhance and support a community. They can be physical and non-physical and may be leveraged to reinvigorate a place or distribute resources (Community Engagement and Environmental Justice Health Lab, 2019; Drakeford, 2021).

Assets contribute to community cultural wealth (Yosso, 2005). Yosso argues that the traditional cultural capital approach is deficit-based, as it assumes non-white communities do not have white-centered forms of capital (such as strong English language proficiency). Instead, Yosso points to the concept of community cultural wealth as an assets-based approach, combining not just traditional cultural capital but many other forms of capital that are abundant in a diverse array of communities. All forms of capital combine to create cultural wealth which every community can accumulate. Figure 16 displays Yosso's concept in full.

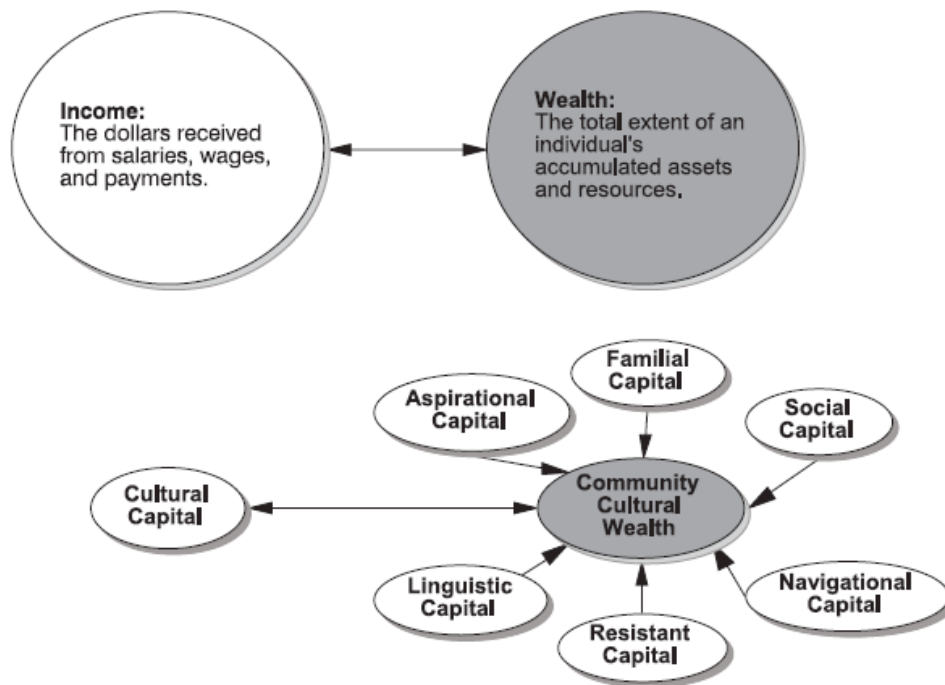


Figure 16: Tara Yosso's concept of community cultural wealth. *Source: Yosso, 2005.*

The Center for Community Engagement and Environmental Justice Lab at the University of Maryland uses the Environmental Benefits District Framework to explore community assets and liabilities (often referred to as salutogens and pathogens). This method seeks to increase the number of community benefits, while decreasing the number of community pathogens in order to increase community cohesion and public health (Community Engagement and Environmental Justice Health Lab, 2019). In our scenario planning efforts, we use this model to increase salutogens while mitigating pathogens.

From our perspective as students and outsiders of the community, we have gathered a non-exhaustive list of community assets that exist in the Fairland and Briggs Chaney area. These include attributes such as a community garden, local historic locations, and the Community Center. Additional non-tangible assets exist in the study area, including the local farmers and artisans market, the diversity that exists in the community, the Global Food grocery store (which may provide increased availability of culturally-appropriate foods compared to a Giant or Safeway, for example), and local art. Figure 17 shows the partial list

of assets identified.

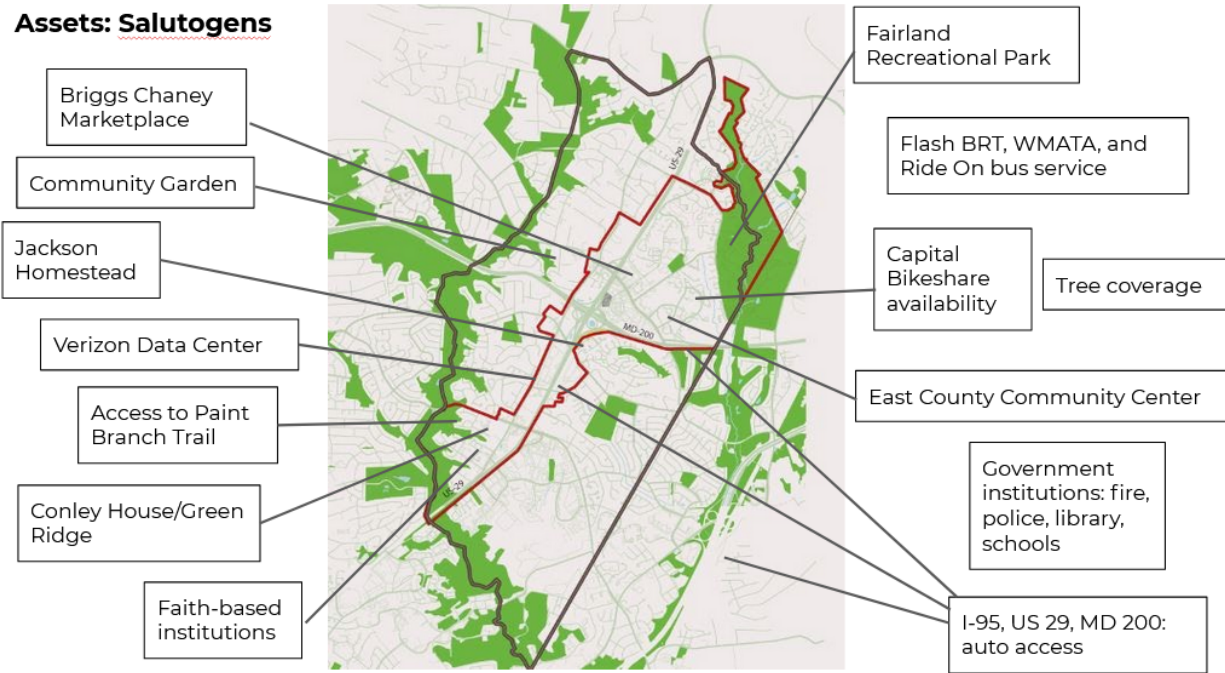


Figure 17: A partial list of Fairland and Briggs Chaney community assets.

A more complete exercise in asset mapping would require the involvement of residents identifying places and networks that they define as assets. In seeking out community assets, planners and community members can take part in several practices. A Community Environmental Scan, for example, is a descriptive analysis of a neighborhood that can identify needs in a community as well as existing resources and institutions, potential partnerships, and gaps in services. One unique technique used in asset mapping exercises is photovoice, in which community members take photos overlaid with text or audio descriptions in their own words (Drakeford, 2021).

On the other end of the spectrum, it is important to note the pathogens that may exist in the Fairland and Briggs Chaney area. The University of Maryland's Community Engagement and Environmental Justice Health Lab defines pathogens as negative community infrastructure and challenges that harm population health and detract from community cohesion (2019). From our perspective, possible pathogens include pollution and physical division created by US 29 and MD 200, multi-modal transportation challenges, and food insecurity in the area.



Community Engagement Strategies

Current Fairland and Briggs Chaney engagement strategies, according to the *Fairland and Briggs Chaney Master Plan's* (2021) Scope of Work, include listening, visioning, refining, and sharing. Tools to implement these strategies are both in-person and web-based, to capture as many residents as possible, while being mindful of current pandemic conditions. Due to the large percentage of residents speaking languages other than English, community engagement materials and events should be interpreted in other languages whenever possible.

The Arts and Planning Toolkit discusses creative engagement, defining it as an “...approach to community engagement that uses creative tools and artistic experiences to help diverse stakeholders imagine new approaches to planning processes...” (Creative Engagement, 2021). Creative engagement goes further than traditional engagement by using imaginative elements in the planning process. These flexibility and creativity are an advantage in problem-solving thinking and can help planners meet the community where they are and how they learn.

The Toolkit provides several examples of successful projects. Takachizu (2017) in Little Tokyo, Los Angeles may be of particular interest for its creative engagement of the public and storytelling element. This project, translating to “treasure map,” invited community

members to participate in an exhibition themed around personal and historical significance (Creative Engagement, 2021). Residents brought significant objects in their lives to be documented and displayed, ranging from paper food boats to yaki onigiri. The project timeline was one year, but it lives on through zines (or independently printed magazines) and an online element. The lessons from Takachizu are having a community-centric focus and inviting the residents to express what is significant to them. The project related to planning by also documenting the changes happening in Little Tokyo over time through the objects brought in. Though the focus was on the community and their stories, the facilitators helped translate residents' visions during the description and documentation process.



Figure 18: LA's Little Tokyo community residents invited to share what they value using objects in the Takachizu community engagement process. *Source: Takachizu, 2017.*

Also highlighted by the Arts and Planning Toolkit is Montgomery County Planning Department's own Bicycle Master Plan (2018) (Creative Engagement, 2021). More directly planning related, the department's idea to take over parking spaces gives a visual guide for residents to see a potential future. The Toolkit notes that "The Montgomery County bicycle lane simulation supported people's ability to imagine and understand different mobility options." Community members were also reached through an online photo contest, which highlights the importance of both in-person and online engagement.



Figure 19: Interactive community engagement event for the Bicycle Master Plan. *Source: Montgomery County Bicycle Master Plan, 2018.*

Overall, the lessons to be learned from both projects are the importance of multiple forms of engagement (online and in-person) and using professional skills to guide or interpret the community's ideas. Engagement is ultimately about the community, and planners have an opportunity to better their vision and work through the incorporation of residents' feedback.

Drawing from the examples above and the lessons they highlight, three interesting potential engagement strategies emerge. Three potential ideas for Montgomery County to implement could be 'engagement stations', featured as coffee and lemonade stands, hand drawings of what people want to see in their community, and teaching students about planning through visiting schools. These ideas draw on meeting people where they are in the community, by facilitating casual conversations over refreshments at community centers or bus stops, utilizing pre-existing community events or centers as a space or using school campuses. It is important to note that these methods are in-person, so virtual versions, like Google Jamboard to hear from residents, submitted drawings, and online courses to capture an online presence would also be helpful and complementary.

The coffee and lemonade stands would cater to adults, teens, and children, while also giving residents a choice. In providing a refreshment, the planners can have a less intimidating way of drawing people in to talk about planning projects currently affecting their community. Often, the public may not know much about the specific technical plans currently being studied or implemented, and they could feel intimidated. Providing some kind of incentive, whether this be something tangible to take home, like a flyer or bag, or a beverage, can attract residents and reward them for their interest.



Drawing a community's future could use an artist to translate ideas to paper or celebrate the residents' own art directly by allowing them to draw by themselves. Both methods have advantages, either through helping the community articulate their ideas, as in the case of Takachizu, or by letting the community members directly communicate their wants. This style of project was used for *Thrive Montgomery 2050*, showing that it is an effective method of idea gathering.

By reaching school age residents, the wider community will be reached, as the students will likely spread information to the adults in their lives. Also, children are current and future stakeholders. With decades-long planning horizons, they will be a major group of adults to plan for in the future, if they stay in the community. Getting people involved in their civic processes and local community may increase the likelihood that they will stay and become engaged in the area they have grown up in.

Stakeholder Analysis

The county has provided many opportunities for the students to interact with and gain exposure to the community's needs. This partial list represents our current, limited understanding of the community.

The first and most obvious group of stakeholders is the project team. This team is made up of us (the studio students, instructor, and teaching assistant), the PALS team, and the Montgomery County staff members. The second and arguably more important group of stakeholders is the people and institutions that are located in the study area. Some of the distinct groups we identified are small business owners, workers, visitors, community leaders, landlords, renters, and homeowners. These categories may overlap, for example, a renter may also be a leader in the community, but they represent the main groups of individuals who will be distinctly affected by what happens in the planning area (and potentially by our own planning proposals). These stakeholder groups also have distinct agendas in the area (i.e., needs, challenges, expectations, demands). Some of the groups that we identified were large businesses (e.g., Verizon), community organizations (e.g., Forcey Bible Church), and small businesses (e.g., Fairland Ethiopian Restaurant and Market). These stakeholders and others similar to them have profound impacts on the community and should be partnered with and included in the planning process.



Mobility & Accessibility

The Fairland and Briggs Chaney study area is home to a highly mobile and auto-dependent population, requiring an effective transportation network. According to 2019 data from the American Community Survey (ACS), 73% of residents within the study area drove alone to work, representing the majority (Census Reporter, 2019).

Other forms of transportation, including transit, walking, and biking made up smaller percentages. When compared against Montgomery County, fewer residents take public transit in Fairland and Briggs Chaney. In comparison to the United States as a whole, the Fairland and Briggs Chaney study area has a slightly higher percentage of residents using transit (Census Reporter, 2019). Figure 20 presents a more detailed chart.

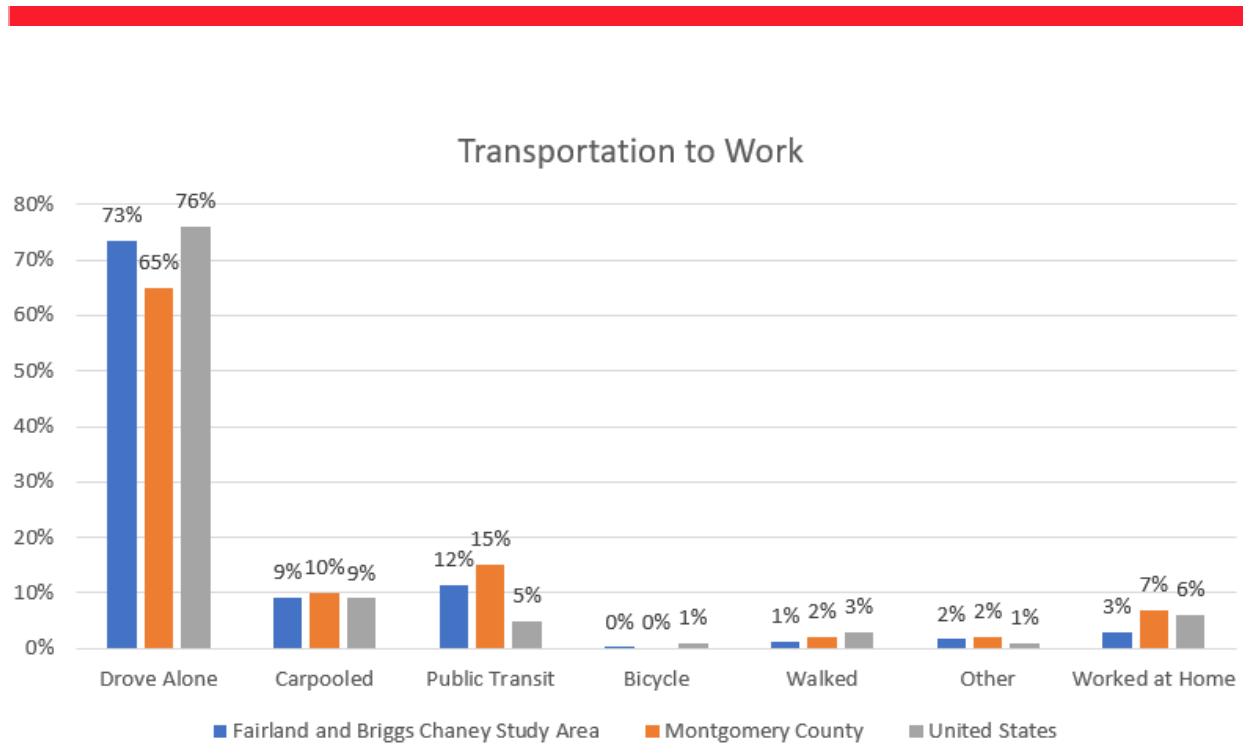


Figure 20: Transportation to work: Fairland and Briggs Chaney, Montgomery County, United States Source: *Census Reporter, 2019.*

This analysis is based on 2019 ACS data; therefore, it was collected before the COVID-19 pandemic and the opening of the Flash BRT line. These numbers may have changed due to changing work environments, transportation habits, and accessible rapid transit options in the interim. Montgomery County's Ride On bus service has operated fare-free since the beginning of the pandemic, and will continue to do so until at least July 2022 (MCDOT). Fare-free transit service may bolster the public transportation share of travel as it recovers from pandemic-related declines.

ACS 2018 data for the eight census tracts in the study area shows that there were a total of 14,119 jobs in the area. However, only 750 jobs (5%) were held by residents of the study area, whereas 95% of the jobs were held by workers who live outside the study area (U.S. Census Bureau, 2018). This indicates a possible jobs-housing imbalance in the study area in which there are many residents who must travel far from their homes to get to work (and vice-versa, i.e., many workers in the study area who have to travel long distances to get home). A jobs-housing imbalance in the Fairland and Briggs Chaney study area could exist because the type of jobs that exist in the study area do not align with the types of jobs residents need, or because the area under analysis is relatively small. If we extended the analysis to a larger geographic region, for example, jobs and housing would likely appear to be better balanced.

Conversely, over 16,000 residents in the study area commute outside of the area for work (U.S. Census Bureau, 2018). This data shows that residents and workers in the study area are highly mobile and make use of the transportation network. Thus, it is important to explore transportation options to determine what challenges and needs exist.

See Figure 21 for a visualization of this data. The yellow-outlined census tracts are those that are in the study area. The arrow pointing toward the study area represents workers who travel into the study area for work, while the arrow pointing away from the study area represents the residents who leave the study area for their jobs. The circular arrow represents the study area residents who also work in the study area.

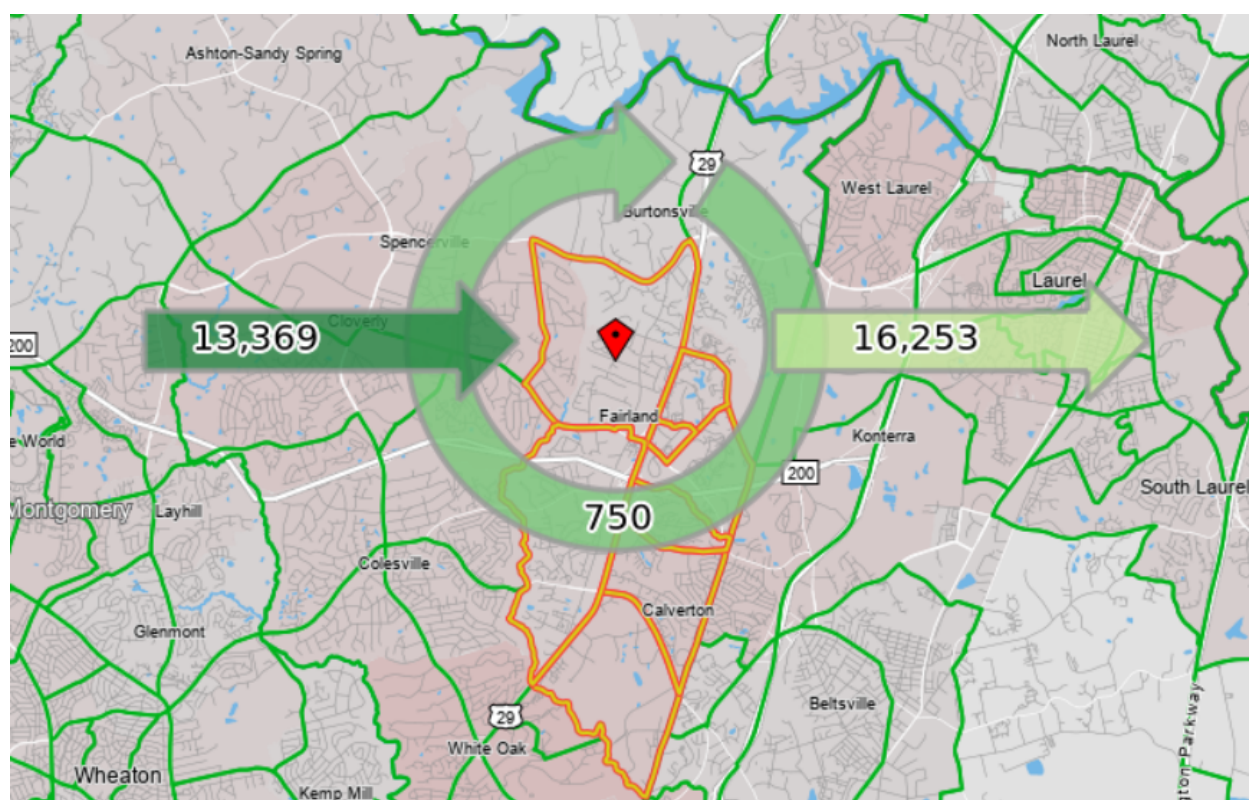


Figure 21: Study area worker inflow/outflow, based on 2019 ACS data. Source: U.S. Census Bureau, 2021.

The ACS data also show that most residents in the study area travel to the south/southwest for work, with work centers in Silver Spring and Washington, D.C. Conversely, most workers in the study area commute from the northeast, from locations including Laurel, Columbia, and Burtonsville, MD (U.S. Census Bureau, 2018). This highlights the importance of an effective north/south transportation network to accommodate these commuting flows. While commuting to and from work is just one form of travel, it is an important one to consider. Figures 22 and 23 show these flows in radar format (U.S. Census Bureau, 2018).

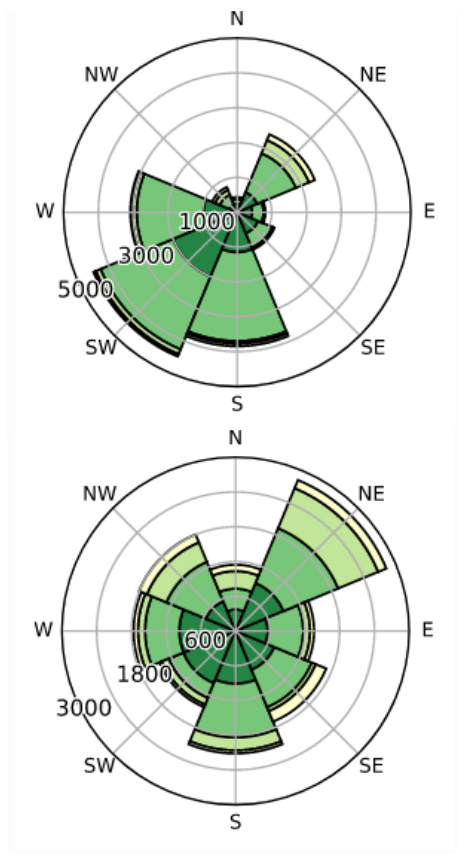


Figure 22: Most study area residents travel to the south/southwest for work. *Source: U.S. Census Bureau, 2019.*

Figure 23: Most workers in the study area commute from the northeast. *Source: U.S. Census Bureau, 2019*

Public Transportation

Much of the existing bus service does support these north/south directional flows. US 29 consists of a combination of Flash BRT, frequent seven-day routes, and less-frequent lines running up to the Briggs Chaney Park and Ride and beyond to Burtonsville (Washington Metropolitan Area Transit Authority (WMATA). Metrobus routes include the Z6, Z7, and Z8. The Z6 and Z8 are local bus routes which operate seven days a week, roughly every 30 minutes each from 5 a.m. to just after midnight. The Z8 serves Old Columbia Pike to the Briggs Chaney Park and Ride and the Greencastle Park and Ride, while the Z6 deviates east of US 29, ending at the Burtonsville Crossing Park and Ride. In contrast, the Z7 is a commuter service, only operating during peak weekday rush hours between South Laurel and Silver Spring via Old Columbia Pike (WMATA).

Montgomery County's Ride On operates three routes in the plan-area: the 10, 21, and 39. Ride On routes do cover portions east and west of US 29, but their route schedules are restricted: the 21 and 39, for example, only operate during rush hour on weekdays. Accordingly, WMATA designates only the Z6 and Z8 as "frequent service" routes in the



Fairland and Briggs Chaney area, dismissing all three Ride On routes due to their low frequency (WMATA). The Route 10 bus is the one bus line that operates every day and cuts west of US 29 along Randolph Road. Service operates every 30 minutes to 1 hour depending on the time of day, and generally ends by 11 p.m. in the plan-area. Route 21 is a commuter service only operating on weekdays in between Silver Spring and the Briggs Chaney Park and Ride. It serves east and west directions along Fairland Road. Morning service on the 21 begins at 5:30 a.m. and ends by 9 a.m., while evening service begins at 3:30 p.m. and ends by 8 p.m. Finally, Route 39 also provides east-west connections along Briggs Chaney Road during peak commuting hours. Hours of operation are roughly 6-9 a.m. and 2:30-8 p.m. (MCDOT).

Finally, the new Flash BRT system offers the Orange and Blue routes. The Orange operates every 15 minutes everyday between Silver Spring and Briggs Chaney Park and Ride. The Blue operates every 15 minutes during peak weekday rush hour: 5:30-8:30 a.m. and 3:30-7:30 p.m. The Blue runs between Silver Spring and the Burtonsville Crossing Park and Ride (MCDOT).

This bus data shows that north-south routes are well-served between Montgomery County and WMATA buses, at least between the Briggs Chaney Park and Ride and Silver Spring. As the directional analysis above notes, many workers in the area commute from points farther north, including Columbia and Laurel. Service could be improved by connecting communities farther north than Burtonsville, MD. On the other hand, east-west connections are lacking. The routes that do operate in an east-west direction are mostly commuter routes, only serving riders during the peak weekday rush hour. Providing more expanded service west toward Glenmont, MD, and east to connect with Prince George's County bus service could improve accessibility for residents who live nearby US 29 or Old Columbia Pike.

Montgomery County's Ride On service shifted to fare-free operations at the start of the COVID-19 pandemic. It will remain fare-free until at least July 2022 (MCDOT). This provides yet another layer of accessibility for residents who may have struggled to pay the regular fare. This is particularly relevant to Ride On service in the Fairland and Briggs Chaney area, as 90% of riders of the 10, 21, and 39 routes are minority riders (Bryant & Hall, 2020). Providing fare-free service is a key component of transit equity and would support the movement away from private vehicles.

Pedestrian and Bicycle Mobility

Pedestrian access is a major challenge for the Fairland and Briggs Chaney plan-area. While sidewalks do exist in some parts of the study area, they are often placed along busy roads with no buffer between pedestrian walkways and road traffic. There is a semblance of a north/south walking route from Tech Road in the south toward Briggs Chaney Road to the north, but it is missing a large section near the Arden Courts Assisted Living facility that makes completing a walking trip difficult. The existing shared-use path that travels underneath the ICC is paved and includes lighting and trees. Due to the isolated nature of this path, however, it may not feel safe, particularly at night.

Evidence of these pedestrian challenges are displayed in Montgomery County's Pedestrian Level of Comfort Map, shown in Figure 24. The blue colors represent pedestrian comfort, which exists primarily on the eastern side of the study area, which contains more multi-family developments with connecting paths, sidewalks, and a shared-use path. The red and orange show up more on the western side of the study area, characterized by single-family housing and commercial development. Paint Branch High School is located along an "uncomfortable road" on the western side of the area, which highlights a challenge for a segment of the population that may walk more often, as most high school students do not receive driver's licenses until Junior or Senior year. In addition, the major routes that physically divide the area, US 29 and MD 200, are not color-coded at all on the map due to their lack of any pedestrian accessibility. Not only that, but to walk or bike across these arterials is challenging, severely reducing the connectivity between neighborhoods.



☑ Stress Tolerance Levels

- **High & Moderate**
(inappropriate for children & most adults)
- **Low**
(appropriate for most adults)
- **Very Low**
(appropriate for most children)

Figure 25: Bicycle level of stress in the plan-area. *Source: M-NCPPC.*

Even though cycling safety and infrastructure is not widespread in the community, Capital Bikeshare has expanded its reach into the Fairland and Briggs Chaney area. This provides a unique level of access that is not available to other suburbs this far out of the D.C. region: for example, communities such as Greenbelt and Aspen Hill do not have Bikesare access. Bikesare is a great addition to the community and seems to be well-used when we conducted a site visit to the area, during which we noted only 4 bikes remaining at a 25 dock station. The system also offers reduced fare options for low-income individuals, further increasing its accessibility and appeal among the population (Capital Bikesare).

However, the Capital Bikesare stations are clustered together in a way that does not allow for a large amount of bike mobility, which has been highlighted as a major need. The current Bikesare locations are at the Briggs Chaney Park and Ride, Briggs Chaney and Castle Dr., and Castle Blvd. and Castle Ln. In the present configuration, users can only bike within a confined distance in order to dock the bike at another station. Because the stations are restricted to a small geographic region, mobility is extremely limited. The



program could be better implemented by providing stations farther south along US 29, allowing residents to bike from residential development near Tech Road to points farther north, such as the Briggs Chaney Marketplace or East County Community Center.

Fairland and Briggs Chaney residents are highly mobile, and the existing bus and road network seems to support north/south commuting flows. However, improvements are needed to better connect neighborhoods across US 29 and the ICC, as they are largely isolated from each other and impossible to traverse via foot or bike. This leaves those without cars and those of differing abilities at an extreme disadvantage in this auto-oriented environment.

These challenges provide many opportunities for scenario planning in relation to our three themes. First, mobility can be improved through complete street designs that accommodate all modes of travel, by focusing on sidewalks, crosswalks, bus stop amenities, and bike lanes. This would allow for changes in mobility type, from driving alone to multi-modal options. Along those lines, it is worth questioning whether there is a possibility to create “15-minute walksheds”, environment in which residents can get to their destinations within 15 minutes. Even further, denser development patterns could possibly complement the recent addition of Flash BRT stations. We explore these opportunities and more in the scenario planning proposals below.

Housing

Throughout this section, housing statistics and cost burden will be analyzed to provide an analysis of affordability in the plan-area. In addition to the plan-area's housing statistics being compared to Montgomery County, there will be an additional analysis comparing and contrasting the two primary residential neighborhoods within the plan-area itself due to the two neighborhoods having very different needs.

As seen previously on the zoning map, residential areas are primarily concentrated in the northeastern quadrant and southwestern quadrant of the plan-area. In the northeastern quadrant, the residential zoning primarily is higher density, allowing for apartments, condominiums, and denser single family home clusters. Meanwhile, the majority of the residential zoning in the southwestern quadrant is lower density. Because of these differences, the housing typologies and financial makeups of these two neighborhoods have distinctive differences. Below are images of the plan-area boundary compared with the land use zoning map previously shown.

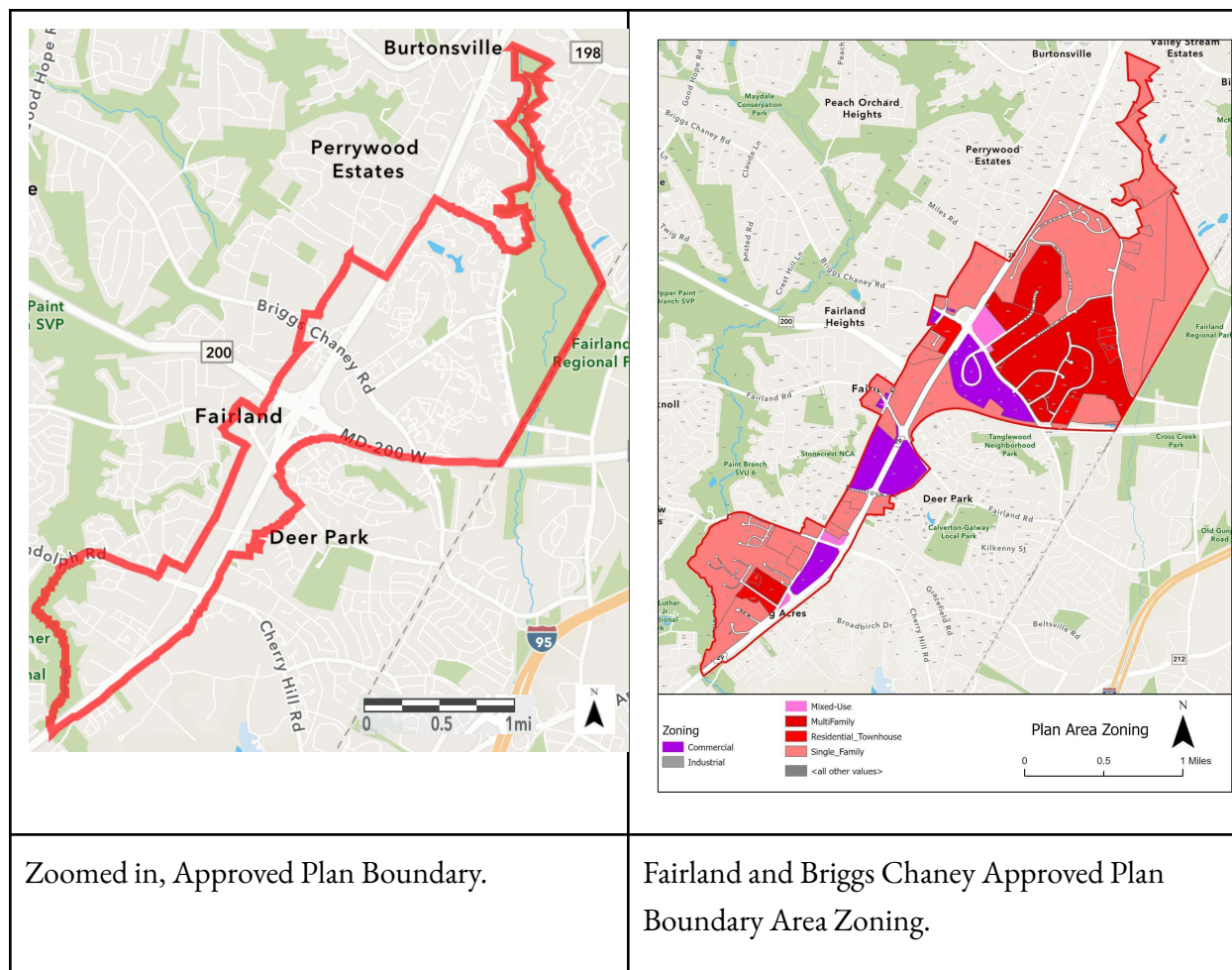


Figure 26: Plan-area boundary (left) and current zoning of plan-area (right). Source: M-NCPPC.

Within the plan-area there are 5,910 households, with a total population of 15,716. Since 2010, the population of this area has grown 10.2% and the number of households has grown 4.7%, and we can reasonably expect a similar level of growth to continue. Additionally, of the total households, 68% are renter occupied which is a significantly higher rate of renters compared to Montgomery County as a whole, where only 35% of the county's housing units are renter occupied (ACS, 2019). However, the two residential areas within the plan-area have some significant differences in housing characteristics.

Both the plan-area and Montgomery County have relatively similar vacancy rates, 6.7% and 4.7% respectively (ACS, 2019). Though the plan-area has a slightly higher vacancy rate, the makeup of the vacancies are significantly different. 90% of all the vacancies in the plan-area were available units for rent, whereas in the county, only 31.4% are for rent and 15% are for sale. Only 10% of the plan-area's vacancies are labeled as 'other' whereas 54% of the

county's vacancies are labeled as 'other' (ACS, 2019). This is significant for two reasons: one, the plan-area has a low amount of blighted or uninhabitable vacancies; and two, there is not as much unused developed space for typical urban infill redevelopment.

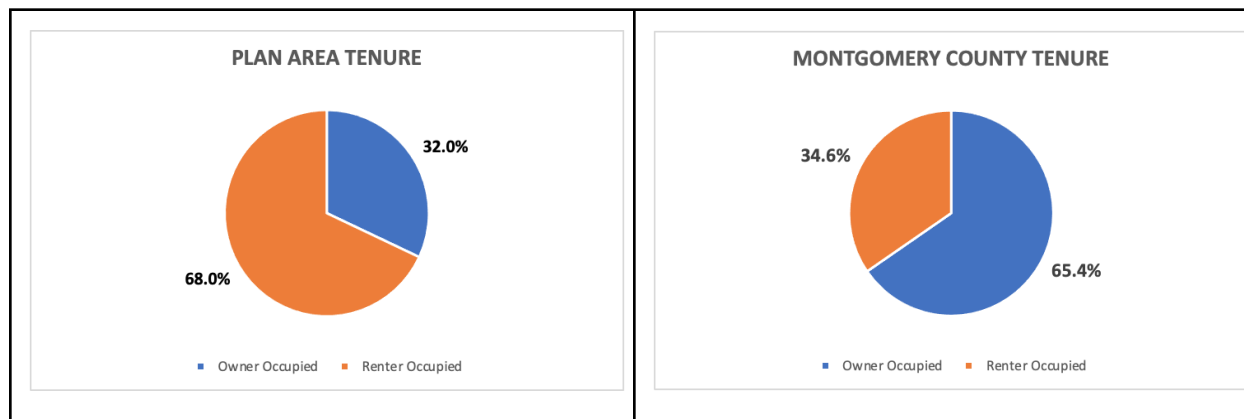


Figure 27: Housing Tenure in Plan-area (left) and Housing Tenure in Montgomery County (right).
Source: ACS 2015 - 2019 (5-Year estimates).

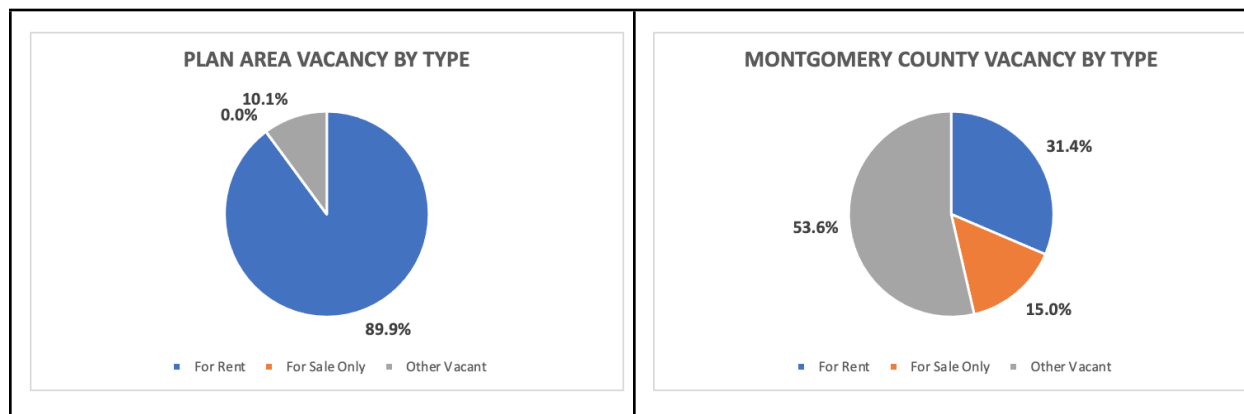


Figure 28: Vacancy by Type in Plan-area (left) and Vacancy by Type in Montgomery County (right). Source: ACS 2015 - 2019 (5-Year estimates).

Figure 29 depicts the number of housing structures built in each decade since the early 1930s. In the plan-area, over 40.9% of all the housing was built between 1980 and 1989, preceded by 25.7% of housing built in the 1970s (ACS, 2019). This pattern correlates with the drastic population growth in the plan-area that occurred during the 1980s, and follows a similar trend to the county's overall population growth. New constructions have been declining since the sharp growth in the 1980s, indicating that the majority of the existing housing stock is aging and will continue to do so over the next few decades.

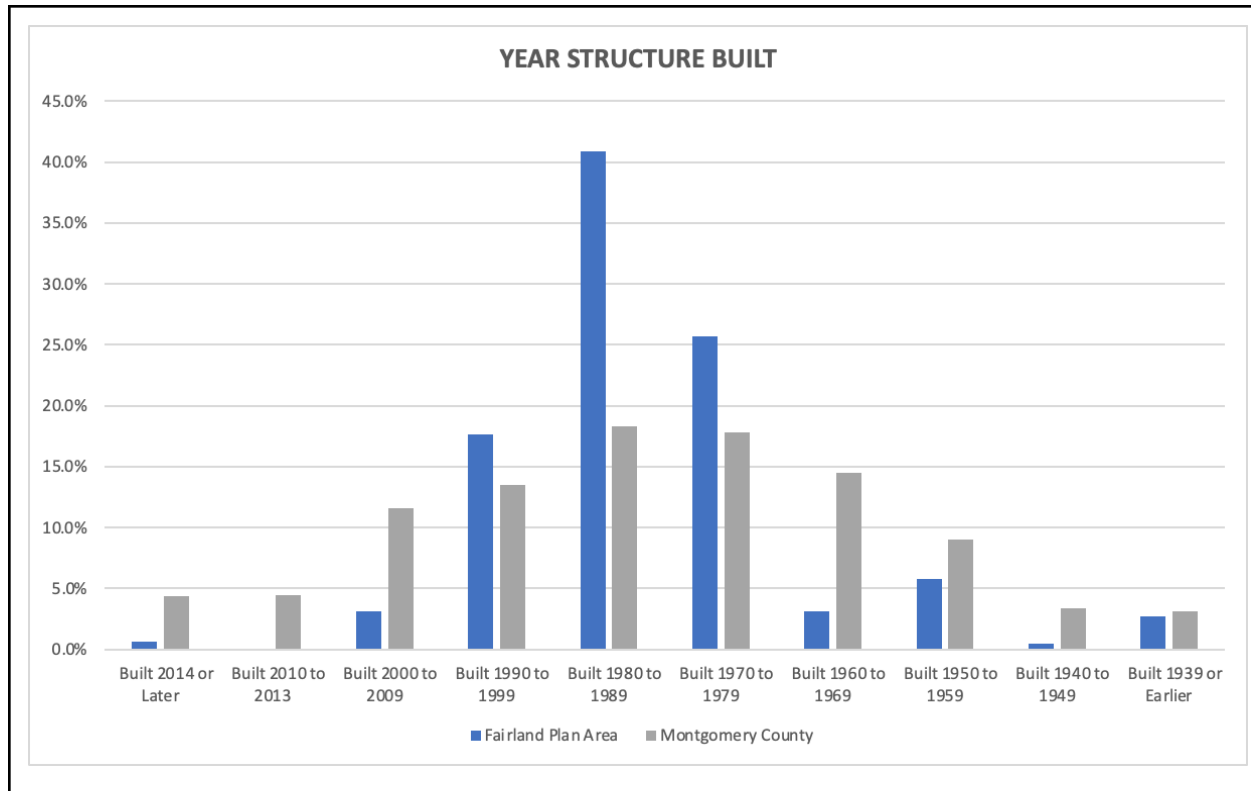


Figure 29: Year Housing Structures were Built within Plan-area, Compared with Montgomery County. *Source: American Community Survey (ACS) 2015-2019 (5-Year Estimates).*

The table of Figure 30 details the median home value, median household income, and median gross rent of the Fairland and Briggs Chaney plan-area compared to Montgomery County. Overall, the plan-area is markedly lower cost than the county as a whole. Both the median household income and the median home value in the plan-area are substantially lower than the county's. However, the median gross rent is just about the same between the two, only a \$77 difference. This may be due to the majority of rental housing being available in lower cost areas throughout the county. Moreover, \$1,691 is about 30% of the median household income, however, since this is the median, half of residents are earning less than \$75,947.

	Fairland and Briggs Chaney Plan-area	Montgomery County
Median Household Income	\$75,947	\$108,820
Median Home Value	\$281,821	\$484,900

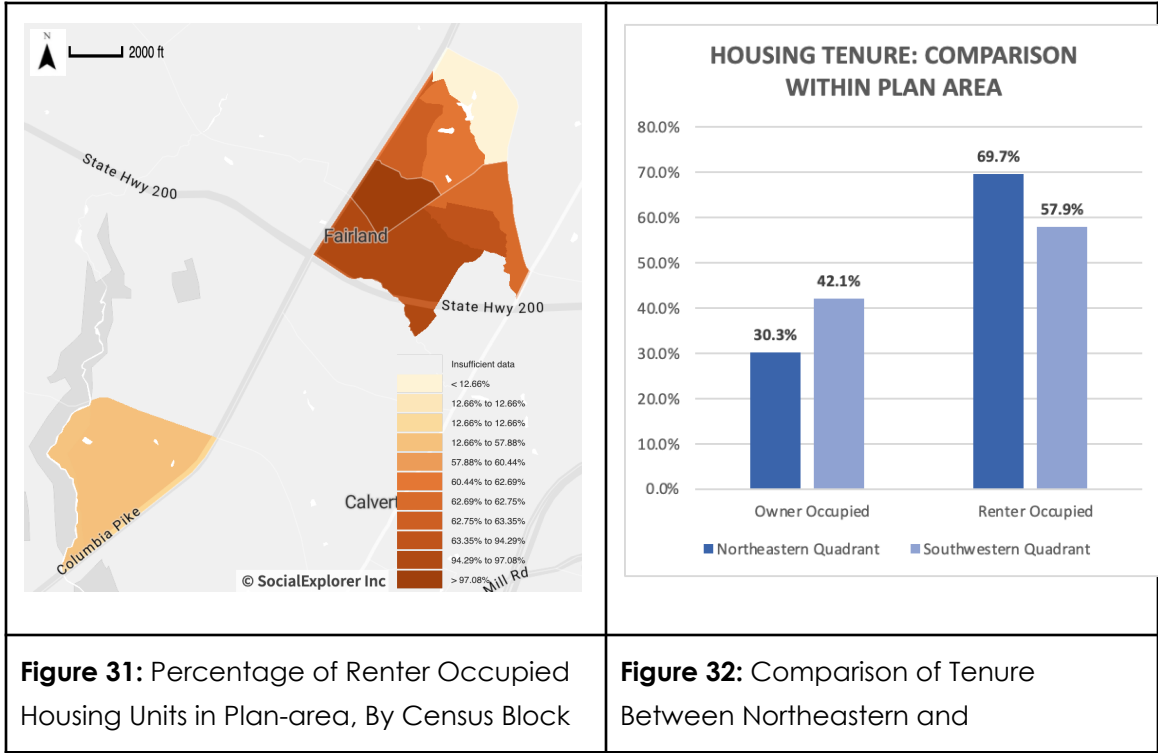
Median Gross Rent	\$1,691	\$1,768
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Figure 30: Plan-area and County housing statistics. *Source: American Community Survey (ACS) 2015-2019 (5-Year Estimates).*

Compared to Montgomery County, the Fairland and Briggs Chaney plan-area is lower income, with lower home values and higher percentage of renters. However, as mentioned before, the two residential areas within the plan-area have some significant differences between the two that must be considered in scenario planning.

Comparison of Residential Areas within Plan-area

Overall, the northeastern quadrant can be characterized as having a higher proportion of renters, being lower cost, and having a lower income population, compared to the southwestern quadrant. Figure 31 depicts the percentage of renter occupied units broken down by census block group. The majority of the census block groups in the northeastern quadrant have between 60% and 100% renter occupied units (ACS, 2019). As seen on the zoning map above, this area is zoned for multifamily housing and mixed use development. Meanwhile the southwestern quadrant is about 58% renter occupied, and is primarily zoned for single family housing. As a whole, the northeastern quadrant is 69.7% renter occupied, compared to the southwestern quadrant being 57.9% renter occupied (ACS, 2019).



Group. Source:
American Community Survey (ACS)
2015-2019 (5-Year Estimates). Visualization
via Social Explorer.

Southwestern Quadrants. Source:
American Community Survey (ACS)
2015-2019 (5-Year Estimates).

Additionally, Figure 33 depicts the differences in the types of housing structures that exist currently in both quadrants. In the northeastern quadrant, which is primarily renter occupied, 51.9% of housing units are in structures that have 10-19 units, 27.8% of housing units are attached single family homes, and just 3.6% of housing units are detached single family homes. Comparably, the southwestern quadrant has 40% of housing units in 10-19 unit structures, 23.9% as attached single family homes, and 22.9% are detached single family homes (ACS, 2019). This further demonstrates that the northeastern quadrant is much denser, and provides insight to the higher percentage of renters compared to the southwest quadrant.

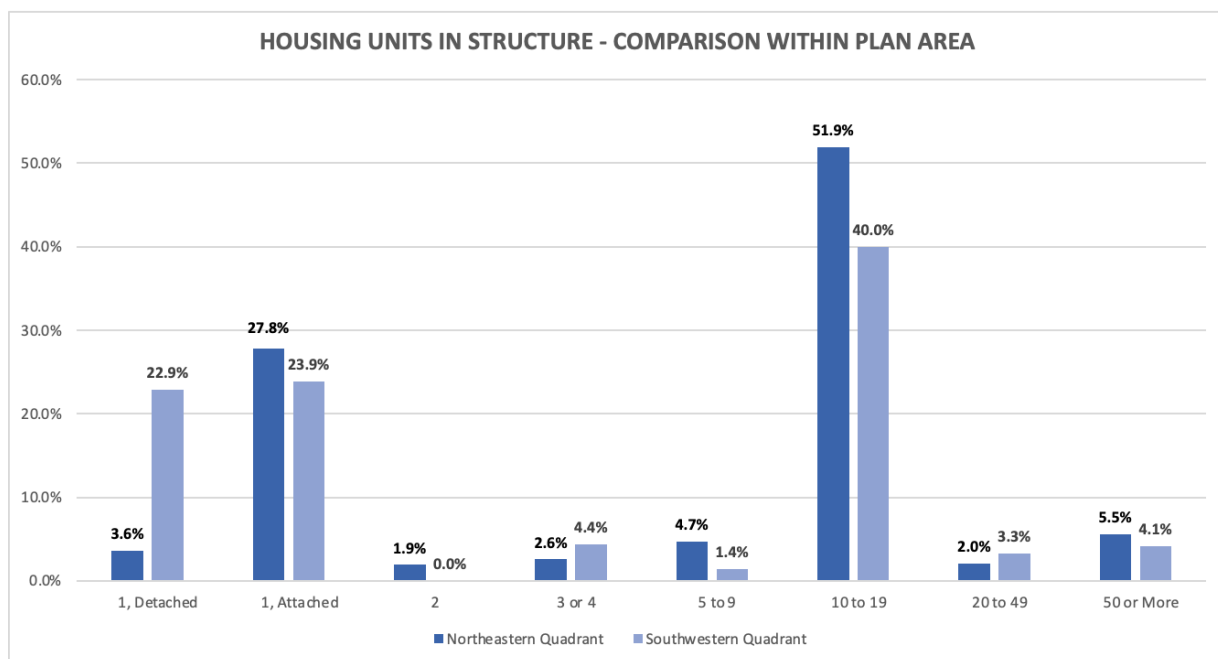


Figure 33: Comparison in Housing Units in Structure Between the Northeastern and Southwestern Quadrants. Source: American Community Survey (ACS) 2015-2019 (5-Year Estimates).

Lastly, Figure 34 indicates the differences in home value, household income, and gross rent between the two quadrants. In addition to having a higher percentage of renters and

denser housing development, the northwestern quadrant is lower income and has lower home values than the southwest. Surprisingly, however, the median gross rent in the southwest is actually much cheaper than the northeast despite having a higher household income and a smaller amount of rental options. This difference in rent prices is important to note, to ensure that the populations residing there are properly considered and given customized and equitable solutions to housing needs.

	Northeastern Quadrant	Southwestern Quadrant
Median Household Income	\$73,796	\$85,575
Median Home Value	\$270,846	\$396,800
Median Gross Rent	\$1,705	\$1,562

Figure 34: Housing Statistics. *American Community Survey (ACS) 2015-2019 (5-Year Estimates)*
Affordability

Following from the previous analysis, we now turn to cost-burdened households. Cost burden is commonly used as an indicator of housing affordability in specific regions, and as defined by the U.S. Department of Housing and Urban Development (HUD), refers to households spending over 30% of their monthly income on monthly housing costs.

For this report, it was important that we analyzed if the existing housing stock in Fairland and Briggs Chaney was affordable to current residents. To do this, we used 2014-2018 Comprehensive Housing Affordability Strategy (CHAS) data available through HUD. This was the most recent dataset available, and data was pulled for Fairland and Briggs Chaney as a census designated place because it was not available at the more specific geographies of census tract or census block group.

Figure 35 depicts the overall cost burden information for both Fairland CDP and Montgomery County. Looking at the table, 35% of all households in Fairland CDP are cost burdened, just 3% higher than Montgomery County. Similarly, 53% of renters and 16% of owners in Fairland CDP are labeled as cost-burdened. These numbers are relatively similar to the county's cost-burdened renters and owners, which indicates that existing residents of Fairland CDP are experiencing the same housing affordability issues as the rest of the county despite considerably lower household incomes and home values.

Overall Cost Burden, Households Spending >30% of Income on Housing			
Region	Total Cost Burdened Households	Cost Burdened Renters	Cost Burdened Owners
Fairland CDP	35%	53%	16%
Montgomery County	31%	46%	22%

Figure 35: 2014-2018 Fairland CDP and County Housing Data. Source: U.S. Department of Housing and Urban Development, 2021.

Furthermore, Figure 36 depicts a more detailed analysis of Fairland CDP's cost-burdened households. This provides an in-depth look at the cost-burdened households by breaking them down by renter and owner, by household income, and by severity of cost burden. The data reveal notable differences between owners and renters in terms of affordability.

Income by Cost Burden (Renters only)	Cost burden > 30%	Cost burden > 50%
Household Income <= 30% HAMFI	40%	66%
Household Income >30% to <=50% HAMFI	36%	32%
Household Income >50% to <=80% HAMFI	13%	2%
Household Income >80% to <=100% HAMFI	10%	0%
Household Income >100% HAMFI	0%	0%
Total % of All Households	53%	29%
Income by Cost Burden (Owners only)	Cost burden > 30%	Cost burden > 50%
Household Income <= 30% HAMFI	20%	59%
Household Income >30% to <=50% HAMFI	22%	14%
Household Income >50% to <=80% HAMFI	10%	11%
Household Income >80% to <=100% HAMFI	29%	16%
Household Income >100% HAMFI	19%	0%
Total % of All Households	16%	5%

Figure 36: 2014-2018 Fairland CDP and County Housing Data. Source: U.S. Department of Housing and Urban Development 2021.

Specifically, of renters earning over 50% of the HUD's Area Median Family Income (HAMFI), only 23% are cost-burdened, but of homeowners of the same income levels, 58% are cost-burdened (U.S. Department of Housing and Urban Development [U.S. HUD], 2021). In contrast, 76% of cost-burdened renters and 42% of cost-burdened homeowners earn under 50% of the HAMFI (U.S. HUD, 2021). This points to the fact that renters and owners in Fairland and Briggs Chaney are experiencing very different affordability issues, thus requiring a need for a customized approach to housing affordability solutions. Homeowners earning over 50% of the HAMFI are still in great need of support, whereas renters earning less than 50% of the HAMFI are most in need of housing support.

Missing Middle Housing

The concept of 'missing middle housing' is important to mention in this analysis for two reasons. One, the lack of middle housing is a primary issue in Montgomery County; and two, middle housing is often used as a tool to increase affordable housing options. As defined by Daniel Parolek, 'middle housing' has two meanings. First, it represents the scale of the buildings between single family homes and large apartment complexes. Second, it refers to the affordability level of this size of housing, which provides homes for "middle" incomes that sit between 60% and 100% of the average median income for a region (Parolek, 2020). As seen above on cost burden by income tables for Fairland, a large percentage of cost burdened households fit into the "middle income" category. 23% of owners and 39% of renters earning between 50% and 100% of the HAMFI are at least 30% cost burdened. Middle housing could potentially provide affordable options for this group of residents.

The definition of middle housing can be further specified to refer to housing structures that would be compatible to the scale of a single family home and neighborhood. Examples of this would include townhomes, duplexes, triplexes, fourplexes, multiplexes, bungalow courts, and live/work buildings, which could contain between two and 12 units, though most are under 10 units (Parolek, 2020). For the purposes of finding middle housing types in the Fairland and Briggs Chaney plan-area, we primarily looked at townhomes and housing structures between two and nine units.

Figure 37 depicts the percentage of each type of housing structure available in the plan-area compared to those available countywide. As mentioned before, the plan-area has a significantly lower number of detached single family homes, and a much higher number of larger apartment complexes containing over 10 housing units. In the plan-area, 27.3% of

housing units are townhomes, but just 8.6% of housing falls between two and nine unit structures. Both of these are a bit higher proportionally to the county, but the numbers are comparable given the considerable differences in single family homes and large apartment complexes. This points to the fact that the Fairland and Briggs Chaney plan-area is experiencing the same lack of middle housing issues that the county is experiencing as a whole, despite the plan-area being coined as affordable.

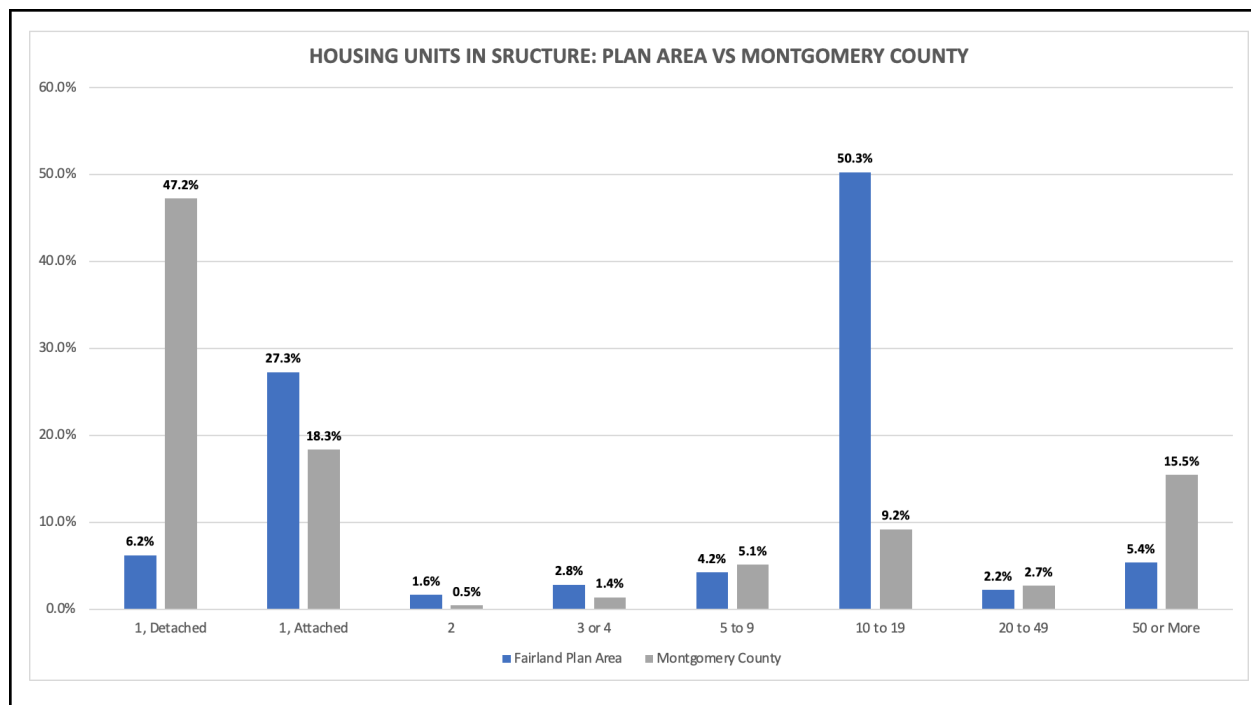


Figure 37: Housing Units in Plan-area vs. Montgomery County. Source: American Community Survey (ACS) 2015-2019 (5-Year Estimates).

Lastly, the Fairland and Briggs Chaney plan-area does have subsidized housing available. In the plan-area, there are 724 total federally subsidized units available, 537 of which are housing choice vouchers, and 187 of which are project-based subsidized housing units (Picture of Subsidized Households, 2020). The availability of these subsidies do aid in the effort to provide affordable housing options, but they primarily serve households that are very low or extremely low income, with average household incomes around \$19,740 per year. Therefore, some of the renter households in Fairland and Briggs Chaney are assisted by these programs, however, there is still a clear need for more options for the unassisted renter and owner households. Additionally, provided subsidies may still leave renter households cost-burdened despite the assistance.

The main takeaways from the existing housing conditions are that the Fairland and Briggs



Chaney plan-area has a wide variety of housing options for rentals and homeownership, the two residential areas within the plan-area have significant differences, and that despite being lower cost, housing in the plan-area is not any more affordable than anywhere else in the county to existing residents. The differences in housing and income between the two residential areas must be considered in scenario planning, and providing affordable and attainable housing through tailored solutions must remain a top priority.

Development Approaches

Infill Development, Retrofitting, and Upzoning

Infill development is identified in *Thrive Montgomery 2050* as a method of limiting growth, while continuing future development. However, since vacancy rates in the Fairland and Briggs Chaney plan-area are mainly due to available rentals, traditional infill development may not be feasible for this area. As noted in *Thrive Montgomery 2050*, accessory dwelling units achieve infill and increase housing diversity (2021). This allows infill development without the need for extensive greenfield or redevelopment sites.

Retrofitting (also acknowledged in *Thrive Montgomery 2050*) may be a better solution for the Fairland and Briggs Chaney area. The advantages of retrofitting instead of infill development include enhanced environmental performance and resilience, opportunities for historic and character-building preservation, and the creation of more mixed-use development. Retrofitting may be a more expensive and labor-intensive process, but it may be a better fit for the Fairland and Briggs Chaney area, since it makes use of preexisting buildings and not vacant lots.

Upzoning is also a method for changing development patterns. Associated with density increases, upzoning incrementally changes building makeup over time. For the Fairland and Briggs Chaney area, this solution may help supplement other approaches to development. In particular, upzoning could facilitate mixed-use development and greater diversity in housing stock. However, it has been noted that upzoning can spur gentrification. Therefore, any upzoning in the plan-area must be paired with anti-displacement policies.

Land Use

One possible approach to shape the future of the Fairland and Briggs Chaney area is a relatively new type of zoning called form-based zoning. According to the organization Strong Towns, form-based code “puts the emphasis on making sure the buildings in a neighborhood are compatible with their surroundings, while letting the mix of actual activities in them be more eclectic.” Form-based code has been proven to come with a number of advantages including encouraging revitalization, promoting housing affordability, promoting walkability, and creating a sense of place (Herriges, 2020).

The prospect of revitalization relates to the concept of retrofitting described earlier. In an area such as Fairland and Briggs Chaney that is almost completely built out, it is important that we encourage revitalization of what is already there instead of relying exclusively on complete redevelopment. The complete redevelopment of large portions of Fairland and Briggs Chaney would likely lead to displacement of current residents. Also, it appears that most of the current housing is relatively new and not in need of complete redevelopment. Form-based code encourages revitalization by providing flexibility for developers to revitalize existing structures in creative ways.

The second, and arguably most important, advantage of form-based code is promoting housing affordability. One of the main goals we have identified for the Fairland and Briggs Chaney plan-area is protecting the existing affordable housing that has become rare in Montgomery County. A form-based code may protect this affordable housing by making it easier for any new development to fill the missing middle housing gap. The fifteen-minute city that we are striving to create may also be aided by the implementation of form-based code. By allowing a mix of commercial and residential uses in neighborhoods, form-based code may help encourage people to walk to the stores or work instead of driving. Finally, form-based code can help create a sense of place in a community by creating more vibrant and diverse neighborhoods while maintaining a harmonious urban form.

Form-based code is not entirely new to the Washington, D.C. region. In 2003, Arlington County, Virginia implemented form-based code along Columbia Pike. The ordinance creates a Columbia Pike special revitalization district, which allows properties with a certain underlying zone to re-develop based on the form-based code requirements. Arlington’s form-based code lays out three goals that are similar to the goals we have established for the Fairland and Briggs Chaney plan. They are to

...foster a vital main street for its adjacent neighborhoods through a lively mix of

uses—with shopfronts, sidewalk cafes, and other commercial uses at street level, overlooked by canopy shade trees, upper story residences and offices. Create transit-, pedestrian-, and bicycle-oriented development, which is dependent on density, diversity of uses, and design. Place greatest emphasis on design, or physical form, because of its importance in defining neighborhood character (Arlington County, 2016).

Implementation of a form-based zoning district in Fairland and Briggs Chaney similar to the one implemented in Arlington could help realize community goals. One prime location for future redevelopment is the Fairland and Briggs Chaney auto mall shown in Figure 38, south of route 200 and east of route 29.

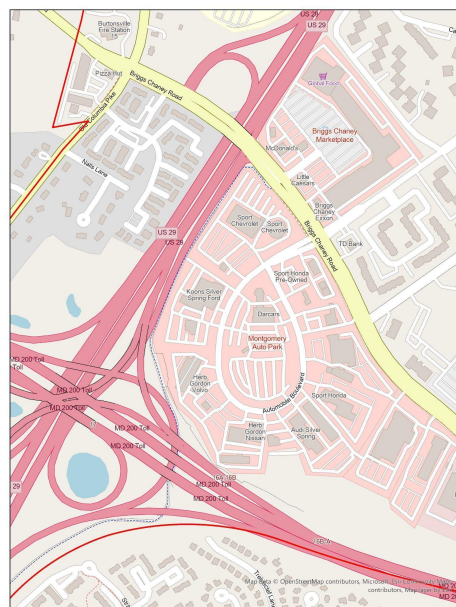


Figure 38: Silver Springs Auto Park: Source: Open Street Map.

Currently, this auto mall is home to a number of car dealerships that serve much of the region. It is not necessarily practical to suggest or expect this area to be redeveloped in the near future due to its popularity and importance in the area's economy. It is also one of the few properties in Fairland and Briggs Chaney where redevelopment is even possible. As we consider scenario planning, it is important that we plan for a future with the possibility of the auto mall going out of business. According to the NewYork Times, "Millennials were nearly twice as likely as baby-boomers to shop for and buy a vehicle — new or used — entirely online" (Furchgott, 2021). This quote demonstrates the uncertain future that the automotive industry faces. With this future in mind, we envision this area as a mixed-use neighborhood scale area that is walkable, connected to public transportation, and



accessible to the surrounding neighborhoods.

Transit Oriented Development

Transit Oriented Development (TOD) is another important approach we believe could be implemented in Fairland and Briggs Chaney. The American Planning Association defines TOD as “more than just dense development around a major transit station. Being transit-oriented also implies pedestrian friendly design, the right mix of land-use types, compact development consistent with neighborhood character, and well-designed parking opportunities” (Thomas, 2009). TOD comes with a number of benefits such as increased accessibility, economic development, and increased transit ridership. Montgomery County’s BRT stations in the Fairland and Briggs plan-area provide an opportunity to create a TOD in the plan-area. There are currently three BRT stops in Fairland and Briggs Chaney running north and south along route 29 connecting Fairland and Briggs Chaney to the region. The southern station is located directly along route 29 and is surrounded by more commercial uses. This station has the opportunity to be reimaged as a small-scale TOD.

Many TODs such as White Flint or Tysons Corner are located along heavy rail lines in highly populated areas and have the demand to create dense and large-scale TODs. TOD is less common along BRT routes and would have to be implemented on a smaller scale that matches ridership levels and demand in the area. Ottawa, Canada, is one example of a community that has successfully created TODs along BRT routes. Ottawa has accomplished this by implementing strict land use regulations in designated TOD zones near BRT stations and heavily investing in its BRT (Currie, 2006). Ottawa also invests heavily in its BRT system to make it an inviting system for passengers and to defeat the stigma associated with bus transit use.

If a TOD is to be successful in the Fairland and Briggs Chaney plan-area, it should follow the best practice guidelines from the Maryland Department of Transportation (MDOT). MDOT lays out a list of measures as well as characteristics for successful TOD. MDOT states that a successful TOD should have a residential density of 20 to 40 dwelling units per acre and one job per dwelling unit. This concentration of residents and jobs encourages residents to use the BRT to access destinations instead of driving alone. In order to provide outside accessibility to the station, the TOD should be accessible by at least one regional connection and provide bicycle parking and access. A TOD in Fairland and Briggs Chaney could implement these criteria on a small scale to increase BRT ridership and create a mixed-use center.

However, the current automobile focus of US 29 limits the ability to implement any real pedestrian scale improvements along the corridor. The Maryland State Highway Administration's Context Driven Guide gives best design guidelines for creating a more pedestrian and bicycle friendly environment in a variety of settings. To make US 29 more compatible with TOD, a variety of pedestrian improvements should be implemented, such as mid-block signaled crossings and newly painted continental crosswalks. Bicycle access should be improved by providing buffered bike lanes to make cycling accessible and comfortable for cyclists of all skill levels. The current speed limit could be lowered to approximately 35mph and right hand turns could be eliminated to make the area even more pedestrian focused and make a successful TOD possible.

Financial Opportunities

To realize these opportunities, financial assistance from both the state and federal government would be helpful. The state of Maryland's Sustainable Communities program designates certain approved areas for increased funding through state grants. Luckily, parts of the Fairland and Briggs Chaney study area and planning area are designated 'sustainable communities'. The map below shows the study area's 'sustainable community' areas in orange.

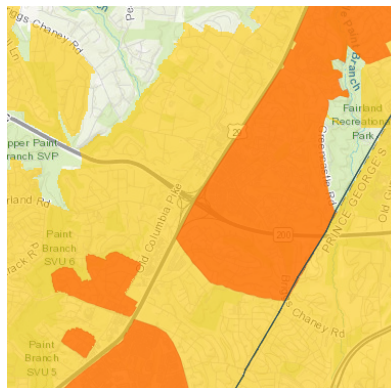


Figure 39: Map overlay of designated funding 'sustainable community' areas in the study area.

Source: Maryland Neighborhood Revitalization Mapper.

The map shows that the areas designated for increased state funding are mainly located east of route 29 and in the far southern portion of the study area. Figure 40 shows the various state grants that could be utilized to fund projects in the area.

Community Legacy Program	“Provides local governments and community development organizations with funding for essential projects aimed at strengthening communities through activities such as business retention and attraction, encouraging homeownership and commercial revitalization.” (DHCD)
Neighborhood Business Works Program	“Provides flexible financing to new or expanding small businesses and nonprofit organizations.”(DHCD)
National Capital Strategic Economic Development Fund	“Provides competitive funds in support of commercial and residential activities in areas targeted for revitalization.” (DHCD)
Bikeways Program	“Provides grant support for a wide range of bicycle network development activities.” (MDOT)
Sidewalk Retrofit Program	“Upgrade existing pedestrian facilities along state highways to meet Americans with Disabilities Act Accessibility Guidelines.” (MDOT)
Maryland Economic Development Corporation/Dept. of Planning - Enhanced Local Tax Increment Financing Authority	“Enables local governments with a Maryland Department of Transportation (MDOT) designated TOD more flexibility and opportunity to use TIF and special taxing district bonds to finance TOD infrastructure.” (MDP)

Figure 40. State grants that could be utilized to fund projects in the area.

These grants could be utilized in Fairland and Briggs Chaney to aid in accomplishing goals such as preserving affordable housing, providing economic opportunity, and improving accessibility. Federal funding is also available in the Fairland and Briggs Chaney plan-area through the Community Development Block Grant, the Emergency Solutions Grant, and HOME Investment Partnerships Program. These federal grants are already utilized by Montgomery County and should continue to be utilized in the future. In order to achieve the goals for Fairland and Briggs Chaney, county leaders may consider utilizing available state funds to make these goals a reality.



PART I: THEME PRECEDENTS



Introduction

This section of the report presents thematic precedents for planning practices that would be useful to consider in relation to the plan-area. Again, our thematic areas of emphasis are housing, economic and community development, and climate change adaptation and mitigation. Beyond those thematic concentrations, our guiding principle is justice. For this reason, the precedents we identify may contribute to the realization of justice in the plan-area. Not every precedent we present could be fully implemented in the plan-area or even Montgomery County as a whole, but they provide a basis for imagining alternative futures. This description of precedents contributed to the scenario planning we conducted in Part II of this report—particularly our reformist and revolutionary scenarios.



Housing

There is a growing need for affordable housing across America while the nation has seen dwindling supply. Nearly a quarter of homeowners and nearly half of renters spend more than 30% of their gross incomes on housing costs (JCHS, 2020). The national minimum wage is \$7.25, but the National Low-Income Housing Coalition reports that Americans would need, on average, a full-time wage of \$24.90 per hour to afford a modest two-bedroom apartment (NLIHC, 2021). In Maryland, that full-time wage amount is \$28.60, the 8th highest in the nation. For those earning less than 30% of their area's median income, there is a supply gap of 7 million affordable units available to rent (Aurand et al., 2020).

The COVID-19 pandemic has only exacerbated this trend. The Federal Housing Finance Agency reported in September 2021 that house prices have

increased by 22.5% since the pandemic began, the fastest increase on record. Don Layton of Harvard's Joint Center for Housing Studies predicts that this increase will deepen economic inequality and lower the homeownership rate. Montgomery County's condition largely reflects that of the nation: the number of households spending more than 30% of their incomes on housing costs have continued to grow in the county as housing prices have outpaced growth in incomes, and this trend most dramatically impacts people of color (*Thrive Montgomery 2050*, 2021). Several of the census tracts in the Fairland and Briggs Chaney plan-area have been designated Equity Focus Areas by the Montgomery County Planning Department due to their high concentration of low-income households, cost-burdened households, and people of color. All these factors, in conjunction with this report's emphasis

on justice, require us to prioritize housing affordability as we look to housing solutions in the Fairland and Briggs Chaney plan-area—this is especially important as the county forwards projects like the BRT, a fifteen-minute walkshed, and complete communities. These improved amenities aim to make the community a better place to live, but achievement of that goal would likely result in increased real estate values and, potentially, displacement. This section presents planning precedents for housing that are relevant to the Plan-area because they preserve housing affordability and therefore could contribute to the realization of justice in the Fairland and Briggs Chaney plan-area. These precedents provide a basis for the scenario planning in Part II of this report.

Rent Control – Washington, D.C.

Rent control operates in many ways, but it essentially works by limiting when, how, and by how much landlords can increase their tenants' rent. Researchers have found that such programs can increase neighborhood stability by giving tenant beneficiaries more control over their moves, and people of color benefit most from that effect (Diamond et al., 2019). A growing body of research has also concluded that rent control meaningfully benefits tenants without substantially inhibiting the construction of new units, although positions differ on this subject among housing scholars and planners

(Mason, 2019).

New York has the longest history of rent control laws among U.S. cities, but we focus on those of D.C. due to its proximity to Montgomery County. D.C. first implemented rent control in 1973, but its most important active law dates from 1985. D.C.'s rent control program, like others across the nation, ensures affordability through a complex set of regulations, but the most significant aspects are that it governs housing units developed prior to 1975, and it allows one rent increase per year of 2% plus inflation (pegged to the Consumer Price Index) (DC DHCD). Through classification, over 80,000 units of housing in D.C. are subject to rent control. The program works intuitively: by capping the amount that landlords can increase rent, tenants are less likely to be evicted and more likely to remain in the neighborhoods they have lived in for years even when those neighborhoods gentrify. Activists in D.C. have identified a number of concerns with the program, however. The group Reclaim Rent Control, for instance, supports a more robust program that eliminates loopholes for particular landlords. Currently, buildings owned by a natural person who possesses less than four total units are exempt from the regulation. Additionally, because the law only covers buildings from 1974 and earlier, the total number of rent-controlled buildings diminishes over



time as buildings are demolished for redevelopment. Reclaim Rent Control argues that the cut-off date should be dynamic—they suggest 15 years so that the number of rent-controlled buildings increases with time.

Rent control also has political precedent in Montgomery County. Mark Elrich, the County Executive, suggested that there should be some kind of countywide rent stabilization in 2019 (Write & Dalca). In late 2020, Councilmember Will Jawando introduced a bill that would establish rent control in the county (Reed, 2020). Like D.C., the Montgomery County rent control bill would have required that rent increases be pegged to inflation—the county already tracks and suggests rent increases based on the Consumer Price Index, but there is no requirement that landlords abide by that suggestion (2021). Unlike the D.C. guideline, which covers the entire district, Jawando's bill would have established a geographic zone in the county so that properties near the Red and Purple Lines and those near BRT stations do not rapidly rise in value. This geographic specificity recognizes, anticipates, and interrupts the relationship between public investment in amenities and real estate values. It is especially suited to the Fairland and Briggs Chaney plan-area where housing has historically been more affordable than the rest of the county, but planners and residents fear that recently

implemented BRT stations will make the area more desirable, which could induce gentrification and displacement.

Planning researchers, however, have identified a long term negative relationship between rent control and affordability. For landlords, rent control effectively functions as a tax on development and maintenance of rental properties. The Brookings Institution suggests that rent control has significant short-term benefits to affordability and anti-displacement, but it can negatively affect affordability in the long term by disincentivizing construction of new housing (Diamond, 2018). New housing construction is generally unaffordable to low-income people, but most of the nation's "naturally occurring" affordable housing stock results from "filtering down," the process by which housing units age and depreciate in value, which makes them available to lower-income segments of the market (HUD, 2020). There has also been evidence that some landlords, when confronted with rent control, convert their rental units to condominiums as a loophole to escape value capture. In markets like D.C., however, it is still much more profitable to rent out developments than to sell condominiums, and so this potential does not have much of an impact (Sinha, 2018). Overall, rent control can be a powerful mechanism for protecting housing affordability and anti-displacement in hot



housing markets, but potential negative externalities should be monitored carefully. Councilmember Jawando's bill has not yet become law (and likely will not in its current form), but the pandemic has exacerbated the problems his bill sought to address. It is thus likely that rent control will remain a part of the discourse on affordable housing in the county into the future.

Zoning Reform – Minneapolis, MN

Zoning regulations have been used aggressively by local governments since World War II to effectively outlaw constructions other than single-family, detached houses in most of the country's residential neighborhoods. Recently, many planners, scholars, and activists have begun attempting to revise those regulations to allow a greater diversity of housing types that enable more density, a change referred to as upzoning (Wegmann, 2020). Because of broad support from various sectors, upzoning has been politically successful in Minneapolis, the state of Oregon, and, most recently, the state of California. Different groups favor upzoning for differing political ends. Environmentalists forward upzoning because its greater densities can reduce car dependence by enabling walking, biking, and transit use, as well as reduce consumption of greenfields for new construction.

Historians have identified that

single-family zoning combined with discriminatory lending practices in the market systematically segregated races—a phenomenon that persists into the present—and contributed significantly to the racial wealth gap (Rothstein, 2017). Both the National Association of Realtors (NAR) and the National Association of Home Builders (NAHB) have endorsed upzoning because, they argue, easier access to amenities will create desirable communities appropriate for America's changing demographics—these lobbying groups obviously see potential profit in upzoning. As the average household size across the country has continued to drop, it seems reasonable that smaller units would better suit the needs of many people across the country and Montgomery County residents.

For the Fairland and Briggs Chaney plan-area, however, the most significant aspect of upzoning is its potential impact on housing affordability. Daniel Parolek has, over the past decade, forwarded the benefits of what he calls "Missing Middle Housing." He argues that there is an abundance of single-family units and large multifamily apartment buildings in the U.S., but middle-size buildings—duplexes, triplexes, quadplexes, and other small apartment buildings with less than ten units—are legally difficult to build and increasingly difficult to find. As a result of the zoning regulations identified above and a



housing market that has pursued a homogenous suburban single-family unit typology, middle-size typologies are largely “missing” from the market. “Middle” in this sense has a double meaning: because constructions with multiple units divide the construction and land value costs among all the units, they create more affordable units. Further, because of its wood-frame construction, middle-size housing requires less initial investment than larger multifamily buildings that use concrete and steel (Parolek, 2020). For these reasons, missing middle housing is an essential part of Montgomery County Planning Department’s Attainable Housing Strategy, its strategic plan to implement upzoning in specific areas of the county.

That strategy was largely inspired by the example put forward by Minneapolis, MN, which eliminated zoning in 2018. Instead, its new zoning regulations allow duplexes and triplexes in the previous single-family zones, which represent over half of the city’s total zoned land. It also plans to concentrate this housing around transit. This move was just one part of a suite of planning changes that aimed to improve housing affordability and address the city’s extreme disparity in life chances and outcomes between Black and White populations. Minneapolis revised the law to allow Accessory Dwelling Units (ADUs) in 2015: ADUs are portions of existing properties that allow an additional

household to live on the same property, and they can be either attached to or detached from the original structure. ADUs can enable a city to increase its housing supply and density, and the household adding the ADU can add income through a rental unit or enable diverse living arrangements with family members or other residents. The city also eliminated parking minimums for new developments in 2021 (Jackson, 2021), which dramatically reduces the costs of construction as developers no longer need to accommodate cars in their plans. Altogether, these strategies aim to improve housing affordability while giving residents access to a greater diversity of housing choices.

In the Fairland and Briggs Chaney plan-area, zoning reform could have significant beneficial impacts. The plan-area includes several categories of single-family zones that, under the county’s Attainable Housing Strategy, would become available for development of duplexes and triplexes, which could be created through conversion of existing single-family homes. As part of that strategy, the county’s Planning Board has also recommended the creation of a “Priority Housing District,” which would allow development of quadplexes and utilization of an “Attainable Housing Optional Method” for even denser developments (Figure 41).

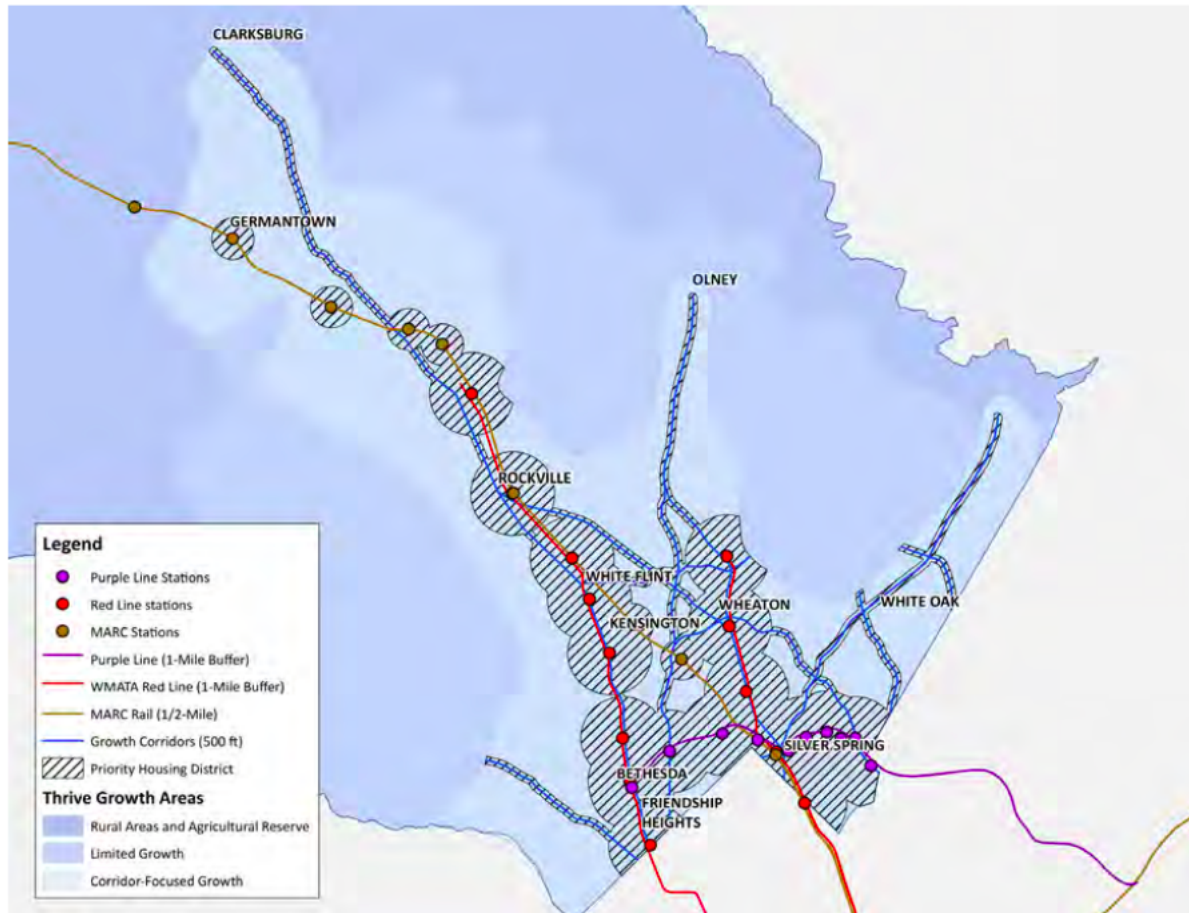


Figure 41:Montgomery County Proposed Priority Housing District. Source: *Montgomery County Planning Department, 2021*

This district emphasizes currently built-out urban areas such as Bethesda, Silver Spring, and Wheaton. As Figure 41 shows, however, the district includes neighborhoods bordering BRT transit lines such as those recently developed in Fairland and Briggs Chaney. Conversion could be an attractive option for households in the Fairland and Briggs Chaney plan-area—as our analysis shows, low-income and very low-income homeowners in the area have relatively high housing cost burdens, and conversion of their single-family units could provide a vital income stream to lessen that burden. The lower costs of missing

middle housing, in particular, could also give more community members access to homeownership and, through it, wealth building. This is especially urgent for the area given its high concentration of people of color: homeownership for these residents represents a first step in redressing the racist policies and practices that limited the housing choices for people of color for decades. These affordability and equity benefits would be complemented by upzoning's mutually reinforcing relation to other planning priorities for the county and the plan-area such as complete communities, 15-minute walksheds, and transit-oriented development.

There are, however, many vital goals that we know zoning reform cannot accomplish. First and foremost, zoning is not housing—implementation of zoning reform does not guarantee the construction of more housing. Minneapolis, for instance, added only 137 ADUs as of 2019, five years after the city legalized their construction (Lee & Kaul, 2019). That reluctance is reflective of a broader industry trend despite endorsement of such zoning reforms by the NAR and NAHB. Developers and investors (that is, real estate capital) have more familiarity with single-family housing development; they know it to be profitable and relatively low-risk while missing middle housing is as-yet understated in the market (Maharaj, 2020). Local political opposition to zoning reform can make it difficult to accomplish in the first place, and there is legitimate concern that units in duplexes, triplexes, and quadplexes are not what most Americans think of when they think of homeownership. The majority of US households are owned units (with or without a mortgage), and most of that housing stock fits the single-family model. It remains to be seen whether the US population can broadly shift to a more expansive idea of housing (let alone the socio-economic ramifications of that shift).

Finally, although there may be broader regional benefits to housing affordability that result from zoning reform, it may be that what the housing zoning reform would enable is not what the residents of the Fairland and Briggs Chaney plan-area need most. The data indicate that, broadly, restrictions on housing supply increase housing prices and that alleviation of those restrictions would make housing more affordable (Been et al., 2019; Glaeser et al., 2008). There may be locationally specific factors that result in different needs and different impacts from affordable housing policy. Daniel Parolek notes that missing middle housing are market-rate units for those earning between 60% and 110% of AMI (2020). Those making less than that amount, he explains, do not have incomes high enough to pay the true cost of housing without subsidies. For this reason, missing middle housing represents one part of what he calls the “affordable housing barbell” (Figure 42); higher end market-rate housing and subsidized housing represent the other parts of a full housing strategy.

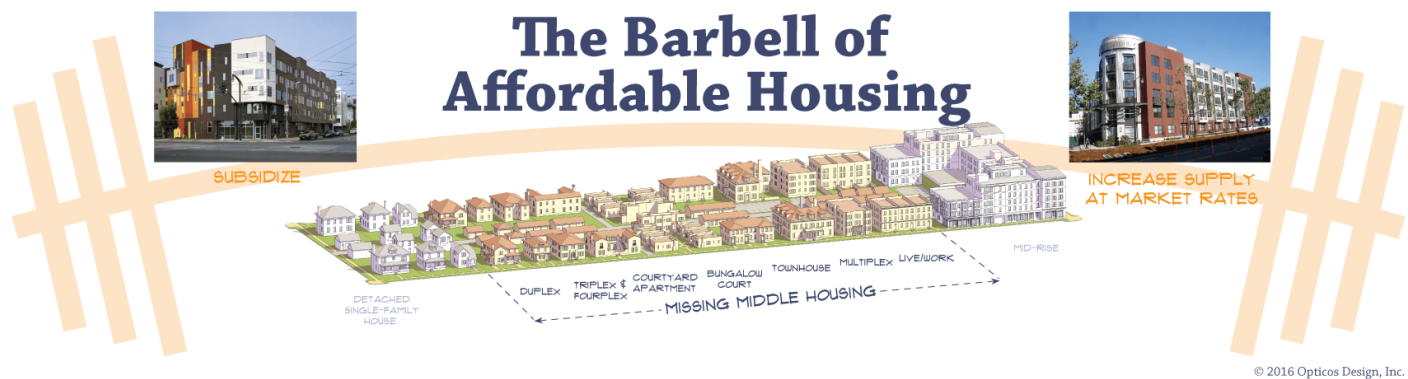


Figure 42: The Barbell of Affordable Housing. Source: Parolek, 2020.

The Urban Land Institute, in a report on “attainable housing,” gives a more conservative estimate for appropriate AMI brackets: 80% to 120% (2019). The needs that missing middle housing may or may not satisfy therefore differ from location to location. For instance, consider Figure 43, which shows the results of an affordable housing gap analysis conducted as part of Montgomery County’s 2020 Housing Needs Assessment.

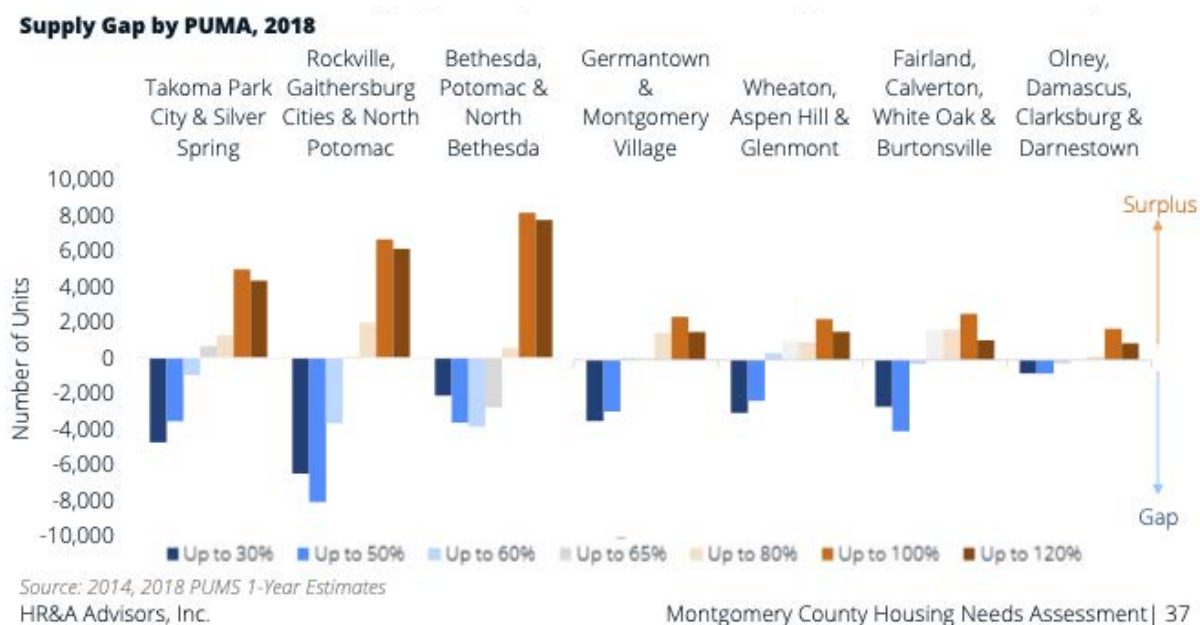


Figure 43: Montgomery County Housing Supply Gap. Source: Montgomery County Housing Needs Assessment, 2018.



The figure shows the relative surplus or gap of housing units in specific subregions of Montgomery County defined by census Public Use Microdata Areas (PUMAs). Looking to the PUMA that contains the Fairland and Briggs Chaney plan-area, we see that there is not currently a great need for the units that such zoning reforms would create. All this said, it may be that the constructions of such units would have broad affordability benefits for the region, or it may be that the construction of such units would intervene in a future affordability crunch caused by a volatile housing market (such as the current one). The plan-area should be monitored closely to ensure that any zoning reforms benefit those most in need.

Social Housing – Vienna, Austria

“Social Housing” is a foreign term to Americans, but it is analogous to our first subsidized housing program: public housing. It is both the most ambitious of the precedents we analyze, and the only one that would comprehensively solve the most serious housing problems in the plan-area, the county, and the nation. The People’s Policy Project released a white paper arguing that social housing was the single best way to address America’s affordability crisis in 2018, and it has remained part of affordable housing discourse since then (Gowan & Cooper, 2018). The Homes Guarantee (2019), a comprehensive housing strategy

forwarded by Tara Raghuveer at People’s Action, demands an additional 12 million units of social housing as the best way to end homelessness and ensure quality, dignified housing for all. Like public housing, social housing refers to developments built and owned by the state with the purpose of providing housing for people outside the private market.

Considering the condition of public housing in the US, however, it is challenging to imagine social housing being implemented in the US. The US introduced public housing in the first half of the 20th century to ensure that working Americans who could not afford market-rate units had access to dignified, healthy housing options. Over the next several decades, the American public increasingly stigmatized public housing, but the federal government continued building housing units as the US population grew, peaking at about 1.4 million in the 1990s (Bloom, 2015). Since then, the total stock has dwindled to less than a million units as the federal government began prioritizing other programs and converting public housing units into other subsidized housing programs. Public housing now represents a relatively small portion of the nation’s subsidized housing stock. Low-Income Housing Tax Credit (LIHTC) developments now make up the greatest number of our subsidized units, and the Housing Choice



Voucher (HCV) system, which follows tenants instead of buildings, subsidizes an even greater number of households. Montgomery County's public housing program reflects that of the nation overall: as of 2021, the Housing Opportunities Commission of Montgomery County (its Public Housing Authority) reported that it manages just 106 public housing units and over 7,000 vouchers. There are no public housing units in the Fairland and Briggs Chaney area. Within that context, social housing differs from public housing in some crucial ways.

Social Housing has come to broadly represent European approaches to public housing. England, Sweden, Austria, Finland, and France are different countries with different political and economic systems, but they are all market economies in which a much greater portion of their total housing units is public housing (over 10% for all of them). For this reason, social housing has come to generally refer to housing systems in which publicly-owned housing units represent a more significant component of the national housing strategy. Nowhere is this more true than Austria, where 80% of all households qualify for housing assistance (Arman & Mundt, 2005). In Vienna, Austria's capital and largest city, the threshold for housing assistance is double the average annual income (Denise, 2015). As a result, over

three-fifths of the city's population live in social housing (Gowan & Cooper, 2018). The country has a robust social welfare system centered on its housing program, which provides high-quality housing with great access to all the amenities people need to live and flourish. As of 2019, Vienna had been identified as the city with the highest quality of life in the world for ten consecutive years by the Mercer Quality of Living Ranking (the study was suspended for 2020 because of the pandemic).

Vienna's innovative and successful approach to housing started a hundred years ago. When Vienna held its first democratic elections after World War I, it extended the franchise to both men and women—the socialists, who advocated for an egalitarian distribution of labor between the sexes, captured the electorate and held power in the city until they were forcibly deposed by the Nazis in the 1930s. This period has come to be known as “Red Vienna.” Vienna during this time had already become a massive city with extensive housing problems, and so the city government began a robust and urgent emergency housing program, sometimes expropriating vacant buildings, and directly purchased properties so that, by 1924, the Viennese government became the city's largest property holder (Duma & Lichtenberger, 2017). The socialists organized this housing program not just to offer a vital

service to the city's most needy but to ensure that every city resident had what they needed to thrive. Despite seismic political shifts over the last century, the fundamental beliefs that grounded this system have contributed to its

resilience—as one Vienna resident answered when interviewed on the subject in 2019, “We have an old idea here that not only rich people should live in good conditions... an important idea and we should hold onto” (Forrest, 2019).

Vienna's approach to housing is simple in its aspirations but complex in its implementation. See Figure 44 for a full diagram of Viennese housing arrangements, compiled by Margaret Funk.

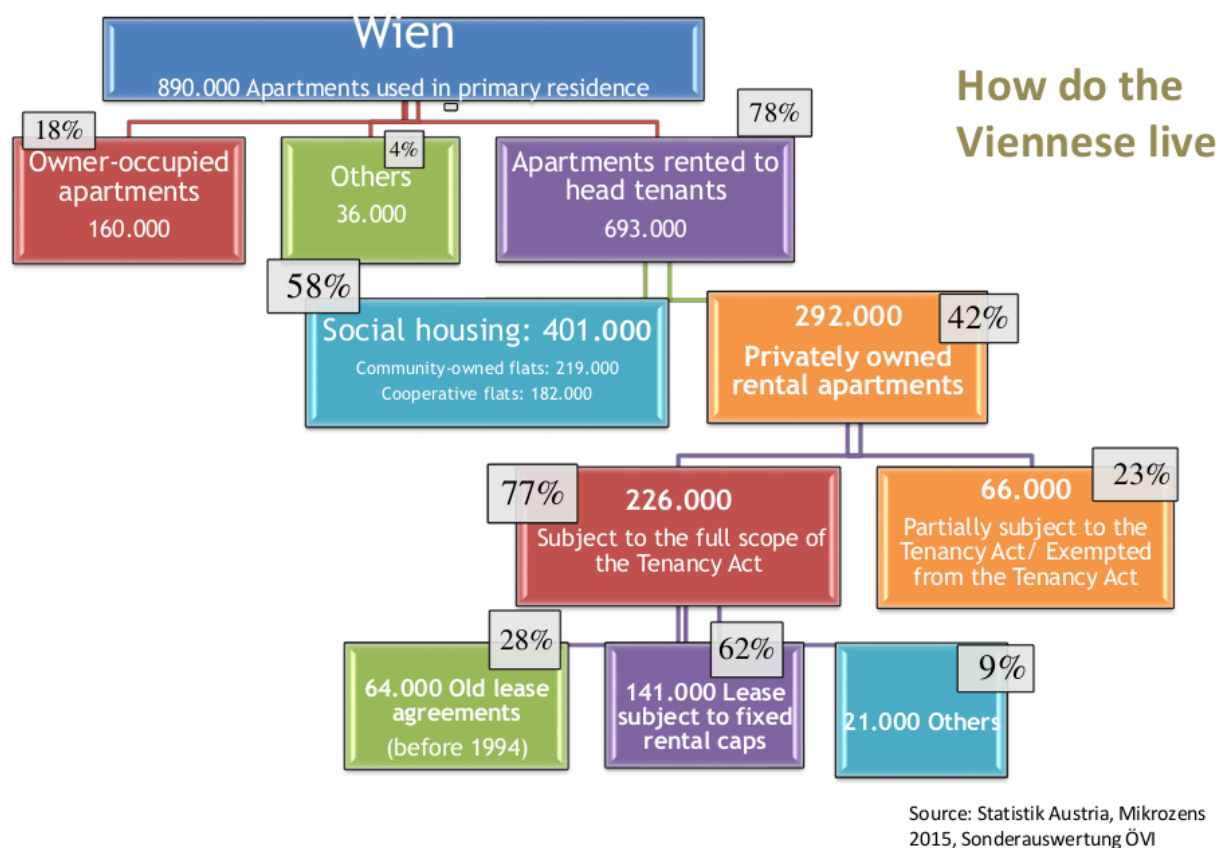


Figure 44: Diagram explaining Vienna Housing Arrangement. Source: Statistik Austria, Mikrozensus 2015

Apartments represent the majority of the city's housing, and 78% of that housing is rented, not owned. Of that subset, the majority is social housing, which is sometimes used to refer to the city's publicly owned housing and sometimes used to refer to its overall housing



strategy. Private landlords own the remainder, but strong tenant laws govern the management of most of that housing stock, such that only an infinitesimal portion of the city's total stock is entirely unregulated. Although the past couple of decades have seen increasing commodification pressure on Vienna's housing market as it becomes a more desirable place to live, the city's people have, for the most part, effectively resisted those pressures (Kadi et al., 2021). The competing pressures of its commitment to both full housing and market economy have resulted over time in an extremely complex system (Housing for All, 2020).

What makes social housing in Vienna so powerful is not the brilliance of any particular housing strategy or policy but rather the sustained political will to realize its project over the last century: quality, dignified housing for all. It works within a market system in which real estate interests constantly attempt to undermine it. Vienna remains relatively successful because the mass of people within Vienna, and the politicians who serve them, recognize the material costs of capitulation to those real estate interests, and so they continuously struggle through bureaucracy, creating an increasingly complex housing system to counter the profit-seeking practices of real estate capital through regulation. It is not, therefore, altogether dissimilar from the complex and reticulated system of

federal and local housing regulations in the US, but it is much more successful.

The Montgomery County Planning Department cannot in-and-of itself realize social housing in the plan-area or Montgomery County overall. It cannot be achieved solely through technocratic reforms within the current American political and economic paradigm. Like in Vienna itself, the people of Montgomery County would have to mobilize to bring it about. Recognizing this, Maryland State Representative and Montgomery County resident, Vaughn Stewart, recently introduced legislation to realize in Maryland a program openly inspired by Viennese social housing that affirms housing as a human right (Schweitzer, 2020). The bill does not currently have enough support to pass, but it represents a growing consensus among politicians and residents that we need more dramatic action to solve our affordability crisis.

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Economic and Community Development

In keeping with our overarching theme of justice, it is paramount that community and economic development strategies work to empower local communities and generate opportunities and support for Fairland and Briggs Chaney's vulnerable populations. It is critical that interventions intentionally prevent the displacement of vulnerable populations that often comes with major redevelopment initiatives or market-driven shifts. Figure 45 articulates a spectrum of community development theory critically analyzing and categorizing the fluctuating trends and definitions of progressivism (Shi, 2020). While both liberal progressivism and radical progressivism emphasized different actors and strategies, the common thread between both includes redistributive components of power, resources, and public space, which is the basis for our approach.

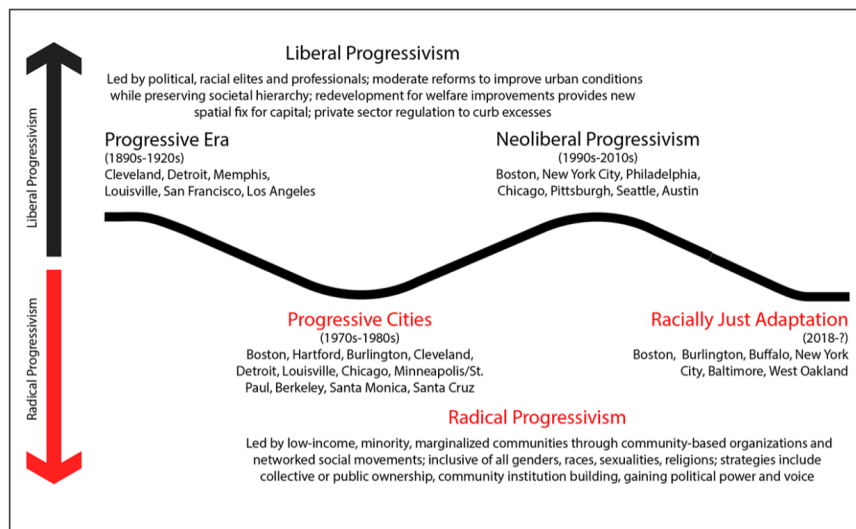


Figure 45: Countercyclical waves of urban liberal and radical progressivism. *Source: Shi, 2020.*

Enabling community-owned assets and increasing public resources for meaningful infrastructure and safety net programs are ways in which communities and cities can build resilience in the face of a gentrifying Fairland and Briggs Chaney. We illustrate this with two examples of such applications below. The East Portland Community Investment Trust and the Land Value Capture tools utilized in Latin America.

Fairland and Briggs Chaney’s suburban form is largely defined by US 29 and the ICC. This transportation network and other components of the suburban form pose many restrictions to mobility, market connection, and social cohesion. Deliberate and strategic intervention in the study area’s spatiality and transportation landscape can not only improve mobility, but stimulate local market connections, respond to and mitigate climate change threats, and foster stronger community cohesion and participation. Two precedents discussed below include a Freeway Removal in Rochester, NY and a

place-making strategy in Downtown Silver Spring, MD.

Buy Back the Block: East Portland Community Investment Trust

East Portland Community Investment Trust in Oregon launched in 2017 by Mercy Corps, a humanitarian nonprofit, that aspired to connect vulnerable communities to wealth building opportunities. The group saw an opportunity in Plaza 122, a commercial strip mall facing foreclosure in an economically underdeveloped corner of town and attached a real estate trust to the property. They designed the financial scheme as a Community Investment Trust (CIT) and invited the surrounding community to invest as partial owners by contributing low, monthly investments and recoup profits from the tenants' rent through appreciating shares and dividends.

Key to the success of East Portland's CIT is the intentional design for the resident population immediately around the strip mall. East Portland is similar to Fairland and Briggs Chaney in that it holds a high percentage of immigrant communities, many of whom are renters and have been displaced from gentrifying sections of Portland, OR.

The Mercy Corps team underwent stakeholder interviews of their target populations to best understand their interests and barriers to investing. They understood that monthly payments could be out of reach for many asset-poor populations, that some saw risks in having their money tied up in a property, and that some had questions or needed to learn more about investing. With this understanding, Mercy Corps developed a unique financial product and community development model to "inspire and enable people to improve their own financial well-being as well as their community health and prosperity" and thus incorporated the following design elements (Mercy Corp, 2019):

- *Zip Code-restricted eligibility:* Investors must be 18 years and older and a resident of the surrounding 4 zip codes.
- *Low barrier to entry:* Monthly payments can range between \$10-100/month, the lowest minimum purchase price from Community Equity Investment Trusts across the country.
- *A secure exit:* Guaranteed protection for loss for an investor through a direct Letter of Credit backing from a bank. This also allows the investor to withdraw their funds at any time such as in the event of a personal emergency.
- *Investor Education course:* A mandatory "Moving from Owing to Owning" course that was offered in 5 languages.

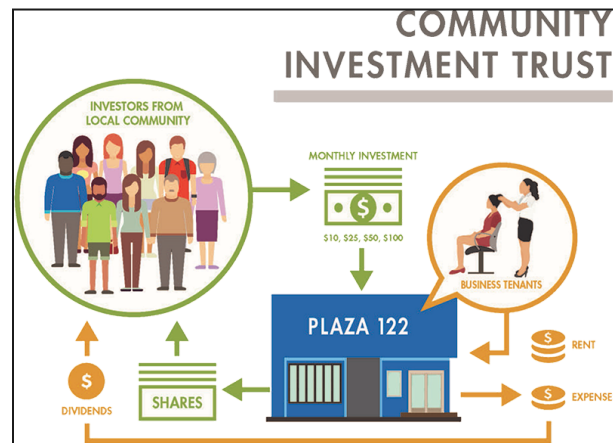


Figure 46: Diagram of Community Investment Trust Operations. *Source: Mercy Corps.*

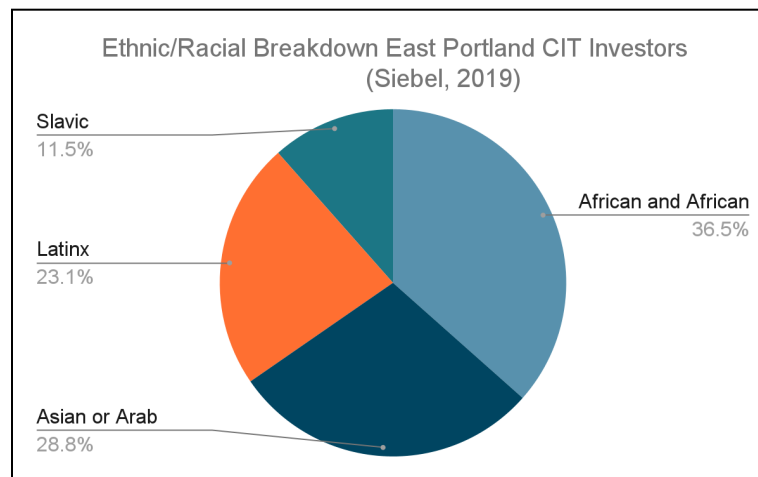


Figure 47: Chart of ethnic/racial demographics of East Portland Community Investment Trust investors. *Source: Siebel, 2019.*

How Plaza 122 CIT Improves Community Health

Plaza 122's CIT is a small-scale economic development program that has provided meaningful and high-impact return on investments. In addition to added financial security for these low-income investors, there are other benefits toward overall community health.

The investors reflect the diversity and socio-economic realities of the target population with over 20 countries of origin represented in the CIT (Siebel, 2019). 69% of participants were first-time investors, many of whom received incomes below the poverty line. Plaza 122 tenants fill critical market gaps for the surrounding community. Businesses and services such as African Family Holistic Health Center, the Somali-owned cab company, the Somali Advocacy organization, and a Latina-owned Hair shop provide services to the diverse cultural community needs in East Plaza.

Portland. Having the local community invested in the Plaza reinforces support for these local businesses, micro-economy of the plaza and the surrounding area.

Other transformative benefits from the CIT are the stronger sense of community ownership, self-determination, and civic participation. Tenants and owners also discuss increased political organizing and community building activities around the Plaza, including advocacy for a new grocery store and improved transit service, among other improvements in their community (Mercy Corp, 2019).

Above all, the program delivered the outcome of increased financial independence. With 26 tenants, the CIT investment model proved viable. Though investors have access to liquid investments at any time they need it, over 95% have left their investments in the

Opportunity in Fairland and Briggs Chaney

Community or Neighborhood Investment Trusts are replicable and are a highlight opportunity to converge and leverage community assets in the Fairland and Briggs Chaney plan and study areas for promoting resilient and equitable community economic development. Mercy Corps's White Paper on the Community Investment Trust (CIT) discusses their design process and important strategic planning and financial factors taken to launch a CIT in different geographic and socio-economic environments (MC White Paper - A Vision For Replication). CITs require strong partnerships with the capacity to organize and manage the CIT and finance upfront purchasing of real estate. In Fairland and Briggs Chaney, partners for impact investments, loans, or grants can be sought from banks, foundations, community or faith-based institutions,

non-profits, and/or the County government.

To scale up CIT solutions and effects, state and municipal governments should make an effort to incentivize and promote CITs through public policy and zoning (Hopkins, 2021). The Briggs Chaney marketplace, for example, is currently designated as an Enterprise Zone (EZ).

The State of Maryland and Montgomery County Enterprise Zone Administrators can educate community stakeholders about CITs and incentivize their formation through the EZ tax credit program. This can be applied to other sites within the study and the plan-area, such as the auto mall, if redeveloped, or the vacant office park near Tech Road.

TABLE 1

Key Design Elements for Five Community Equity Investment Initiatives

Organization/ project	Location	Purchase price minimum	Exiting the investment	Ongoing buy-in options?	Geographic requirement for investors
Market Creek Plaza	San Diego	\$200	Undefined at outset, but in practice, exit has happened at any point an investor has requested it	No; onetime only	Designated zip codes
Nico	Los Angeles	\$100	Local investors may request exit after six months, subject to the redemption plan's terms	Yes	None
Northeast Investment Cooperative	Minneapolis	\$1,000	Investors may request to exit, and the board must grant approval	Yes	State of Minnesota
Community Investment Trust	Portland, Oregon	\$10 (monthly)	Anytime	Yes	Designated zip codes
Boston Ujima Project	Boston	\$50	Investors may request to exit, and the fund must grant approval	Yes	City of Boston

Source: Authors' analysis of community equity investment projects.

Figure 48: Chart of design elements of community equity investment projects. *Source: Theodos & Edmonds, 2020.*

Land Value Capture Tools: Trade offs from CEPAC in São Paulo, Brazil

Land Value Capture is an economic development strategy in which governments employ a variety of financial tools to grow their public resources from future development. When applied and managed well, it can be a significant means of enabling municipalities with tight and competitive budgets to fund

critical public infrastructure and services, such as affordable housing, transit, and parks, or other major strategic climate or social justice goals in need of stronger public financing.

A wide variety of such tools, such as tax increment financing, property taxes, and impact fees are deployed to capture the financial benefits of anticipated



development. Brazil developed a unique financial tool called CEPAC, a Certificate of Additional Construction Potential. Its application in São Paulo, Brazil yielded the single-most revenue per developable land amongst Land Value Capture tools in the world. The CEPAC is authorized and backed through clauses in the Brazilian 1988 Constitution that states the goal of urban development is to “guarantee the well-being of citizens” and ensure the “full development of the social function of a property” (Brazilian Constitution Art 128 of 1988).

The CEPAC program allows an Urban Operation (UO) or redevelopment zone to set development potential and charge a developer for the “Onerous grant of the right to build” (Amigo, 2021). CEPAC certificates are sold and traded to developers via an electronic auction, enabling this demand-driven market to dictate the price. In return, investors enjoy the added flexibility of diversifying their portfolios as well as the luxury of building or selling their certificate at their leisure. The local government collects funds from the auction upfront to build out desired public benefits rather than deficit spending or relying on a developer to build it. Between 2015-2018, the CEPAC program São Paulo resulted in major returns. The two Urban Operations, Faria Lima and Agua Espraiada, make up only 0.1% of the city’s developable land but generated \$2.76 billion (Kim, 2018).

Unlike property taxes or Tax Increment Finance (TIF), which are more common public financing mechanisms in the US and Montgomery County, CEPAC does not place the burden on taxpayers for recouping costs for public investments. It is also designed primarily for steering high-density TOD redevelopments, which may be the conditions of a future Fairland and Briggs Chaney US 29 redevelopment. However, further capacity building is needed on the part of the federal, state, and local governments in order to adapt and adopt a program like CEPAC (Kim, 2018).

Land value capture tools, like CEPACs, are useful financing mechanisms, they are tools for generating public revenue. While linking equity and sustainability agendas with financing mechanisms is an important policy step, equally important is the oversight and accountability mechanisms through decision-making and implementation processes to ensure intended outcomes are achieved and negative consequences are avoided. For example, in Sao Paulo’s example, zoning was allocated for affordable housing through the redevelopment, which prevented some residents from being displaced; yet, insufficient land was preserved and the dramatic rising cost that followed the private investment displaced many low-income residents.



Still many policy makers, especially across the developing world are excited about the potential of land value capture tools and getting the institutional mechanisms and cooperation right to enable communities and governments to adequately and strategically set and finance important public-serving agendas.

Freeway Removal: Rochester, NY's Inner Loop East

A potential intervention that can be applied to the study area is the removal of US 29 and the InterCounty Connector which currently divides the Fairland and Briggs Chaney residential communities across four quadrants that experience minimal interactions and heavy transportation-related burdens.

Rochester, New York's Inner loop was built in the 1950s to move suburban commuters and its construction and 8 lanes of dedicated car traffic divided downtown areas and Black communities for decades (Popovich et al., 2021). With the aid of a \$25 million US Department of Transportation Tiger Grant, the city of Rochester matched funds to reconstruct the eastern part of the loop. In 2017, the sunken section of the multi-level highway was filled in and converted to an at-grade complete street with bicycle and walking paths. Eight driving lanes were brought down to three. In addition to the reduction of single-occupancy vehicles on the road, the reclaimed lanes were made

available for other transit modes and new mixed-use development.

Freeway removal projects like the one in Rochester are gaining traction across the country, as many cities and counties look to repair the harmful, racist legacy of highway expansion. As part of the Infrastructure Bill debates, the *Reconnect Communities Act* was introduced to US Congress in April 2021 calling to “establish a program to improve community connectivity by identifying and removing or mitigating infrastructural barriers that create obstacles to mobility or economic development or expose the community to pollution and other health and safety risks, and for other purposes” (S.1202 - 117th Congress, 2021-2022). The Act has support from Maryland legislators, such as Senator Ben Cardin and Representative Anthony Brown from the neighboring Calverton district and others.

This example highlights the opportunities and possibilities if the focus of transportation and revitalization projects shift to moving people and not simply car-traffic, which is especially critical for populations that do not or cannot drive, such as cost-burdened individuals, new immigrants, youth, and old or disabled individuals.

In auto-dominant places like Fairland and Briggs Chaney, similar agendas could be taken to build on existing sustainable



transportation assets, such as the trail network and the BRT to increase service, connectivity, and access points to the natural, historic, cultural, and built assets across the plan-area. Such a program would also enable an appropriately-scaled response to the enormous mode-shift needs demanded by the climate change crisis.

Placemaking: Silver Spring, MD Civic Center + Veterans Plaza

The second spatial example responds to the limited public spaces and sense of place in Fairland and Briggs Chaney. Indoor and outdoor gathering places are significant amenities in communities that mark a location's identity and invite

communities to meet, socialize, and foster civic participation. Downtown Silver Spring's Veterans Plaza & Civic Center is a beloved example. This award-winning plaza and civic building is a centrally-located public facility with a variety of meeting room sizes and welcoming accommodations. Montgomery County also sponsors a Community Access Program funding that enables non-profits and other community groups to reserve space and host events at an affordable rate. It is located in the central business district, which fosters further activity and connectivity to shops, transit, and other desirable destinations. The plaza is consistently populated with residents of all ages and backgrounds and jostling and vibrant activity of a desired place.

The community centers in Fairland and Briggs Chaney are important resources for the residents as they host events as well as adult and youth training services. As the study area possibly grows and transforms, support and enhancement of such places will be important. Locating such facilities in a centrally accessible location near commercial and recreational sites can bring residents across the area quadrants together. Embedding valued community elements or history in these places are other meaningful ways to honor and highlight the identity of the place.



Climate Change Adaptation & Mitigation

Planning for Climate Change

Climate change adaptation requires that the built environment is developed in such a way that it is able to absorb the impact of changes to local and global climates. Climate mitigation means that a community takes action to address the root causes of climate change, such as reducing greenhouse gas emissions. Accomplishing both is vital to a sustainable future for any community; however, these objectives are not enough. It is critical we weave climate justice throughout a broader vision of any area's future, ensuring that planning strategies lead to equitable and just distribution of community benefits and costs. Providence, Rhode Island's Climate Justice Plan succinctly captures this last objective with the phrase "everyone gets what they need to thrive" (Faulkner, 2019). The existential and present threat of climate change requires immediate action through a systems-based approach to transform our communities and change our behaviors.

Locally, examples of this type of initiative include Montgomery County's Climate Action Plan (CAP) from June 2021 and its Solid Waste Management Plan. The CAP is an ambitious



framework detailing how the county can reach its goal of net zero greenhouse gas emissions by 2035, relative to 2005 emissions levels (CAP, 2021). Strategies for accomplishing this include decarbonization of the electricity grid, promotion and facilitation of public transit use versus personal vehicles, and adaptation of construction methods to reduce the carbon embedded within buildings (CAP, 2021). The CAP outlines specific actions to reduce emissions and build climate resilience and commits to an annual inventory of tasks that will implement those actions. Ultimately, these climate-specific documents are functional plans that build on the guidance of Thrive Montgomery 2050's comprehensive plan. The latter makes references to climate change, but acknowledges that as a planning document, it is only meant to set a general vision and other more specific plans will be developed to turn ideas into reality. The CAP, which was developed concurrently, is an example of such a functional plan, as is the county's Solid Waste Management Plan.

In 2018, an effort was started to formalize a zero waste strategy for the county, building on the county's already impressive waste diversion rate (60% in 2016) compared to the region (Zero Waste 2018). Posters for the Aiming for Zero Waste initiative mention that certain regulations and policies could help the county foster a circular economy. This economic model intentionally reincorporates waste from a product's life cycle back into the production cycle and minimized any residual waste, if it is not eliminated completely. Although highly compatible with climate adaptation and mitigation goals, the phrase "circular economy" does not appear in the CAP or *Thrive Montgomery 2050* plans. However, use of certain indicators for climate and waste-related strategies mirrors what one would need to follow for circular economy programs (ex., recycling rates, creation of green jobs, renewable energy adoption, etc.).

Climate change is also being addressed at elevated scales that ultimately impact the Fairland and Briggs Chaney area. Maryland recently enacted the "The 2030 Greenhouse Gas Emissions Reduction Plan" Act in February 2021, setting a practical vision for reducing the state's greenhouse gas emissions by 40% compared to 2006 levels, if not more (MD GHG, 2021). Both at the state and federal levels, programs exist and continue to evolve that can help Montgomery County achieve its climate goals and facilitate emissions reductions. Federally, these include planning efforts like the Building Resilience Against Climate Effects (BRACE) Framework, developed by the Centers for Disease Control and Prevention (CDC) to guide public health departments establish climate resilient adaptation plans (Marinucci, 2014). Agencies and departments across the federal government, such as the Environmental Protection Agency, Health and Human Services, Energy, NASA, and NOAA,



are also conducting important remote sensing, planning, facilitation, funding and other practical work to implement projects that will combat climate change.

The need to take this immediate system-wide approach to tackling global climate change is emphasized at the international level by the Intergovernmental Panel on Climate Change (IPCC). The Panel's Working Group I published an updated report on the scientific basis for climate change in August 2021, a part of the IPCC's Sixth Assessment Report. The Summary for Policymakers version of this contribution (SPM) states,

With every additional increment of global warming, changes in extremes continue to become larger. For example, every additional 0.5°C of global warming causes clearly discernible increases in the intensity and frequency of hot extremes, including heatwaves (very likely), and heavy precipitation (high confidence), as well as agricultural and ecological droughts in some regions (high confidence). (IPCC 2021, SPM-19).

The report goes on to describe how urban areas around the world will bear and generate climate change-related consequences:

Cities intensify human-induced warming locally, and further urbanization together with more frequent hot extremes will increase the severity of heatwaves (very high confidence). Urbanization also increases mean and heavy precipitation over and/or downwind of cities (medium confidence) and resulting runoff intensity (high confidence). In coastal cities, the combination of more frequent extreme sea level events (due to sea level rise and storm surge) and extreme rainfall/riverflow events will make flooding more probable (high confidence). (IPCC 2021, SPM-33)

This collection of global actions at every institutional scale demonstrates how far governments have come recognizing both the planetary threat climate change poses and the role small communities can play to fight back. The work currently being done is not enough alone to turn back the clock on the damage already inflicted, but it is a foundation from which to continue innovating solutions and course correcting. The master area plan update that Montgomery County is working on for Fairland and Briggs Chaney is an opportunity for the county to implement many of its climate goals and actions. Laying this foundation for a better future in the Fairland and Briggs Chaney area can serve as a model

for other area plans to come

Climate Change's Potential Impacts on Fairland and Briggs Chaney

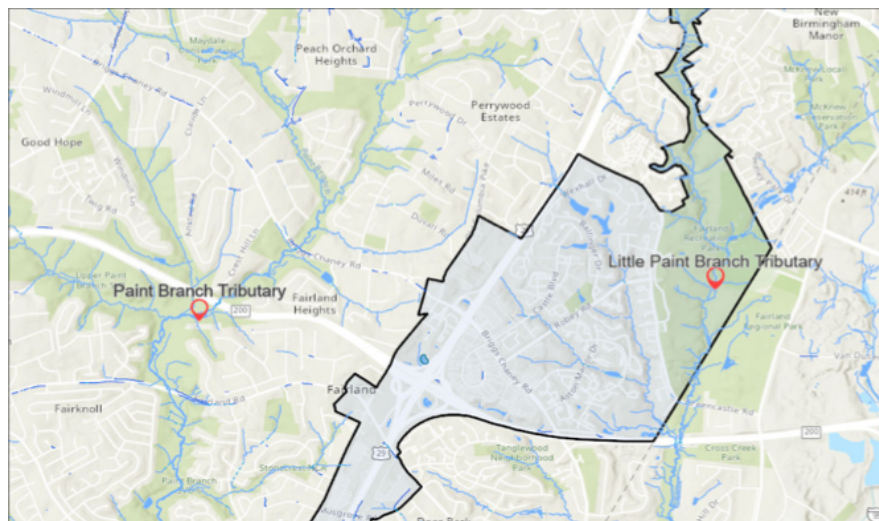


Figure 49: This map shows the northern end of the Fairland and Briggs Chaney Master Plan-area (outlined and shaded). It draws attention to the Little Paint Branch and Paint Branch streams which cut across the master plan and study areas. The sensitive headwaters of both streams are in the general Fairland and Briggs Chaney area. *Source: Potomac Conservancy, 2021.*

One way climate change can have a significant impact in the plan and study area is through disturbance of cold water currents, which exist in the headwaters of various Fairland and Briggs Chaney streams (see map above), including the Little Paint Branch, Paint Branch, and tributaries of the Patuxent River (Potomac Conservancy, 2021). The wildlife in these coldwater streams are sensitive to minor changes in average water temperature, including the native brown trout, so the more water temperatures rise, the more threatened these already stressed urban wildlife will be (Potomac Conservancy, 2021). Flash flooding from more extreme weather will also increase the polluted runoff entering these streams and directly impact residents in low-lying areas. However, regular flooding is not a widespread

or significant issue in Fairland and Briggs Chaney currently and climate forecasts do not project this to be a major impact of climate change in the area (compared to other issues like extreme heat or relative to other neighborhoods in the county) (CAP, 2021).

Climate change is fed by greenhouse gas emissions and internal combustion engine (ICE) vehicles are a common source. These atmospheric emissions are mitigated by a variety of natural means, including tree absorption. The following map shows the location of the tree canopy marked in green in the Fairland and Briggs Chaney plan-area.



Figure 50: Intersection of US 29 and MD 200, Fairland and Briggs Chaney plan-area, MD. GIS Layer. Source: *Montgomery County Tree Canopy Explorer, 2017*

The lightly shaded areas at or near the nexus of US 29 and MD 200 reflect impervious surface or uncovered turf. The canopy is noticeably patchier within the plan-area compared to the tree canopy in the surrounding neighborhoods because of the greater dominance of pavement and buildings. One recent major reduction to the area's tree canopy occurred as a result of the redevelopment of Paint Branch High School (Bunnag, 2009). Due to the need for land to build the school's modern campus, adjacent forest land was cut down. Using Montgomery County's online Tree Canopy Explorer tool to measure changes in tree coverage, the school's current land area experienced an approximate 24.3% loss of canopy (from 29.1 to 4.8%). The decrease in canopy experienced around the community has a negative impact on the value of its ecosystems' services. This results in raising the level of danger to residents due to extreme heat, as well as reducing the environment's capability to sequester carbon and effectively manage stormwater.

Socio-Ecological Corridors Uniting Communities (Worldwide)

One climate change adaptation and mitigation solution that offers the co-benefit of reconnecting communities is the creation of socio-ecological (SE) corridors. These corridors are an extension or creation of natural areas that connect to other patches of the surrounding environment that serve as wildlife habitat, ecosystem tools, and recreation space for people (Borrero, et al. 2014). Globally, SE corridor development is a means of both restoring the ecology of an urbanized area and addressing society's needs for expanding the benefits of ecosystem services, such as stormwater runoff mitigation, carbon sequestration, and mental health benefits. In an urban area, expanding these “wild” spaces may also counteract the consequence of transportation projects that had the effect of dividing neighborhoods or eliminating competing uses from the landscape, such as highways and rail lines.



Figure 51: Utrecht, NL Wildlife Corridor (left) and Brooklyn Queens, NY Expressway (right). Sources: Jongman, 2021; White, 2021.

As demonstrated by the wildlife corridor and active transportation path in Utrecht, Netherlands (pictured above on the left) and the conceptual park proposed for over the Brooklyn-Queens Expressway in New York City (pictured above on the right), engineering spaces for trees, turf, and green paths can serve as new community focal points, as well as tools to facilitate wildlife adaptability through habitat connectivity. In areas where a transportation right-of-way (ROW) cannot be removed or redeveloped, building over the ROW may be a feasible option that takes advantage of the full potential (tridimensionality) of the space. This strategy also keeps the new part of the corridor highly visible to potential users, while preserving existing transportation uses for local and regional commuters.

Strengths of establishing or extending socio-ecological corridors include providing natural

space to serve as a carbon sink and not just sequester carbon dioxide, but also absorb stormwater runoff. Furthermore, the joining or infill of wildlife habitat patches makes life more resilient for native species that may use these corridors currently or need them to migrate in the future to adapt to new climate conditions. Corridors also offer social co-benefits, such as traffic calming, public health, and aesthetic improvements. Weaknesses of these projects include that they may be expensive to implement or otherwise not pass a conventional and short-sighted cost-benefit analysis, especially depending on the scale of the project.

In addition, financing may be difficult to access, as has been the case for the aforementioned Brooklyn project (White, 2021). A corridor extension may also require relocation of existing community assets or residences, which may generate public resistance and lead to equity and justice concerns, as well as higher indirect development costs.

Fostering Resilience Through A Circular Economy (Peterborough, UK)

Figure 5.1: Proposed 'Peterborough Circular Economic Indicators'

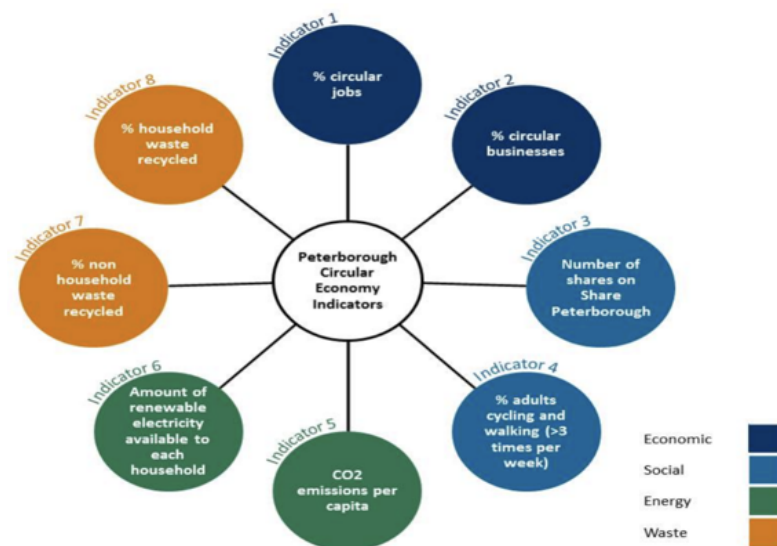


Figure 53: Proposed 'Peterborough Circular Economy Indicators' Source: Morley, Looi, and Zhao, 2018.

The phrase "circular economy" means an economic structure where waste is limited and materials that would historically find their way to a landfill (e.g., scrap inputs, product returns, obsolete items, etc.) are re-incorporated into the production cycle (Morley et al., 2018). In the context of climate change adaptation and mitigation, the phrase takes on a broader meaning and significance. At the community scale, adopting circular economic



principles in planning means designing a society where societal wastes get recycled, reused, repurposed, and repaired, as well as eliminated by removing single-use and finite resource dependent items from the supply chain. This would apply at different scales as well. For instance, household garbage gets minimized and what is left is almost entirely recycled or composted. More generally, finite fossil fuels are exchanged for renewable energy. Both have the effect of reducing greenhouse gas emissions and putting less stress on the planet's natural resources. Around the world, cities have begun to adopt the label "circular city" and wish to be at the forefront of innovation toward a cleaner and more resilient future (Circular Cities).

Peterborough, UK did this by spurring community and economic development through activities that reduce waste, create jobs, lower carbon emissions, and improve residents' health (Morley et al., 2018). The city tracks its success by applying data to a variety of indicator categories that measures its circularity and reflects how much the city has done to reduce its carbon footprint and improve its climate adaptability. Many of these indicators are already used or recognized by Montgomery County in its *Vision for Zero Waste* and *Thrive Montgomery 2050* plans, but have not necessarily been comprehensively approached by any single plan. Labels and campaigns like "circular cities" help bake holistic, climate-friendly policies into a community's identity and may contribute to resident buy-in of necessary culture changes (e.g., choosing to recycle or repair versus throwing items in the trash).

During the ongoing area planning process, an objective can be set for Fairland and Briggs Chaney to be Montgomery County's first "Circular Community" and become a model for other county neighborhoods and communities worldwide. Ways in which Peterborough, UK and other cities around the globe have undergone this transformation include:

- A business to business (B2B) sharing platform that helps residents with small and nascent businesses access the resources it needs to develop products and offer services (Morley, Looi, and Zhao 2018);
- Encourage and develop platforms (like MyFoody (Milan, IT)) that help area food retailers connect with soon expiring food/surplus with customers looking for discounts (European Commission 2018);
- Partner with mobility-sharing programs that do not require massive capital investment or long contracts and offer pilot programs that can scale up with proof of concept (compare the experiences of electric vehicles (EV) car sharing programs

(BlueIndy in Indianapolis, IN with BlueLA in Los Angeles, CA) (Sheridan, 2021; see also Ferguson and Holland, 2019).

Addressing Climate Change's Impact on Fairland and Briggs Chaney's Food Security: Learning from urban farming in Kuala Lumpur, Malaysia

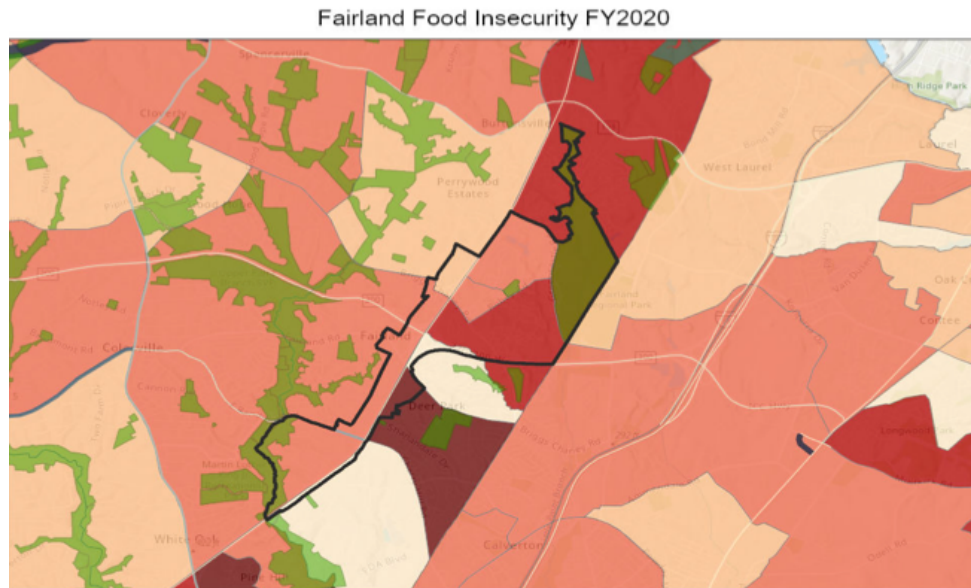


Figure 54: Census tracts are shaded in red to represent areas with higher food insecurity rates (darker reds) versus lower (lighter shades). The Fairland and Briggs Chaney Master Plan-area (map center) is outlined in black. *GIS Layer Source: Capital Area Food Bank GIS captiData, 2020-2021.*

According to the Capital Area Food Bank, the food insecure rate in the census areas that make up the Fairland and Briggs Chaney plan-area range from 6.3-14.6% (Capital Area Food Bank, 2021). This will only increase with the current pandemic and climate change impacting global food prices and supply chains. A related solution is a hyper-localized urban farming model existing in Kuala Lumpur, Malaysia (Teh & Ives, 2020). A start-up

opened a vertical farming company in a shipping container at the beginning of the pandemic and has found a supportive customer base with local residents (Teh & Ives, 2020).

This model can be highly responsive to a community's food needs and wants. The facilities are climate controlled and allow a year-round growing environment. Furthermore, its mobile nature allows for flexible siting and a small footprint. Finally, it could benefit from efficient drip irrigation incorporating rain harvesting. However, it may only grow a limited amount of food types and amounts. There may also be zoning challenges or neighborhood pushback. Finally, these mobile vertical farms are also more capital intensive to develop than a traditional community garden. Nevertheless, they may fill a market need for accessible, healthy, and high quality produce, while producing grounds for local job training and job opportunities.

Investing in Grid Decarbonization and Partnering for Energy Storage (Worldwide)

The graph below, originally from Montgomery County's Climate Action Plan, demonstrates what greenhouse gas emissions sources in the county need to be addressed most to reduce county emissions by 100% of 2005 levels.

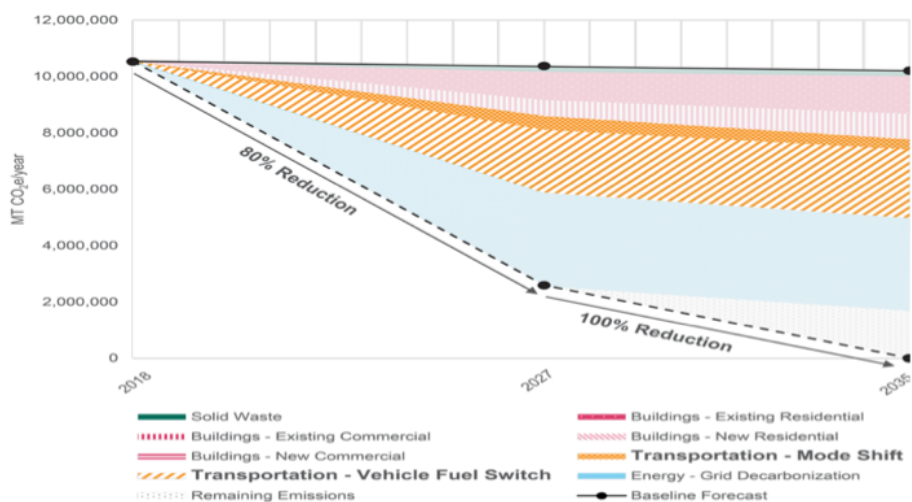


Figure 55: Montgomery County Climate Action Plan Emissions Reductions Projections. Source: CAP, 2021.

The 2018 baseline is depicted to demonstrate where emissions are as of the planning of the CAP and reflect how much has changed since 2005 (CAP, 2021). Interestingly, grid

decarbonization and moving away from internal combustion engine vehicles are expected to have the largest impact toward being net-zero. With renewable energy generation and electric vehicles becoming more prominent in the coming decades, there is an opportunity to leverage that growth in support of Fairland and Briggs Chaney's climate change mitigation and justice efforts. For example, Los Angeles, CA, focused deployment of its EV car sharing program, BlueLA, in underserved neighborhoods, recognizing that these communities have historically suffered higher levels of emissions pollution (Ferguson & Holland, 2019).

As auto manufacturers shift production lines to exclusively produce EVs within the next two decades, Montgomery County can take advantage of the expanding inventory of electric vehicle batteries. These batteries can have a first- or second-life as a means of non-vehicle energy storage and electrical grid management, as the map below shows has occurred around the world in a variety of ways.

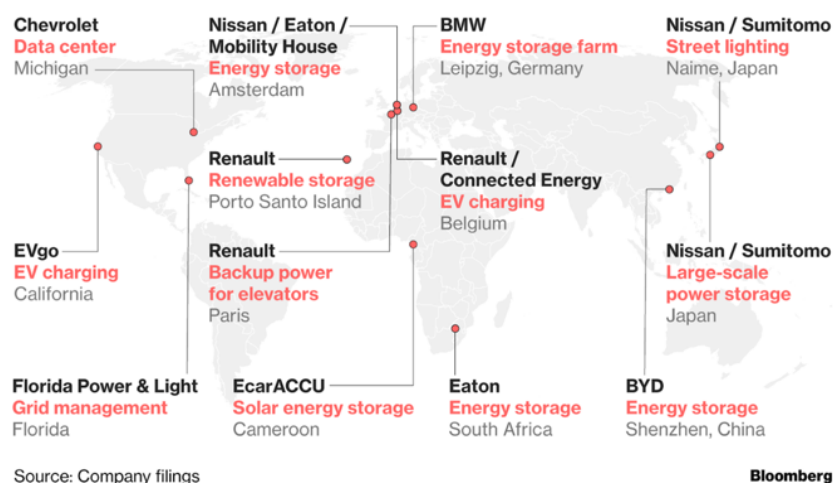


Figure 56: Global EV Battery Reuse Sites. *Source: Lovell, 2019.*

If connected to solar panels or other renewable generation, these batteries can collect power throughout the day and redistribute it into the grid during peak demand periods (Maloney, 2018). The energy storage system can also be used for site-specific purposes like EV charging or powering mobile vertical farms, most importantly, at any time of day. After



capital investment is accounted for, maintenance costs may be low enough to provide the community with a low cost energy source. The potential for small-scale implementation creates opportunities for mini-grid load management, such as in shopping centers, homeowner associations, East County government properties, etc. Auto dealerships and maintenance businesses are also natural partners to help launch this initiative. For example, instead of auto companies keeping unused batteries on shelves in a stock room, the county could collaborate with them and have the batteries deployed as active units for the business' own energy needs or in a community generation/storage system. Some weaknesses to this approach include that batteries do lose storage ability over time. These facilities may also take up too much space, even for small scale uses. The county also needs to plan for battery retirement and disposal. Nevertheless, facilities around the world have shown that both the private and public sector are excited to innovate in this real

Conclusion

After experiencing rapid suburbanization in the middle to later part of the twentieth century, investment in Fairland and Briggs Chaney declined, leaving the community waiting for more opportunity. As a result of this underinvestment, in addition to policy challenges, the culturally rich and diverse community living within the plan-area has dealt with burdensome housing costs, food insecurity, a lack of transportation options, and increasing vulnerability to climate change's impacts. Steps have been taken over the years to address these issues, but they still exist today and will continue to burden residents until definitive action is taken to make it a sustainable and just community.

The precedents described earlier all present potential solutions to make Fairland and Briggs Chaney a complete community, holistically designed to ensure its residents live their best lives. Through policy changes, spatial interventions, and tactical strategies, the housing, community and economic development, and climate change challenges facing the plan-area can be overcome. In the following section on scenario planning, three potential scenarios for the community are explored. Within these scenarios, uplifting precedents like those discussed earlier and others are applied in unison, presenting a whole vision of what a static, reformed, or transformed Fairland and Briggs Chaney will look like. Although big changes are coming to the surrounding study area, a direct and purposeful commitment to and investment in Fairland and Briggs Chaney's residents must happen to help them thrive.



PART II: SCENARIO PLANNING

INTRODUCTION

As planners, we start from the recognition that the future is uncertain even though communities want very much to secure a particular future. All planning starts from that, but the exploratory scenarios we present here differ in that they identify several potential alternative futures. This is essentially a learning process in which we collaboratively identify multiple visions of the future and then use those as guides to make decisions. For each of these alternative futures (or scenarios) we first formulated a vision and objectives that state overarching themes for what we want to accomplish in Fairland and Briggs Chaney. We then came up with multiple strategies, which are guided by our study of precedents, to help achieve these identified objectives. Finally, we created personal vignettes for each scenario to provide a glimpse into what life for a resident in Fairland and Briggs Chaney may look like if the vision presented is fully accomplished. These vignettes add a human element to our scenario planning and show how our proposed strategies will affect people's lives.

Our three scenarios are status quo, reform, and revolution. Our status quo scenario assumes that business as usual will continue and no great intervention will take place and asks, based on that, what the Fairland and Briggs Chaney plan area in 2031 would look like (a 10-year horizon span). This scenario uses data from our analysis of current conditions (Part I) and forecasts using projection methods to envision that future. This scenario will show that the current trends taking place in Fairland and Briggs Chaney are unacceptable and will not lead to a desired future. Our reform scenario asks, if every goal forwarded by the Thrive 2050 Plan were accomplished, what would 2031 look like? We identify objectives for the plan-area based on the goals laid out in *Thrive 2050* and other planning best practices, then present actionable strategies that would be necessary to realize those objectives. This scenario will show that while great strides would have been made to realizing the stated goals, more still would need to be done to accomplish sustainability and equity in the plan area. Our revolution scenario instead asks, if we imagine a truly just and sustainable future for the plan area, what sort of objectives and strategies would be necessary in order to realize this? The objectives and strategies of the revolutionary scenario aim to realize a future that is truly just and sustainable, achieving and exceeding and sustainable the goals of Thrive Montgomery 2050

STATUS

QUO

Vignette

JOSH

2031 Fairland and Briggs Chaney resident, Josh, is a single father who teaches at Bethesda Elementary School. It takes him about half an hour to drive there on US 29. On his commute, Josh cranks his AC to deal with the stifling heat. In the last couple of summers, Josh has kept his AC on full blast in his apartment, too, and now prefers to drive to the local farmers market rather than bike with his daughter. Josh moved to Fairland and Briggs Chaney because he could find a 2- bedroom apartment for less than \$2,000, but he still spends over 30% of his gross income on rent. Because of how much he pays for rent, a car loan, gas, utilities, groceries, and childcare, he has little to no money left over for savings or leisure, preventing him from saving to buy a house. Josh lives paycheck to paycheck, so he worries about what would happen if he lost his job.

STATUS QUO

The status quo scenario is based upon existing conditions forecasted 10 years into the future, to 2031. This scenario, along with the other two, follows three themes: climate change, community and economic development, and housing. For the status quo scenario, within each of these three themes, existing conditions are provided based on the most recent available data, and then trends for 2031 are presented based upon those existing conditions, as if nothing has changed in terms of current interventions or the lack thereof. The trends provided throughout this scenario have a strong level of unpredictability due to various unforeseen factors that may occur. For example, refugee or immigration influxes, local climate change-induced events, national economic crises, and as seen this past two years, pandemics.

Vision for 2031

The cost of living and housing has increased substantially while local employment growth has remained low, and little has been done governmentally to aid vulnerable residents. Without meaningful alternative transportation options, residents remain dependent on personal automobiles and inaction has exacerbated the effects of climate change resulting in greater pollution and extreme heat. Despite these conditions, many people continue to live or choose to move to Fairland and Briggs Chaney because of the town's location and affordability.

Climate Change



CLIMATE CHANGE

The Fairland and Briggs Chaney plan-area is socially vulnerable, making the area more susceptible to climate disasters and their effects. This section highlights how climate change is currently and projected to impact this area. The Plan-area is now facing sustained pollution with increasing private car ownership per household, urban heat island effect, and food insecurity. If these trends persist, the effects of climate change will be exacerbated.

Existing Conditions

Transportation

Transportation has a significant impact on greenhouse gas emissions. The Fairland and Briggs Chaney plan-area residents are majority private car riders, with about 60 percent of people driving to work over other modes of transportation. There was an increase in private ridership of about 5 percent from 2010 to 2019. There was also an increase of 2-vehicle homes from 2010 to 2019 of about 10 percent. The area had seen an increase in WMATA, Ride On and Flash BRT ridership in recent years, but ridership today is still lower than pre-pandemic levels (WMATA & MCDOT).

Urban Heat Island Effect

"Heat islands are urbanized areas that experience higher temperatures than

outlying areas. Structures such as buildings, roads, and other infrastructure absorb and re-emit the sun's heat more than natural landscapes such as forests and water bodies" (EPA). Within Montgomery County, heat waves are the most dangerous natural hazards. Fairland and Briggs Chaney is one of the most vulnerable areas within the County and its residents experience the effects of extreme heat disproportionately. The County currently experiences 4 days above 95 F° degrees due to a sparse tree canopy and significant impervious surfaces. In our personal observations of the plan-area, we have seen distressed trees caused by the extreme heat shrinking the already sparse tree canopy.

Food Insecurity

Food insecurity is defined by the U.S. Department of Agriculture as "a lack of consistent access to enough food for an active healthy life." The Capital Area Food Bank breaks down food insecurity into census tracts and the plan-area includes four: Census Tract 7014.17 has a food insecurity rate of 13.7 with about 93.9 percent of its population food insecure; Census Tract 7014.23 has a food insecurity rate of 11.5 percent and 78.7 percent of the population is food insecure; Census Tract 7014.22 has a food insecurity rate of 14.6 percent and 58.9

CLIMATE CHANGE

percent of the population is food insecure; and Census Tract 7014.14 has a food insecurity rate of 10.3 percent and 90.9 percent of the population is food insecure.

Trends for 2031

Transportation

Looking at the trends for transportation, by 2031 there will be an increase in public transportation ridership but still not projected to be higher than pre-pandemic levels (WMATA). Trends show that COVID-19 still poses a threat to public ridership. Private vehicle ridership is also expected to continue to increase along with 2-vehicle households. There is also a small increase of adoption of electric and hybrid vehicles but older, fossil-fueled vehicles will be heavily relied upon due to the persistent price differential between gas and electric vehicles.

Urban Heat Island Effect

Extreme heat is projected to increase from 4 days per year in 2021 to 12 days per year on average being above 95 degrees by 2035 (CAP, 2021). This extreme heat will affect shrinking tree canopies, heat-related illnesses and deaths, increased air pollution and emissions, increased energy use and demand, and increased stormwater temperatures damaging aquatic ecosystems (EPA).

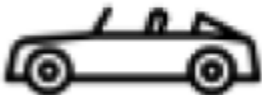
Food Insecurity

Food insecurity is projected to increase based on the current trends. There may be a slight increase of food security as we come out of the pandemic but overall food insecurity will continue to grow due to the impact of climate change on global food supply networks. This could be attributed to both direct environmental impacts and economic crises that those environmental impacts indirectly cause.

Conclusion

Overall, if nothing different is done, by 2031 the Fairland and Briggs Chaney plan-area will be in a dire state. The current climate change effects will be exacerbated creating a public health crisis. The need for climate change adaptation is necessary to ensure the safety of all residents within the boundary. This adaptation will also increase the chances that all residents are able to provide healthy meals for their family.

Community & Economic Development



COMMUNITY & ECONOMIC DEVELOPMENT

In this scenario, today's community and economic conditions are forecasted ten years into the future with no changes to policies, zoning, or funding. Under this format, economic development will be limited to existing, limited opportunities, there will be restricted access and mobility options due to single-use and single-family residential zoning, and the spatial fragmentation of the plan-area will preclude the creation of a sense of community for current residents.

Existing Conditions

As discussed in the demographics analysis portion of this report, of these residents, 22% are young adults who need job training and face limited access/mobility to opportunities due to private automobile dependence and spatial fragmentation, precluding a sense of community. Regarding economic development in the plan-area, the per capita income is \$32,601, the unemployment rate is 7.9%, and the current number of jobs is 8,544.

Per capita income in the plan-area is significantly lower than in Montgomery County. Fairland and Briggs Chaney's per capita income is \$32,601 compared to \$54,510 in Montgomery County overall. However, the unemployment rate for the plan-area is much higher than in the county: about 7.9% of the Fairland and

Briggs Chaney residents are unemployed compared to 4.5% for Montgomery County residents. Although the Fairland and Briggs Chaney population has significantly lower per capita income and high unemployment than the county, residents struggle with income levels and inequality. The Fairland and Briggs Chaney plan-area challenged standard of living affects the current area's economy.

For employment, the plan-area has fewer jobs than the county's, reasonable to the smaller area size. The Fairland and Briggs Chaney plan-area consists of 8,544 jobs compared to 560,950 jobs for Montgomery County, suggesting fewer job opportunities of 1.52% jobs in the plan-area being within Montgomery County. There is a need for building large employment centers to train the workforce where residents can live and work in the same plan-area, thus the limited income options and economic activity in Fairland and Briggs Chaney.

For community development, the plan-area is single-use zoned, vehicle-dominated, and spatially fragmented in four quadrants by US 29 and MD 200. Access to amenities such as jobs, shopping, and recreation is limited to those with private automobiles due to the spatial fragmentation caused by the major highways. Single-use zoning has

resulted in the separation of land uses where uses are permitted or prohibited (Watsky, 2018). As previously mentioned in the climate change analysis portion of this report, the Fairland and Briggs Chaney plan-area is currently auto-dependent with 84.4% of the residents using their vehicles compared to 74.9% for Montgomery County. This indicates that the plan-area is highly auto-dependent, forcing many residents to drive to get basic services. Based on community listening sessions, many residents expressed a lack of a sense of community. Economic and social opportunities remain relatively limited. These conditions are expected to continue over the next decade if no reform is accomplished.

Trends for 2031

Per Capita Income

In 2031, the plan-area would improve local economies to a more regional labor market benefiting Montgomery County as a whole. We used the growth rates from 2011 to 2019 American Community Survey (ACS) data to calculate the 5-year estimated trends for 2031. The Fairland and Briggs Chaney plan-area is expected to increase by 25.3% from 2019 to 2031, meaning that the plan-area's per capita income will be higher at \$40,847 compared to \$32,601 in 2019. A higher per capita income can enhance a higher

standard of living. However, the high per capita income is not enough to survive. This data does not reflect the COVID-19 pandemic we are experiencing, meaning residents could encounter different factors that significantly affect their standard of living.

Employment

The Fairland and Briggs Chaney plan-area will produce an additional 11,693 jobs from 2019 to 2031. The Fairland and Briggs Chaney plan-area will consist of 20,237 jobs compared to 8,544 jobs in 2019. Despite suggesting more job opportunities, only specific industries in the plan-area will rise. By 2031, the fast-growing job industries will be in healthcare, professional, and management/business/financial services. The healthcare industry will create 9,489 jobs, with 3,231 jobs in the professional, and the management/business/financial industry with 2,125 jobs. The remaining population who work in the other job industries may face challenges getting hired due to not having the training to transition to other jobs. However, we see that the unemployment rate for the plan-area is decreasing by 26% from 2019 to 2031, suggesting that the plan-area unemployment rate will lower to 6% compared to 7.9% in 2019. Despite the lower unemployment rates for the plan-area and county, the Fairland and

COMMUNITY & ECONOMIC DEVELOPMENT

Briggs Chaney area's rate remains higher than Montgomery County's. By 2031, 6% of the Fairland and Briggs Chaney residents will be unemployed compared to 3% for Montgomery County residents. Residents may need additional education and training opportunities to increase the area's labor market.

Community

The plan-area will continue to be vehicle-dominated and spatially fragmented by US 29 and MD 200. Accessibility to work and leisure opportunities will be limited. Residents driving in the plan-area will increase by 9.7% from 2019 to 2031, suggesting that the plan-area's driving rate will be higher at 92.6% compared to 84.4% in 2019. The percentage of driving residents in the Fairland and Briggs Chaney area remain higher than Montgomery County's. By 2031, 92.6% of the Fairland and Briggs Chaney residents will be driving compared to 73.0% for Montgomery County residents.

The plan-area's current spatial fragmentation by US 29 and MD 200 has resulted in the separation of uses, car-dominant communities, and limited sense of community. Fairland and Briggs Chaney would benefit from mixed land uses, walkable neighborhoods, a variety of transportation choices, and distinctive

and attractive placemaking giving residents a strong sense of place they can call home, but those changes require significant investment. Without zoning reform and significant government support, community and economic development in Fairland and Briggs Chaney will become increasingly limited and would preclude a sense of community.

Conclusion

Overall, in this scenario, if the lack of support for residents in Fairland and Briggs Chaney continues over the next decade, despite higher per capita incomes and job opportunities, we can expect to see limited economic activity in specific job industries and scarce job training opportunities. In addition, Fairland and Briggs Chaney residents will continue to lack a sense of community due to single-use zoning and spatial fragmentation by highways US 29 and MD 200. Without local zoning reform and increased government support through programs and funding, economic activity and access/mobility in Fairland and Briggs Chaney will continue to be limited. Many residents will struggle economically, and as the Fairland and Briggs Chaney plan-area continues to be an auto-dependent location, it may result in limited access to opportunities, spatial fragmentation, and even displacement.

COMMUNITY & ECONOMIC DEVELOPMENT

Reform is urgently needed to address these current issues.

Housing



As seen in Part I of this report, housing within the Fairland and Briggs Chaney plan-area has not necessarily been affordable to existing residents despite the area remaining one of the lower-cost regions within Montgomery County. In this scenario, the current housing conditions are forecasted ten years into the future with no changes to policies, zoning, or funding. Under these conditions, housing will become increasingly more expensive, there will not be enough housing available to accommodate the projected population growth, and the new housing that is added will not be affordable to current residents.

Existing Conditions

As discussed in the housing analysis in the previous portion of this report, the Fairland and Briggs Chaney plan-area is home to over 15,000 residents residing within approximately 6,000 households. Of these households, 68% are renters, and the housing stock primarily consists of low density apartments and townhomes.

Of households in the plan-area, the median household income is \$75,947, the median home value is \$281,821, and the median gross rent is \$1,691. Both household incomes and home values in the plan-area are significantly lower than

the county's by about \$30,000 and \$200,000 respectively, suggesting that Fairland and Briggs Chaney pose as one of the county's relatively affordable neighborhoods (ACS, 2019). However, as noted before, the existing lower cost housing in Fairland and Briggs Chaney is not necessarily affordable to the town's existing residents who earn lower incomes. Specifically, of the households in the plan-area, approximately 2,000 renters (53% of all households) and 300 homeowners (16% of all households) spend over 30% of their monthly income on their monthly housing costs (CHAS, 2014-2018).

As of right now, despite Fairland and Briggs Chaney being perceived as an affordable area, current residents experience a similar severity of lacking housing affordability to that in the county. Most concerning in this case, is that of the approximately 2,000 renters that are cost-burdened by housing costs, well over $\frac{3}{4}$ earn under 50% of the HAMFI. Comparably, of the roughly 300 homeowners that are experiencing cost burden, the overwhelming majority earn over 80% of the HAMFI (CHAS, 2018). This to say that not only is affordability a primary issue in Fairland and Briggs Chaney for most residents, but renters especially are severely underserved in terms of affordable and attainable

HOUSING

housing choices in Fairland and Briggs Chaney. These conditions are expected to become increasingly more severe over the next decade if no reform is undertaken.

Trends for 2031

Housing Units

By 2031, the plan-area is expected to gain roughly 1,000 residents and 500 households. This is reflective of a slowing growth rate that is comparable to Montgomery County's. This was calculated using a simple ratio method whereby the growth rates for Fairland and Briggs Chaney and the County are assumed to be the same. Looking at American Community Survey (ACS) data from 2010 to 2019, the plan-area gained roughly 1,450 people within 260 households during those years. As you can see, in the next 10 years we expect there to be a smaller growth of residents, though residing in a larger number of households. The larger number of households may be due to decreasing household sizes and due to the ratio method not accounting for disparities of housing units available and housing units that could be made available over the next decade.

In order to accommodate 500 new households, there would need to be 400-600 housing units constructed or

added to retain a healthy vacancy rate of 5-8% (Florida, 2018). It is highly unlikely that this number of housing units could be added to Fairland and Briggs Chaney in the next ten years under current conditions. From 2010 to 2019, only a total of 152 housing units were added to support the growth of ~260 households, and in those same years levels of cost burden remained virtually unchanged; thus inferring that the housing added was market rate and not accommodating low and middle income households.

Moreover, the plan-area's current zoning has resulted in quickly declining developable residential space. Currently, the majority of residential zoning is R90 and R200, both of which are low density residential zones that do not allow for high density development. Second, the plan-area only has two small areas zoned for mixed-use development, signified by the magenta on the map. Because so much of the land in the plan-area has already been developed, the remaining undeveloped space is currently within either R90, R200, or mixed-use zones. However, of that undeveloped space, R90 and R200 zones do not allow for the high density residential development that would be necessary to provide enough housing for 500 new households. Similarly, of the two mixed-use zones that would technically be good existing

HOUSING

candidates for high density residential development, the zones are already developed with long standing commercial properties and it would likely be difficult to redevelop without significant public and/or private investment. Lastly, of the small amount of new housing that is ultimately constructed, it will most likely not be affordable or attainable to low and middle income households due to the existing demand for the area, and due to the high costs of producing affordable housing developments. Without zoning reform and significant government support, housing in Fairland and Briggs Chaney will become increasingly limited and unattainable for the low and middle income households that currently reside there or the new households.

Affordability

Not only will housing units themselves become more limited in amount, but many residents of Fairland and Briggs Chaney will face continued financial hardship related to housing costs. Between 2015 and 2019, rental prices and home values have both risen significantly. Rental costs in the plan-area increased 11.9% while home values increased 8.4%. Both of these cost increases exceed that of Montgomery County's. The rental increases in Fairland and Briggs Chaney are of most concern, as Montgomery County's median gross rent only

increased 8.6% over the same period of time. Similarly, the County's median home value only increased 6.6% during the same years. If these growth rates continue, it is likely that rents and home values will continue rising at a faster rate than the county, putting the current low and middle income residents of the plan-area at risk for worsening cost burden and even displacement.

Relatedly, incomes in the plan-area have also been steadily rising. From 2015-2019 they rose by 24.2%, which is staggeringly higher than the County's rate which sits at 9.4%. We can hope to see these incomes continue to rise in the plan-area, however, the current median household income of approximately \$75,000 is still just barely enough to afford the median gross rent with no cost burden. As seen in the previous section of this report, it is known current residents still experience the severity of cost burden that the county as a whole does, thus inferring that Fairland and Briggs Chaney is not necessarily affordable to current residents.

Based on these predictions, we can expect to see that cost burden rates remain the same if not become more severe. This is especially important to recognize for renter households, who are more vulnerable to rising rental costs and

are more likely to be cost burdened by their housing costs. It's vital to note that these predictions are based on pre-pandemic years, thus meaning that these numbers do not account for the unpredictability and tightening of the housing market that was a result of Covid-19. These global and national events may become more frequent as 2031 approaches, and it calls for an urgent response from governmental agencies.

Conclusion

Overall, in this scenario, housing will have become more costly, there will not be enough housing to accommodate the projected population growth, the new housing that is built will not accommodate low and middle income households, and housing overall will have become much more limited despite the demand. Without local residential zoning reform and increased governmental support through programs and funding, housing options and affordable housing in Fairland and Briggs Chaney will continue to be increasingly limited. If the lack of support for residents in Fairland and Briggs Chaney continues over the next decade, the many low and middle income households will be left to struggle with their housing costs, and as Fairland and Briggs Chaney continues to be an in-demand location, it may result in

increasing household sizes, overcrowding, and even displacement from the area. Reform is urgently needed to address these worsening issues.

Community Concerns

As the status quo scenario highlights data driven aspects of current conditions in the community, we wanted to be sure to include community member's thoughts about Fairland and Briggs Chaney. Through attendance of Montgomery Planning Listening Sessions and Montgomery Planning Community Events, we took note of the primary topics that community members were concerned about in Fairland and Briggs Chaney. The list below are community concerns that we aim to address along with the existing conditions above in both the reform and revolution scenarios.

- Local job availability
- Disinvestment when compared with the rest of the County
- Better access to local parks and programming opportunities
- Old, low-quality housing that is still high cost
- Limited access to Montgomery College campuses
- Insufficient transit
- No sense of "culture"
- Interchanges for pedestrians
- Lack of a community gathering place

CONCLUSION

Moving Further Away from an Equitable and Sustainable Future

Overall, the status quo scenario acts as a reminder of the urgency that attention to these subject areas require. Without reform, temperatures will continue to rise and the long term climate viability of the area will continue to decline. Economic and social opportunities will remain limited, and the fragmented landscape due to Route 29 and Route 200 will continue to inhibit a sense of place. Housing will become increasingly unaffordable, and potentially displace existing residents, especially renters, and a lack of accommodations for low and middle income households will persist. The following reform and revolutionary scenarios seek to address these urgent issues by providing viable strategies to solve them.

An aerial, black-and-white photograph of a city street intersection. The street has multiple lanes with cars and pedestrians. In the background, there are several tall buildings, including a prominent one with a stepped roofline. A large red rectangular overlay covers the upper portion of the image, containing the text 'REFORM' and 'Vignette'.

REFORM

Vignette

VANESSA

Vanessa is a nurse who commutes to Silver Spring using the expanded Flash BRT service. While she would like to switch from her gas-powered sedan to a new electric vehicle, available rebates cannot be used for the model she wants, and she can't afford a full car loan considering the cost of her rent. Because of the down payment assistance available to her from the state, she had her eye on a unit in a nearby duplex that recently went up for sale. Sadly, Fairland and Briggs Chaney have a hot housing market these days, so the unit was quickly purchased by a family that could afford to make a better offer. On the weekends, she likes to ride her bike up US 29 using the new separated bike lanes to the Fairland Recreation Park—it has not been so hot recently thanks to the County's efforts to restore the local tree canopy.

Given the impact of a status quo future for Fairland and Briggs Chaney, it is clear there is a need for intervention. The reform scenario rights many of the wrongs resulting from the status quo, and does so through the adoption of planning best practices. In reform, there is a push for changes in regulations, traditions, and typologies by using the best planning ideas, practices, and tools available today. The reform scenario would make a sizable impact. Yet, despite these state-of-the-art adoptions, as we will see, do not alleviate all challenges in the future and will fall short of achieving a fully sustainable and just Fairland and Briggs Chaney. To frame the reform scenario, this report will first provide an overall vision of Fairland and Briggs Chaney in the year 2031 under the reform framework proposed by Thrive Montgomery 2015. Next, it will dive into objectives and strategies for each of the three overarching themes: climate change adaptation and mitigation, economic and community development, and housing.

Thrive Montgomery 2050

The reform scenario is informed by *Thrive Montgomery 2050*, the draft update to Montgomery County's General Plan. *Thrive Montgomery 2050* acts as a comprehensive amendment to the 1969 General Plan, *On Wedges and Corridors*, and other master, functional, and general plans since. The county's General Plan was last updated in 1993 (Montgomery County, 2021).

Because *Thrive Montgomery* is a General Plan, it does not provide implementation steps and instead sets a vision for the county through broad policy recommendations. The plan includes three desired outcomes: (1) economic health, (2) equitable communities, and (3) environmental resilience. On a smaller scale, the plan focuses on the topic areas of complete communities, transportation, housing, parks and recreation, compact growth, and design, arts, and culture (Montgomery County, 2021). In this report, the reform scenario objectives and strategies will interweave Thrive Montgomery goals to ground them in the actual scenario.

Vision for 2031

Under the reform scenario, in 2031 the Fairland and Briggs Chaney community has taken meaningful steps to reduce its carbon emissions and residents have better access to affordable housing options, healthy foods, employment, and transportation options. However, many households remain housing cost-burdened, the community struggles to meet its net zero emissions target, the population experiences uneven access to job, education, health, and recreation opportunities, and residents face risks of displacement.

Climate Change



CLIMATE CHANGE

In 2031, the Fairland and Briggs Chaney area made large strides toward climate justice and goals outlined in the Montgomery County Climate Action Plan. The Climate Action Plan is Montgomery County's strategic plan to cut greenhouse gas (GHG) emissions 80% by 2027 and 100% by 2035. Specifically, the plan-area is building a stronger focus on multimodal travel options, including walking, biking, and transit infrastructure. A targeted extension of the Flash BRT system to points north and an expansion of the Capital Bikeshare network to key destinations allows for greater mobility. Complete street designs create safer roads for all multimodal users. The region also supports the natural environment and park network with community-based solutions, working to enhance environmental stewardship with a Community Justice Academy made up of local residents. Finally, there is an emphasis on the reduction of emissions from vehicles, homes, and businesses through plentiful EV charging stations, green building standards, and an expanded tree canopy.

Montgomery County Climate Action Plan

Climate change objectives in the reformist scenario are based on actions outlined in the Montgomery County Climate Action Plan, or CAP. The plan provides more

in-depth information about climate change effects in the county and outlines specific strategies that are necessary to achieve its goal (Montgomery County, 2021).

CAP is directly related to *Thrive Montgomery 2050*. As mentioned, *Thrive Montgomery* offers broad, county-wide policy recommendations and points to the Climate Action Plan for a more comprehensive analysis of action steps. The following climate change objectives and strategies incorporate many of the actions in the Climate Action Plan to ground our work in the existing plan.

Objective 1: Build a Stronger Focus on Walking, Biking, and Transit Infrastructure

The first objective is to build a stronger focus on walking, biking, and transit infrastructure. Given the existing mobility and accessibility challenges of the area, multimodal transportation is not a competitive transportation option when compared to the private vehicle. To achieve climate objectives outlined in Montgomery County's Climate Action Plan, shifting transportation modes away from private vehicles is a necessary step to lower emissions.

Expanding public transit involves increasing the frequency, span of service,

CLIMATE CHANGE

and coverage of existing bus routes operated by WMATA and Montgomery County to make them more accessible, effective, and attractive to residents and workers in the area. As discussed in the mobility analysis in Part I, WMATA bus service operates in the north-south direction via the Z6, Z7, and Z8 routes. Similarly, the Flash BRT emphasizes the north-south directional. Montgomery County's Ride On Service provides more east-west connections, but two of the three routes only operate during weekday rush hour.

Increasing the frequency of local bus service to at least every 15 minutes (matching the Flash BRT service interval) would be a major step in increasing accessibility, as residents would have the ability to arrive at their bus stop at any time without consulting a schedule of arrival times. Expanding the span of service to operate on every day of the week would similarly reach more residents and workers who currently are not served by restricted service spans. Finally, offering connection points to the east and west would increase the ability for residents to arrive at points east in Prince George's County, including adding a connection point to Prince George's The Bus service. Currently, in the Fairland and Briggs Chaney plan-area, only the Z6 and Z7 connect to routes in Prince George's

County, and those connections are to other local, low-frequency routes. This severely limits the amount of cross-county mobility, even though the study area is along the county border.

Another larger planning intervention includes the extension of the Flash BRT service to Columbia, MD. As previously mentioned in the report, many workers in the Fairland and Briggs Chaney plan-area commute from points north, including Columbia and Laurel. Extending the BRT service would ultimately connect Columbia to Silver Spring, providing a strong north-south transportation route connecting jobs and homes along the US 29 corridor. As part of this expansion, it would be wise to incorporate bus-only lanes or allow bus travel in the breakdown lane to avoid traffic congestion.

To complement expanded public transit, it is important to similarly expand active transportation and micro-mobility networks in an effort to reduce private vehicle trips. We would do so by adding three Capital Bikeshare stations at key locations in the plan-area, as shown in Figure 57. We have selected Paint Branch High School to support a demographic that may not have driver's licenses and to encourage active transportation among the younger generation. The intersection

CLIMATE CHANGE

of Fairland Road and Columbia Pike is near the center of the plan-area and is next to the entrance of the north-south shared use path, making a bikeshare station easily accessible. Finally, the Tech Road BRT station is a location with office buildings, rapid transit, and is also near the north-south shared use path, making it another suitable location for bikeshare.

By adding bikeshare stations farther south in the plan-area, residents would be able to travel throughout the entire area via bike. For example, residents living near the Tech Road BRT station could use bikeshare to visit friends living near the Briggs Chaney Park and Ride station.

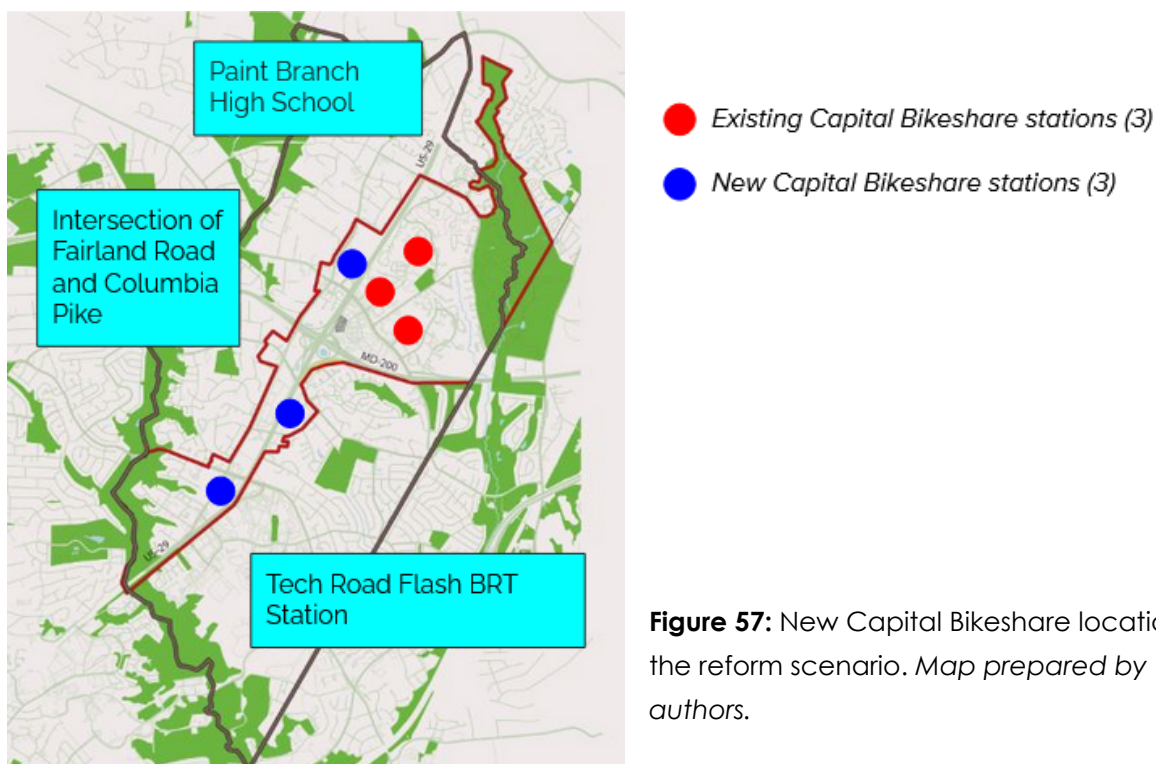


Figure 57: New Capital Bikeshare locations in the reform scenario. Map prepared by authors.

Beyond expanding Capital Bikeshare service, roadways will need to be improved using complete streets guidelines. In general, complete street designs include curb cuts, visibly painted crosswalks, painted (and often protected) bike lanes, and related signage. These actions improve safety for all roadway users. With an increased perception of and provisions for safety, more residents and workers would feel comfortable traveling by bike

CLIMATE CHANGE

or on foot.

Finally, connecting the north-south shared-use path around the outside of the Arden Courts Assisted Living facility is a priority. As shown in Figure 58 and described in the existing conditions analysis, the missing link in the north-south shared-use path is a major challenge to increasing multimodal travel. By making use of the green space surrounding Arden Courts and the adjacent Verizon campus, a sidewalk or path could be constructed to fully link the network. A completed north-south shared-use path fully connects the east side of the plan-area, allows for convenient bike access, and would support the reduction of greenhouse gas emissions.



Figure 58: North-south shared-use path with missing connection. Map prepared by authors.

Objective 2: Support a Resilient, Community-based Natural Environment and Park Network

The second climate change objective in the reform scenario is to support a resilient, community-based natural environment and park network. A key strategy is to incorporate green infrastructure in the existing network of parks, including the Fairland Recreational Park and Edgewood Neighborhood Park. Examples of green infrastructure interventions include the creation of rain gardens, increased tree canopies, and removing impervious

CLIMATE CHANGE

surfaces. Successful green infrastructure initiatives have taken place at Eastie Farm in Boston, where the local green space absorbs heat, provides a cooler area during hot summer days, absorbs rainwater, and helps to build resilience against storm flooding (The One Waterfront Team, 2019).

Food systems' sustainability is another major component of community resiliency. In the reform scenario, Fairland and Briggs Chaney has expanded its community gardens from the existing Briggs Chaney Community Garden, located just west of the plan-area along Briggs Chaney Road. Existing local parks such as Fairland Recreational Park and Edgewood Neighborhood Park are natural locations to expand this program. In addition, expanding the program to local HOAs and apartment building operators could bring food sustainability to the hyper-local level: at people's homes.

All of these strategies must be grounded at the local level. To ensure resiliency and natural environment protection is based in the community, we would develop a Community Justice Academy to empower local residents to innovate and implement neighborhood-specific solutions. Examples of community-driven solutions can be found in Austin, TX and New York City, NY to name a few (Mitchell, 2018; NYC Mayor's Office of Criminal Justice, 2020). Referring back to Part I sections regarding community assets and community engagement strategies, a community engagement academy will ensure that residents are empowered to identify and implement solutions where they live.

Objective 3: Reduce Emissions from Vehicles, Homes, and Businesses

Finally, a major component of Montgomery County's Climate Action plan includes efforts to reduce emissions from vehicles, homes, and businesses. To do so, we must amend the building code to require new buildings to be net zero, all electric-fueled, and use low carbon materials. This will support the overall goal of making buildings more efficient, especially if there is new development taking place as a result of zoning changes allowing for more compact and transit-oriented development.

Relatedly, the local and county governments can take the lead in installing electric vehicle (EV) charging stations in rights of ways. For private property, incentives are needed to encourage residents, HOAs, and businesses to install charging stations as well. A wider availability of EV charging options will encourage residents and others in the area to shift their private

CLIMATE CHANGE

vehicles to electric power and reduce transportation emissions. There are currently three EV charging stations in the plan-area: two located at Auto Sales Park and one located along Tech Road. Additional parking lots including the Briggs Chaney Marketplace, the Verizon campus, and Briggs Chaney Park and Ride/East County Community Center could support additional charging stations throughout the plan-area.

Finally, retaining and expanding the tree canopy is essential for carbon sequestration and reduction of the heat island effect. Tree Montgomery is an existing program that plants trees on private property and could be expanded to re-tree large, public areas that are severely lacking a canopy (Tree Montgomery). In line with the Climate Action Plan, tree canopy renewal should be implemented with equity in mind to ensure underserved populations do not bear the brunt of inadequate tree canopies. In fact, the census block group near the ICC/US 29 cloverleaf interchange is the lowest-rated census block group when measuring the tree canopy. All this shows the severity of this issue in the Fairland and Briggs Chaney community.

Community & Economic Development



The status quo scenario for community and economic development portrayed some worrying trends for the future of Fairland and Briggs Chaney. Stagnating economic growth, inequities, and spatial fragmentation will likely continue to plague Fairland and Briggs Chaney in 2031 if corrective action is not taken. Luckily, *Thrive Montgomery 2050* puts a strong emphasis on economic health and community equity. This section will lay out objectives and strategies guided by *Thrive Montgomery 2050*, to achieve the desired future for the economy and community of Fairland and Briggs Chaney.

The three objectives that were identified for community and economic development in *Thrive Montgomery 2050* were to promote economic growth, incentivize more mixed-use development, and create places that encourage social interaction and reinforce a sense of place. These three objectives combined can help Fairland and Briggs Chaney realize the goals set forth for Montgomery County in *Thrive Montgomery 2050* by creating a competitive economy and an inviting business and community atmosphere. The following sections will lay out strategies identified to achieve these goals and propose place-based interventions.

Objective 1 : Promote Economic

Growth

The strategies identified to achieve the objective of promoting economic growth are derived from *Thrive Montgomery 2050*'s section on economic health. The plan states that Montgomery County as a whole must “simultaneously bolster its dominance in existing sectors, diversify its job base, improve connections to centers of employment and innovation throughout the region, and provide the kinds of infrastructure, services, and amenities that will strengthen its ability to compete effectively in the future” (*Thrive Montgomery 2050*, 2021). The strategies we propose in this section will help achieve these necessary improvements to Fairland and Briggs Chaney's economy while simultaneously improving the lives of the area's residents.

The first strategy we have identified to promote economic growth is to support the creation of local jobs in the green industry. The addition of well-paying jobs in the green industry will help diversify the area's economy that is currently dominated by the health care and professional sectors. This diversification of the economy will help position Fairland and Briggs Chaney for future success and protect it against economic downturns in other sectors. The focus on job creation in the green sector would also help achieve

COMMUNITY & ECONOMIC DEVELOPMENT

Thrive Montgomery 2050's other goal of environmental resilience. One example of jobs in this sector would be work related to upgrading Fairland and Briggs Chaney's existing energy infrastructure to one that relies more heavily on renewable sources such as solar and wind.

The second strategy that could be implemented in Fairland and Briggs Chaney is using innovative techniques such as community investment cooperatives to strengthen the local economy. Community investment cooperatives are a technique used to build community wealth by allowing residents to pool their resources to purchase shares in a local project to build wealth and improve their community. An example of this is the Northeast Investment Cooperative (NEIC) in Minneapolis, Minnesota. The NEIC was formed when a group of local residents decided to pull their resources together to purchase an abandoned furniture store and rent the property to local businesses. Today the property is occupied by two successful businesses and the cooperative recently purchased a second property that is currently rented to a local contracting and construction company. The NEIC has not only benefited the community by providing space for local businesses but also pays out a dividend to community

shareholders enabling them to build wealth. A similar model could be implemented in Fairland and Briggs Chaney's Marketplace to provide an investment opportunity for residents and space for local businesses.

Objective 2: Incentivize Mixed-Use Development

Creating dense, mixed-use developments is an important topic in *Thrive Montgomery 2050* and garners its own entire section in the plan. With Fairland and Briggs Chaney's land largely already developed, any new development will likely be re-development of existing buildings and should take place in a dense form with a mix of uses. The creation of a mixed-use center in Fairland and Briggs Chaney will help stimulate the economy, build a sense of place, and promote sustainability.

One strategy available for creating a dense mixed-use center in Fairland and Briggs Chaney is to pursue infill development in existing commercial centers. One possible location for this development to take place is the existing auto mall. The current auto mall is made up of aging buildings and has an uncertain future due to changes in the automotive industry such as e-commerce and smaller showrooms, following the Tesla model. This area has tremendous potential due to its access to regional

connections via US 29 and MD 200 and proximity to dense multi-family neighborhoods. A community gathering space could be included in this new development providing much needed public space for surrounding residents.

The second strategy that could be implemented in Fairland and Briggs Chaney is form-based code. Current zoning in Fairland and Briggs Chaney only allows mixed-use development on four small parcels scattered across the plan-area. Form-based code would allow new development not to be limited by use and ensure that the form is consistent with the surrounding environment. This would make it much easier for a mixed-use center that combines residential, commercial, and institutional uses to locate in Fairland and Briggs Chaney. Form-based code has already been implemented in Arlington along US 29 and has resulted in the redevelopment of some traditional commercial properties into walkable mixed-use development.

Finally, any new mixed-use development in Fairland and Briggs Chaney would likely raise the cost of living for nearby residents due to the attractiveness of living near development with community spaces and transit access. In order to fight the possibility of displacement, an

anti-displacement fund should be formed to combat the rising housing costs. This fund could be used to offset the increase in rents and allow renters to stay in their current home and benefit from the new development. It could also be used to help residents who may be displaced due to the construction of the new mixed-use center find housing in the new development. These strategies will help create a welcoming town center for Fairland and Briggs Chaney that strengthens the economy, provides space for the public, increases the housing stock, and creates a sense of place. The addition of an anti-displacement fund would ensure that the benefits of this improvement can be felt by existing residents.

Objective 3: Reinforce Sense of Place

While it is important to invest in Fairland and Briggs Chaney's economy, we cannot forget to invest in the people and places that already exist in the area. The third strategy focuses less on economic development and more on community development through creating a sense of place and encouraging social interaction. *Thrive Montgomery 2050* suggests making social connection a central objective for the Parks Department. This displays Montgomery County's commitment to creating a sense of community and encouraging interaction.

The first strategy that should be implemented is to invest in community capital by funding youth development programs. After speaking with community leaders, we heard that more investment needs to be made into Fairland and Briggs Chaney's youth. This investment in youth will improve the community by giving kids recreational opportunities and preparing them to be productive citizens and members of the workforce.

Montgomery County should also enhance Fairland and Briggs Chaney's existing public parks, facilities, and paths. As stated in *Thrive Montgomery 2050*, this investment should provide opportunities for social connection in this fragmented community. This could entail adding new amenities to Fairland and Briggs Chaney's existing parks, improving access to parks via biking and walking, and improving community facilities such as the East County Community Center.

Finally, a grant program should be established to improve aging facades and streetscapes to make Fairland and Briggs Chaney's commercial centers and neighborhoods more appealing. This would mainly improve the area's sense of place by creating a more visually appealing community but it could also have a positive impact on the area's economy by attracting consumers to

Fairland and Briggs Chaney's commercial areas.

Conclusion

The strategies outlined in this section will ensure that Fairland and Briggs Chaney is able to compete in the regional economy that has historically outperformed it.

Through investment in businesses, new mixed-use developments, and investing in the citizens of Fairland and Briggs Chaney the goals outlined in *Thrive Montgomery 2050* can be achieved. These strategies will involve significant investments in Fairland and Briggs Chaney's parks, public facilities, commercial centers, and transportation network and can make substantive, although not sufficient improvements towards the goal of a healthy economy and community.

Housing



Working within current systems is necessary for reform, however, these systems must be pushed to their limits. Housing is an area where there is room for change in the Fairland and Briggs Chaney plan-area. To understand the strategies recommended, it is important to note that housing is still considered a commodity, and some single family developments still exist. To achieve movement forward, three objectives have been identified with corresponding strategies. The purpose of these objectives and strategies is to create significant reform in housing typology, affordability, and climate resiliency for the plan-area.

Objective 1: Provide Affordable and Diversified Housing Options that Attempt to Accommodate Existing and New Residents.

Utilize zoning reform to remove barriers to denser housing typologies.

Zoning reform, particularly the upzoning of single family developments, will allow for denser development to proliferate through the plan-area. While the plan-area has multifamily developments, it is clear from both population and future housing need projections that single family developments will not be enough to house existing and new residents in the future. Also, there is little vacant land

left to develop within the plan-area. As Fairland and Briggs Chaney continue to be a relatively affordable area in comparison to the rest of Montgomery County, people will continue to migrate to the region.

Encourage Low-Income Housing Tax Credit (LIHTC) financing and public/private partnerships for potential affordable developments.

Currently, there is only one Low-Income Housing Tax Credit (LIHTC) building in Fairland and Briggs Chaney, Willow Manor. It is meant to be housing for senior residents. Expanding LIHTC financing can serve the community by creating more affordable housing for residents of different age groups. Also, public/private partnerships can help ease the cost of building affordable housing, as it is typically expensive to build.

Allocate additional funds from Montgomery County's Housing Initiative Fund to aid renter households.

The Housing Initiative Fund, or HIF, currently serves to keep properties affordable. The goals of the HIF include: "renovating distressed properties, preserving the affordability of units, creating housing for residents with special needs, creating mixed-income communities and making sure that

housing programs build neighborhoods and not just housing units” (Montgomery County, 2007). Funds could also be earmarked to directly provide rental assistance.

Implement localized community land trust to encourage long term affordability for current and prospective homeowners.

Community land trusts help preserve affordability by putting power into the hands of the land trust members. Since the purchaser is only buying the house, not the land, the cost of the home is lessened. Also, prices are kept affordable in perpetuity through restricted sale prices (Inland Empire CLT, 2020).

Objective 2: Strive for Equitable Housing.

Mandate rent control.

Rent control is a basic element for creating equitable housing, as it prevents rents from skyrocketing. It also can restrict the eviction of tenants (New York Office of Rent Administration, n.d.). The main purpose of rent control is simply to make sure rents remain affordable in an unaffordable market for many. For Fairland and Briggs Chaney specifically, rent control would ensure the area is not extremely affected by the rising rent trend around Montgomery County.

Encourage homeownership by implementing a down payment assistance program for low-income and/or first-time home buyers utilizing regional and state funds.

The state of Maryland has the Community Legacy Program, which could be used to help with a downpayment assistance program. Since the Program is particularly concerned with encouraging homeownership and Fairland and Briggs Chaney is in a Sustainable Communities’ designated area, this use of funds is a good match. Other funding could come from a combination of county and state resources to distribute the cost of such a downpayment assistance program more equally between funders.

Implement fair-share housing policy and fully fund the enforcement of fair housing.

Fair-share housing involves making sure that each neighborhood or community within a designated region, regardless of racial or economic makeup, has some affordable units to contribute to the fair distribution of units in the region. This prevents the concentration of affordable housing in traditionally low-income, minority neighborhoods. Also, fair share housing can even create more affordable housing overall, since some of the barriers to the placement of affordable housing are lowered.

Objective 3: Support Climate Resiliency, Mitigation, and Adaptation within Residential Neighborhoods

Encourage the replacement of impervious surfaces in residential neighborhoods with pervious materials.

Montgomery County's own program, RainScapes, already works on rewarding residents who convert their property through more stormwater-friendly designs. Spreading awareness of RainScapes and other educational programs and providing funding opportunities would create more alternatives to impervious surfaces in Fairland and Briggs Chaney. As the limited greenfields in the plan-area develop, it is important that they develop sustainably, in an environmentally-friendly way.

Incentivize homeowners/landlords to plant native or non-grass lawns in residential areas.

RainScapes again could help with the educational and incentivization aspect of championing native or non-grass lawns. Native and non-grass lawns, like pervious pavements, are better for water management. This would make the plan-area less vulnerable to water related issues, like flooding and runoff.

Utilize regional, state, and/or federal grants to fund retrofitting of residential structures.

The state of Maryland has multiple programs rewarding the upgrading and retrofitting of buildings, including the BeSMART Energy Efficiency Loan for Homeowners and the Low-to-Moderate Income Energy Efficiency Grant (Maryland Energy Administration, n.d.). Using the preexisting state-level programs, educating residents on the importance of retrofitting, and creative Montgomery County-specific programs would all serve to expand retrofitting in the plan-area.

Overall, the plan-area could benefit from expanded housing policies, including enhanced renter protections, environmental stewardship rewards, and encouraging increased homeownership. While these objectives and strategies serve to move us forward, they still work within inequitable systems. More must be done to dismantle these systems to create housing justice for the plan-area.

CONCLUSION

Though movement forward has been achieved, there are still persisting inequalities and unsustainable systems in the Fairland and Briggs Chaney area. There is still urgency to tackle the same challenges that plagued the status quo scenario. Climate change objectives have been implemented, leading to reduction in carbon emissions and an increase in transit use. However, the steps taken have not been enough to reach net zero emissions. While an inviting atmosphere and competitive economy have been improved upon, there is more work to be done to create a sustainable and justice-oriented plan-area. Housing affordability and diversity has improved in Fairland and Briggs Chaney, but too many residents still continue to be cost-burdened. By moving beyond reform into revolution, we can create a truly just and sustainable future for all residents of Fairland and Briggs Chaney.

JANE

Jane lives in fully-funded, supportive social housing right next to the East County Community Center. Her mom received a big raise when she changed jobs a few years ago, so their monthly rent has gone up but never exceeds 30% of their gross household income. Some of her friends live in privately owned rental housing at Windsor Court, but they have strong legal protections, the building's tenant association makes sure those protections are enforced, and their building was recently retrofitted to become carbon negative. On some evenings, Jane likes to walk to the recently constructed Columbia Pike outdoor plaza and take-in nature and socialize. She has been training and volunteering recently with the Climate Corps to bolster the local tree canopy, and she is thinking about applying to work with them full-time when she graduates.



For the revolution scenario, we start by imagining a truly just and sustainable 2031 and backtrack from there to identify objectives and strategies to achieve it (backcasting). In other words, what would the realization of sustainability and justice in the plan-area require? Because the actions reflected in the revolution scenario are necessarily more ambitious than the reform scenario, we assume here that reform-level strategies have been realized, but were unable to fully accomplish the climate adaptation and mitigation, housing, and community and economic development objectives required in the plan-area. This scenario is not constrained by what may currently be perceived as politically or economically possible but is instead guided by what would be necessary to achieve full sustainability and justice. Such a powerful exercise can help planners and community members alike reconsider what is politically possible and desirable. It is our hope that this vision thereby contributes, to the expansion of the planning imagination.

What the Community Values

During our study, we heard from community members about the things they value in the plan-area. In the objectives and strategies addressed in the revolution scenario, we seek to preserve and enhance these assets and valued features. The major assets community members identified were:

- Access to green space
- Moderate cost of living
- Accessibility
- Socioeconomic and cultural diversity
- Housing value
- Existing transit, e.g., Ride On bus

Vision for 2031

Fairland and Briggs Chaney prospers as a just, carbon negative community that has adapted to and mitigates the effects of climate change. Residents of Fairland and Briggs Chaney live in quality, dignified housing. They have access to everything they need to thrive and lead healthy lives, including: emissions-free multi-modal transit options, quality job opportunities, good food, vibrant public spaces, and opportunities to develop their vocations and pursue their dreams. Residents feel supported, fulfilled, and valued by their community, their county, and their nation.

Climate Change



CLIMATE CHANGE

The revolutionary climate change objective for Fairland and Briggs Chaney is that the existing community will both resiliently adapt to the effects of climate change and contribute to climate crisis resolution. By 2031, the community has surpassed net zero and is carbon negative. Successful efforts to daylight streams and remove impervious surfaces have opened land areas for climate change mitigation programs, like tree canopy expansion and local food production. The community has become 100% food secure, as well as a surplus producer. And finally, it has overcome the urban heat island effect through a multi-pronged approach. By implementing these and other climate change adaptation and mitigation strategies, the Fairland and Briggs Chaney has become a global model for just resiliency. This is pursued by a single objective and multiple strategies.

Objective: Making Fairland and Briggs Chaney Resilient, Sustainable, and Just

Eliminate Transportation Emissions

Montgomery County's existing goal to eliminate 2005 level greenhouse gas emissions by 2035 does not mean eliminating all greenhouse gas emissions; however, committing to impactful strategies that radically change the status quo in Fairland and Briggs Chaney will hasten the move away from carbon and toward cleaner energy and transportation choices. Adoption of these strategies not only supports the mobility and health needs of community members, but also will influence the transportation choices of residents in surrounding communities, thereby reducing any potential emissions resulting from out-of-area vehicles. Three of the potential strategies to eliminate transportation emissions in the plan-area include: extending light rail from the Silver Spring or Takoma areas of Montgomery County to the northern edge of East County; transforming parking lots and automobile-centric corners of Briggs Chaney into people-centric areas; and integrating inductive electric charging pads into local roads and strategic locations to facilitate the use of electric and autonomous vehicles.

Extend Light Rail up US 29 to County's Edge

In order to eliminate transportation emissions and address the needs of the increased population in the master plan and broader study areas of Fairland and Briggs Chaney, the extension of light rail is required. Via light rail, there is less of a need to switch modes of transit on longer commutes and the uninterrupted nature of a train ride is more convenient schedule-wise for riders than bus rapid transit (BRT) or other bus options (WMATA, 2011). Extending light rail transit to the area, whether through the development of a new WMATA metro line (Metro) or the expansion of the upcoming Purple Line offers

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expanded mobility access to residents who lack private transportation and makes it easier for residents reliant on their personal automobiles (particularly ICE - internal combustion engine vehicles) to use alternative, more climate-friendly forms of transportation.

Extensions of Metro and the Purple Line were studied a decade ago by WMATA, but found to be a threat to ridership at existing stations because of a lack of sufficient demand (WMATA, 2011). More residents in and around Fairland due to new developments in the White Oak, Fairland and Briggs Chaney, and Burtonsville areas, as well as surrounding communities, generates a significant amount of new demand for light rail (Bohnel, 2021). Furthermore, the paths of these light rail lines can serve as added green space and multi-modal pathways for pedestrians, e-scooters, bicycles, etc., like the example set by the Underline in Miami, FL (see Figure 59) and proposed for the Silver Line Metro Path in Tysons, VA (Bolden, 2021; Solomon, 2021).



Figure 59: Rendering of the Underline greenway under the Miami Metrorail.

Source: The Underline, 2021

Finally, rather than abandoning the existing BRT line, it can be rerouted to improve cross-county, east-west transit access for residents. The buses and stations can be re-deployed in other areas of the county without light transit to support WMATA metro lines or, ideally, support the extension of light rail to the plan-area/East County. As displayed in Figure 60, the BRT system was originally envisioned to criss-cross the county and efforts to expand the existing network are ongoing, including development of the Veirs

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Mill Road, east-west stretch (*BRT Scope of Work, 2011; Final Corridor Study Report, 2018*). By shifting the BRT lines to east-west routes and concurrently committing to light rail in the plan-area, the new train to Fairland and Briggs Chaney will succeed in supporting the needs of local ridership while attracting ridership from neighboring areas via the rerouted BRT, other bus lines, and expanded multi-modal trails.

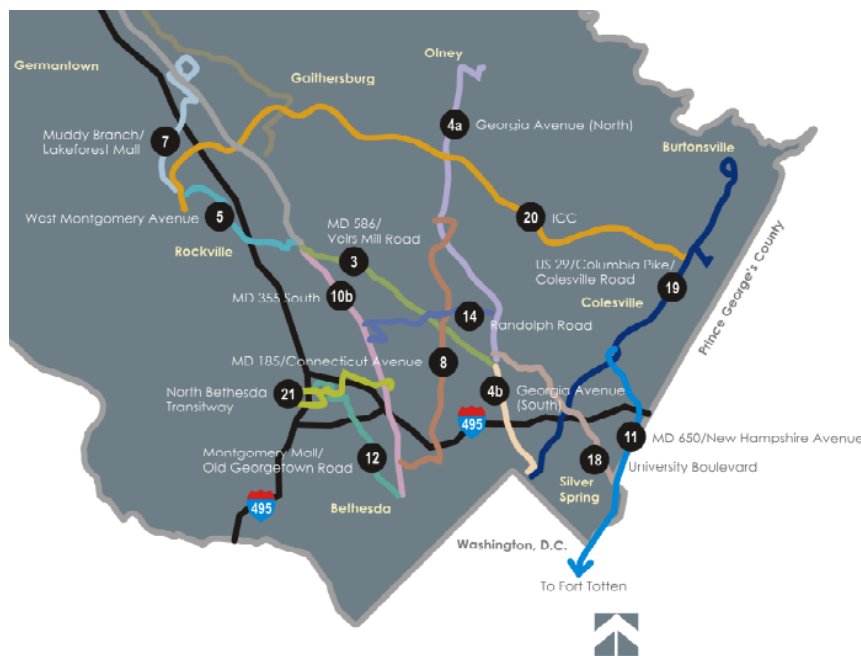


Figure 60: Partial map showing proposed BRT routes (colored lines) in Montgomery County, MD.
Source: *BRT Scope of Work, 2011*.

Plan for Open Space Due to EV Adoption

The general conversion of the nation's transportation to fully electric vehicles and modes of transportation will have a significant impact on eliminating carbon emissions. Beyond light rail, personal electric vehicles and car sharing programs using electric cars will greatly decrease the need and reliance on a variety of vehicle maintenance services, such as oil changes, system flushes, engine repairs, etc. (Bloor, et al., 2019). The spread of these vehicles will have a large spillover effect. Considering the longer life of certain EV car parts, reduced need for regular service and the fact that these service products "account for 50% of dealers' gross profits," less car maintenance businesses will be needed (Bloor, et al., 2019; Woods, 2021). Over time, this means less gas stations, less vehicle service businesses,

and likely smaller dealerships. This negates the need for large car lots and significant surfaces of impervious pavement. Removing this pavement and adaptively reusing auto park spaces for mixed-use creates new opportunities for affordable housing, community services, and park space. Tesla for example is known for small-scale, urban dealerships, but Cadillac is also embracing that model for the future at the Manhattan-proposed development pictured in Figure 61 (Lutz, 2021; White, 2021).



Figure 61: Rendering of a planned mixed-use building with ground floor auto dealership.

Source: Automotive News, 2021.

Integrate EV Charging Into Pavement for Autonomous and Electric Vehicles

To ensure that electric vehicles operate efficiently, especially public transportation vehicles and expected autonomous vehicles, inductive charging infrastructure is necessary. This charging infrastructure can be inlaid within collector and arterial roads as demonstrated in Figure 62, as well as strategic locations such as curbside (as being done in Norway) to keep vehicle batteries charged all-day, thereby addressing any concerns about battery range (Statt, 2019). In Indianapolis, new electric public buses had issues with the range of its batteries, in part due to cold weather affecting the charge capacity of the batteries, as well as the inability to quickly recharge in more locations (May and Hwang, 2019). This issue led to buses being unable to complete a route and disrupting riders' commutes (Dzikiy, 2019). As a remedy, the bus manufacturer strategically installed inductive charging areas where a bus could recharge while stopped between route loops, helping the buses get over 200 miles per charge, closer to the promised range (Dzikiy, 2019; Sanchez, 2021).

Similarly, the adoption of EV buses by WMATA and MCDOT will benefit from, if not

necessitate, the same infrastructure. Furthermore, in order to keep more shared autonomous vehicles on the road (as are expected to come) and available to users, they will need to take advantage of this type of "charging on the go"; otherwise, delays in being able to access a vehicle or the threat of having a vehicle stop en route due to a drained battery may dissuade users from adopting these eco-friendly options (Gruzen, 2019; Newman, 2021). Like being done in Norway, inductive charging would also speed up turnaround times for human-driven, ride-hailing services and potentially privately-owned EVs.

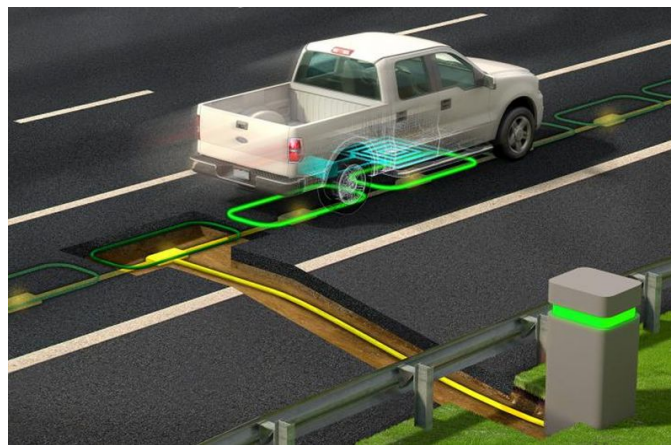


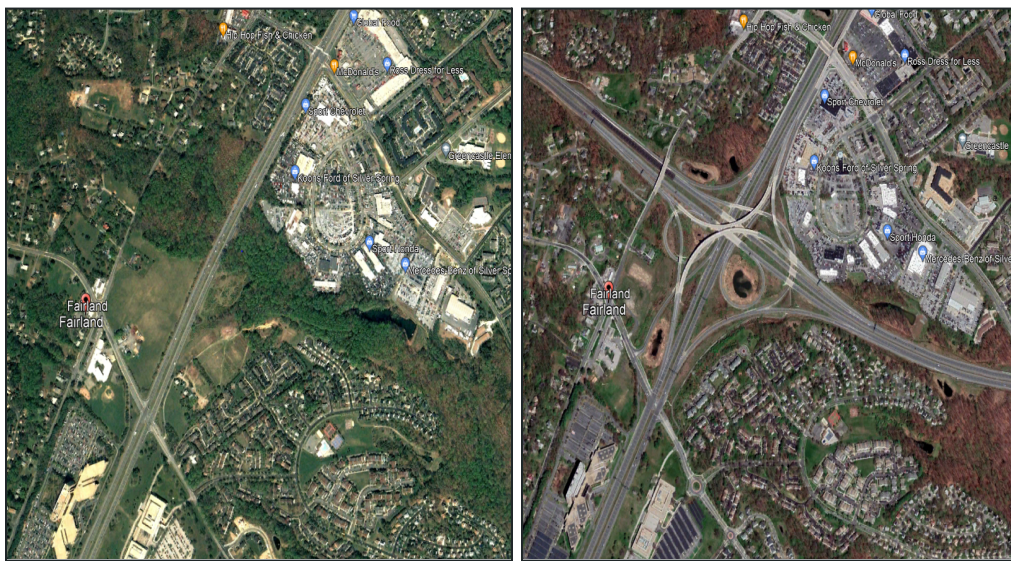
Figure 62: Depiction of an EV charging its battery while moving over an inductive charger installed within the road. Source: SXDRV.com, 2021.

Redesign the US 29/MD200 Interchange to Improve Land Use

The aforementioned introduction of improved transportation alternatives, incorporation of shared autonomous vehicles, and use of more efficient electric vehicles will lead to less demand for wide, excessively paved roads and highways. Like with the evolution of the auto park in the plan-area, redesigning road spaces such as the US 29/MD 200 highway interchange opens up space for more pedestrian and multi-modal friendly pathways, as well green infrastructure and the daylighting of buried streams. To help understand the scale of impact from road removal around US 29, just removing the on and off ramps connecting MD 200, as they exist in 2021, opens up at least 56 acres to redevelopment. For comparison, the successful mixed-use development Mosaic District in Fairfax County is only about 31 acres, but adds 1,004 multifamily rental units and 121 townhomes to the Merrifield community alongside restaurants, retail, and services (Fairfax County Planning and Development, 2021).

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Roadway removal and redesign is a large project that demonstrates the county's commitment to an expansive tree canopy, healthy waterways, and to disincentivize private automobile use. When MD 200 was constructed a decade ago, acres worth of mature trees south of the auto park had to be removed for roadways (*ICC SCEA*, 2004). As visible in Figure 62, the project radically transformed the natural and built environment of the plan-area.



2002: before ICC construction

2020: after ICC construction

Figure 63: Overhead Photos of the US 29/MD 200 Interchange. Source: Google Earth, 2021.

In 2021, the census block the auto park is located in (bordering the northeast corner of the US 29/MD 200 interchange) has the lowest tree equity score of any census block in unincorporated Montgomery County and the fifth-lowest overall in the county, due in part to the loss of tree canopy and addition of unshaded pavement from the highway construction (American Forests, 2021). The loss of forest has had a harmful effect on the surrounding community, which already is burdened with a high poverty rate, food insecurity, and exposure to greater air pollutants from the additional road traffic and auto-centric nature of the Briggs Chaney commercial center (American Forests, 2021).

By removing and redesigning the US 29/MD 200 interchange area, space is created to reverse some of the damage caused by the original highway project, such as the daylighting of a stream that ran alongside the highway's path, but disappeared because of construction. Together with new tree canopy, this waterway can help support local wildlife

and lead to more effective stormwater mitigation. MD 200 as a concept also does not need to disappear entirely as many community members and surrounding neighbors rely on the east-west connector, but could be reduced in size and better integrated with neighborhoods to the north and south. This realignment of the road would facilitate community-friendly construction around the new surface road that would feature stormwater tools like green or blue roofs, tree-building integration, public transit and bike and pedestrian trail access.

Ensure Community Wide Access to Local Food Supply and Production Opportunities

In 2031, even with climate change impacting global food supply chains and costs, and after a local history of food insecurity, Fairland and Briggs Chaney turns a corner and becomes a surplus food producer. This is achieved by first, incentivizing local HOAs to develop community gardens on their properties rather than exclusively relying on public spaces for these sites. Based on observation, many townhome and multi-family residential communities in the Fairland and Briggs Chaney area have community space that can be converted into community gardens, food forests, or can accommodate a mobile vertical farming operation for the benefit of community members (e.g., by repurposing guest parking spaces).

Second, creation of a public vertical farming program similar to the one recently implemented in Jersey City, NJ that not only offers access to this innovative food growing method to all residents, but integrates these farms into public facilities, like the East County Community Center, Paint Branch High School, and Greencastle Elementary School (Morris, 2021). Food produced by these facilities is available to residents for free through the cooperation of the farm company (here Aerofarms) and the local government (Oladipo, 2021). The Jersey City program is the first municipal vertical farming program in the country and reflects how much potential there remains to address community nutrition through technologies that, although still developing, have existed for years (Morris, 2021).



Figure 63: Aerofarm's commercial vertical farm facility. Source: NewYorkYIMBY, 2021.

Finally, creating a public farmers' market where residents could buy and sell locally-produced food on a year-round basis, creating a new income stream for residents and solidifying local access to healthy food. This food could be grown in gardens at homes, community garden patches, or a vertical farm. Local residents could also be assisted by the county expanding its Business Advancement Team to have representatives at the Regional Services Center operate a business incubator at the site (or at the Resilience Hub described in an upcoming section below). Using this economic development resource, residents can develop cooperative farming arrangements and companies that source from a variety of local cottage growers, helping residents gain access to more farmers' markets and further increase income potential.

Require Cooling Paint for All Roofs and Pavement

In order to combat the urban heat island effect discussed earlier, several strategies are combined to make the outdoors safer and more comfortable for the community. The new trees planted in previously impervious surfaces, such as around shrunken roads, removed parking lots, and integrated into building surfaces (like roofs and balconies) will reduce air, surface, and indoor temperatures. This shade will work in tandem with cooling paint on roads, sidewalks, and building roofs. Newer cooling paints are not just white or light-colored paints, but chemically composed to effectively reduce heat. Figure 65 shows this cooling paint being applied on a Los Angeles' road. The paint has shown to reduce temperatures by between 10 to 15 degrees Fahrenheit, and Greg Spotts from L.A.'s Bureau of Street Services states, "the locations near the cool pavement were, on average, two

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degrees Fahrenheit cooler than the surrounding area" (Haas, 2021).

Applied in the Fairland-Briggs Chaney area, one example is using this seal on the roof of the Greencastle Elementary School complex, which itself is approximately 54,577 sq ft, equating to an acre and a quarter of unshaded impervious surface, not including the almost $\frac{3}{4}$ of unshaded acre beside it used for parking. Addressing these "invisible" and often ignored areas will have a significant impact on residents' quality of life as global temperatures rise.



Figure 65: A construction worker in Los Angeles applying cooling paint to a residential road.

Source: L.A. Bureau of Street Services, 2021

Recruit a Paid Neighborhood Community Climate Response Team for a New Local Resilience Hub

Communities around the world are taking steps to accommodate residents during times of crisis, whether natural or otherwise. For example, during heat emergencies, Montgomery County designates and opens cooling centers where people can seek shelter from life-threatening heat (Ramirez, 2020). Also, a variety of places around the county offer free food to individuals in need, whether with or without county or other governmental assistance (Swenson, 2021). To overcome escalating threats from climate change (such as more regular extreme heat and rain events) and secondary effects of climate change (such as strains on food supply and energy), a more holistic approach to addressing community needs is required. Many of these threats will impact a particular community at once and those residents will benefit from having a single location that is able to address the multitude of threats it faces due to climate change and other crises. This is the rationale behind the concept of a 'resilience hub'.

At a resilience hub, residents not only can seek shelter from an ongoing emergency, like those aforementioned, but during moments of calm, the site also serves as a community meeting place and potential recreational and training site (*Hubs in Action*, 2021). Here, a resident can charge all of their devices, including a vehicle, from off-grid renewable energy if their residential power goes out (*Hubs in Action*, 2021). They can also obtain food from the on-site food pantry and municipal urban farm, discussed previously. In addition, green infrastructure integrated into the site and its surroundings can serve as new wildlife habitat for birds and small mammals, short nature trails, and parkland for playgrounds and athletics. As shown in Figure 66, a wide variety of features can be part of a neighborhood resilience hub (*Hubs in Action*, 2021). Therefore a resilience hub could easily be integrated into existing public structures, community centers, schools, etc. via retrofits. In fact, the East County Community Recreation Center in Briggs Chaney is already a designated cooling center (Ramirez, 2020).

Operating this resilience hub and serving as a rapid response for climate emergencies that require personal attention is a Community Climate Response Team (CCRT). Its mission is partially inspired by FEMA's Community Emergency Response Team program (FEMA, 2021), but the CCRT differs in that it is a paid staff that serves a primary role in local climate crisis preparedness, as well as response. Members of this team help maintain the resilience hub's inventory of supplies for residents and its infrastructure. They also report to local calls in the same way an ambulance, firefighter or police officer would, but remove the burden of climate crisis-related calls from those other officials. For example, if a household's air conditioning breaks during a heat emergency and they are unable to move to a resilience hub on their own to escape the dangerous heat, they can call the local CCRT to get a ride to the nearest hub. Similarly, during an expected flash flooding situation, CCRT members can mobilize to flood-prone areas before a storm to help any commuters or pedestrians trapped by rising water. The CCRT not only gives the local community another safety net for any climate risks not addressed through building retrofits, stormwater mitigation, or emissions strategies; it is also a fail-safe in case something goes wrong with existing infrastructure. Furthermore, a CCRT is a job creation program that generates meaningful work opportunities and can recruit from local high schools and colleges through associated internship and volunteer mentor programs.

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Figure 66: A depiction of a neighborhood resilience hub that incorporates a broad range of community needs. *Source: Hubs in Action, 2019.*

Conclusion

Without immediate, focused action, the Fairland and Briggs Chaney community will only become more vulnerable to the rising dangers of climate change. Although more passive actions such as the promotion of electric vehicles and offering of energy efficiency rebates are important and the execution of the Climate Action Plan's proposals would have a significant impact on emissions, a more complete and rapid transformation is necessary to truly make the community resilient and just. The revolution scenario depicted here incorporates strategies that in combination could eliminate transportation emissions and food insecurity, make the neighborhood healthier and more comfortable to live in, and create green jobs. A ten-year planning window (with a 2031 horizon) to accomplish all of this is short compared to many planning timetables, but it's necessary to make up for lost time to address the community's climate change vulnerabilities and to be responsive to the Intergovernmental Climate Change's urgent recommendations. In fact, it is only four years less time than the 2035 emissions reduction goal established in the county's Climate Action Plan. The climate crisis will not wait and neither can the Fairland and Briggs Chaney community for the solutions to combat it.

Community & Economic Development



Understanding the limitations of the reform scenario interventions, our revolutionary community development strategies aim to fully address systemic barriers at the scale of the need to promote community health and realize a just and sustainable Fairland and Briggs Chaney.

In the revolutionary scenario, our primary community and economic development objective is to fully eradicate poverty and secure a livable income for all residents. Our second objective is to optimize connectivity, realizing the vision of the 15-minute city that relies primarily on sustainable and healthy modes of transportation. Last, but not least, in this diverse community, it should be an objective to ensure that all residents feel a sense of belonging, safety, empowerment, and representation in decision-making processes. This is revolutionary in that it challenges dominant paradigms of capitalist norms, but is not untenable for affluent societies and counties like Montgomery County. It offers a critical reframing of community and economic development because it focuses on the desired outcome for community well-being, rather than simply replicating market-focused activities that will reproduce or exacerbate disparities.

Objective 1: Eradicate poverty and create livable incomes for all

Eradicating poverty should be a priority objective which on the ground translates to a population that is adequately employed, compensated for their contributions, or otherwise receiving the full access and support they need to lead fulfilled lives. Though Fairland and Briggs Chaney are considered affordable in Montgomery County, many area residents still struggle to cover their basic needs as the cost of living continues to climb. The conventional strategies proposed are at risk of exacerbating displacement or homelessness if appropriate interventions are not taken. Conversely, the following strategies are critical strategies recommended to provide security to current and future generations in Fairland and Briggs Chaney.

We recommend strengthening or creating new social safety nets with anti-poverty interventions, like piloting a county-wide Guaranteed Basic Income as a means of providing basic security as a right. Such a program should be designed to offset major lags in the labor market and relieve the burdens of the most vulnerable among us who are either working poor or unable to work due to various life circumstances (e.g., age, handicap, or illness conditions). Universal Basic Income pilots such as in Stockton's 2019 pilot

found that full-time employment among participants increased by 12% in the program's first year (Bedayn, 2021).

The second strategy we recommend is improving access and affordability to quality healthcare, a studied method to reduce social and economic vulnerabilities and inequality (Asaria et al., 2016). This can be done with piloting a county-wide Universal Healthcare policy as in the United Kingdom, but should also be holistic and focus attention on the expansion of healthcare practitioners and facilities to bridge service gaps and produce additional jobs in the study area. Stimulating growth in public sector jobs for these social safety nets at the state and local level is an important means to facilitating new projects and the county's capacity to respond to economic instability and needs.

Our third strategy to eradicate poverty involves the addition of a Montgomery College Campus to the study area as a means of stimulating educational and economic activity. The campus would be a partner institution to the community, offering not only higher education training, but also workforce training for existing and emerging industry gaps, and enhance the capacity for delivering community services. Assuming the ICC and US 29 highways are redesigned, as is

recommended in the revolutionary scenario, significant public land is available for siting a new 1000' x 500' campus.

Objective 2: Optimize Connectivity and Realize the 15-minute City

Our second Community and Economic Development objective builds on the strategies in the reform scenario and works to fully optimize connectivity in the study area. Building on the ICC/US 29 reduction and rail extension interventions, we expect this to not only transform the transportation network, but also open up more space for higher density mixed-use equitable transit-oriented development (ETOD), a key method of achieving more compact 15-minute cities. Rezoning the study area to upzone and incentivize more commercial and mixed-use centers near residential communities would be necessary to enable residents to access their destinations/shopping needs without relying on a car.

To create a more cohesive sense of place that connects destinations, we envision a centralized green space that brings the study area together and can serve as an activity hub where people can exercise, shop, hold classes, access transit, walk from the new Montgomery College campus to their housing or other services

in the area nearby. Such processes should invite the community to co-create the area and allow them to design and plan for uses they value.

Converting the ICC clover to a more traditional boulevard or 4-way street grid provides opportunities for connecting the east and western parts of the study areas in a more pedestrian, transit, and bike-friendly manner. The recently passed Federal Infrastructure Investment and Jobs Act includes a GAO commissioned report for evaluating the impact of highway removal on the surrounding community (H.R.3684, 2021-2022).

Section 11509: Reconnecting Communities Pilot of the law offers funding for planning, construction, treatments, and support for disadvantaged businesses and communities burdened by transportation systems (Vakil, 2021). We recommend County staff working with state and national DOT agencies to pursue funding to conduct feasibility and planning analysis for retrofitting the surface transportation grid along the corridor.

Lastly, as mentioned in the reform scenario, ETOD planning includes coupling necessary anti-displacement programs such as: affordable housing, small business protections, affordable workspace policies (discussed further in

Objective 3), and other negotiated community benefits.

Objective 3: Foster Sense of Belonging, Security, and Fairness

The third objective for the revolutionary scenario is to foster an environment that promotes residents' full sense of belonging, security, and fairness in their interaction throughout their communities. We look to strategies that promote inclusivity and the co-creation of communities through the introduction of greater access to spaces, economic opportunities, and relationships.

The first recommendation is the adoption of non-citizen voting in local elections as has been done in nearby Maryland cities such as Takoma Park and Mt. Rainier, and in national cities, like New York City (Hernández, 2016; see also Al Jazeera, 2021). Approximately 15% of Montgomery County residents are non-citizens, an average concentration of whom reside within the plan-area (ACS 2019, Census Reporter). A significant portion of the population whether they are refugees, green card holders, or unauthorized residents are currently navigating without representation in the decisions that affect their everyday life. Expanding suffrage rights and civic participation to all residents is a critical action to creating a more just Fairland and Briggs Chaney.

The second strategy we recommend is the introduction of community time-banking systems, which provides flexibility and compensation for skills and labor that are outside traditionally-recognized job functions, such as raising children or caring for elderly parents. Rather than monetary payments, which is not necessarily a disposable form of capital, time contributions are an acceptable means of exchange for goods/services. Time-banking has been utilized in a range of ways, from business development and lending, social services, advocacy, and more (Cahn & Gray, 2015; *AboutAroyo SECO Network of Time Banks*). Groups participating in time-banking systems appreciate the social benefits of having methods that help people build a different type of capital – relationships and value networks with their neighbors, which is valuable in an era undergoing social disconnection.

Lastly, as the study area transforms with the above strategies in place, it will attract new residents and employers and will require measures to counter the cost of living and provide a mix of small, medium, and large businesses. Hackney Borough in London, England's Affordable Workplace Policy requires commercial developments to offer at least 10% of workplace floorspace below market rate. In certain

districts, the borough also designated rent caps between 40-60% of the market rate (*Affordable Workspace*, 2021). Such measures allow small- and medium-sized businesses to enter and prosper in market spaces.

Conclusion

The possibilities for a revolutionary community and economic development strategy are vast, and the presented strategies introduce important, immediate corrective actions for a region that has been historically neglected. The interventions also are intended to support the area and population with significant opportunities to shape and experience a just and sustainable future.

Housing



It is beyond the scope of this report to define housing justice, so we instead identify housing conditions that most people would consider unjust: it is unjust that a small portion of the US population live in luxurious housing while so many struggle to pay for unlivable homes, it is unjust that the many Americans who live paycheck-to-paycheck fear forced displacement from their homes, and it is unjust that the catastrophic consequences of climate change impact the poor most severely.

Our revolutionary housing objectives acknowledge these injustices and seek to correct them. They aim to house every resident in quality, dignified housing with no cost burdens. Residents no longer fear that they will be forced from their homes because of strong legal protections and anti-displacement strategies that recognize every residents' right not just to good homes but to remain in place. And blending with our climate change objectives, the housing stock will adapt to and mitigate the effects of climate change such that homes become safe and carbon negative.

Objective 1: House Everyone without Imposing Cost Burdens

Convert some existing housing into social housing and construct new social housing.

Social housing is essentially a more comprehensive version of the public housing we see in the US. The major difference is that it is designed not merely for poor people but for the general population. This is, quite simply, the best and most cost-effective way to provide good housing for everybody. The budget of Montgomery County's Housing and Community Affairs department shows that, in 2021, each unit of affordable housing produced cost nearly \$60,000 (Housing and Community Affairs, 2021). Considering that the Fairland CDP has over 3,000 cost-burdened households, it would cost over \$180 million for the County to house its cost-burdened household at that rate. By comparison, the City of Vienna funds over 220,000 social housing units with a budget of just \$700 million per year (Pelleteret, 2020). Other localities with high land values are also exploring social housing as a solution to their most serious housing problems, e.g., the San Francisco city council recently voted to fund a \$64 million social housing program (Abraham, 2021).



Figure 67: Map of social housing site proposal (left). Map of the 15-minute walkshed from the social housing site (right). *Prepared by paper authors.*

Figure 67 shows how social housing could operate in the plan-area. The most cost-effective way to create social housing is to convert existing market-rate naturally-occurring affordable housing, but ultimately Fairland and Briggs Chaney need more units to accommodate its growing population, and those units should be affordable. As an example, we identified the East County Community Center parking lot as a good location for a multifamily social housing development. Because of the extension of the Flash bus line to include a stop right next to this parking lot, its highest best use has already changed. And we mapped a fifteen-minute walkshed on the figure's right, which shows that it would have walkable access to Edgewood Park, Briggs Chaney Marketplace, Greencastle Elementary School, and the Willow Manor LIHTC retirement home. With this development and the densification of the auto mall, the highest best use for all that space to the south-west would likely change to enable different kinds of development. However, routes 29 and 200, if remain unchanged, have a huge effect on the extent of the walkshed. Even with that limitation, this development would boost attractiveness for nearby retail investment, enable a 15-minute walkshed that creates a complete community, and give residents the capacity to age gracefully in place through transfer to the nearby retirement home.

Make a Community Control Fund.

Next, we suggest establishment of a community control fund. This fund would operate in a manner similar to the housing initiative fund, but it would emphasize democracy by putting those funds in the hands of the people, enabling creation of community land trusts, giving tenants meaningful access to the right of first refusal, and allowing for the development of permanent supportive housing.

Objective 2: End Forced Displacement

Guarantee Security of Tenure

To end forced displacement, the revolution scenario would require a suite of legal protections that, for the most part, the County could enact with political consensus. Organizations that advocate for tenants' rights such as People's Action and the Kansas City Tenants union have forwarded several of the protections we present here. Many of these protections have been legislated temporarily in the County due to the pandemic, but they should be made permanent.

- **Just cause evictions:** Currently, landlords can evict any tenant for violation of lease terms, excepting particular legally-prohibited causes. By identifying the specific conditions under which a landlord can justify eviction, tenants are protected from creative and arcane rental contract requirements.
- **Right to organize:** many tenants facing exploitative rental contracts and unlivable conditions would organize with other tenants but fear retaliation. Montgomery County has such laws on the books, but like other localities, this requirement is often insufficient to guarantee protection. Montgomery County should invest more in enforcement of this protection, and the consequences for landlords who violate it should be made more severe and enforced.
- **Right to counsel for bank tenants negotiating mortgages:** the term "bank tenants" has become a popular descriptor for homeowners with mortgages. While the financial conditions of a mortgage are significantly different from that of a rental contract, mortgage holders are effectively renting their home from whatever financial institution gave them the mortgage—therefore, they are bank tenants. Many bank tenants sign into their mortgage with a poor understanding of the extremely complex requirements that the contract imposes, such that many financial institutions employ predatory lending practices. A right to counsel for bank

tenants negotiating mortgages would ensure that all parties would enter into a contract with a full understanding of its obligations.

- **First-come, first-served rental applications:** this requirement would force landlords to accept the first application that meets their publicly stated rental requirements. This protection bolsters existing fair housing protections by preventing landlords from discriminating against particular categories on false pretenses.
- **Fee limits:** using various and unexpected fees, landlords can mislead prospective tenants using artificially low rents. By specifying what sorts of fees are allowed and identifying a fee-to-rent percentage for fees and deposits, the County can interrupt this misleading practice.
- **Extension of fair housing protections:** the federal Fair Housing Act makes it illegal for landlords to discriminate on the bases of race, color, national origin, religion, sex, familial status, and disability. Montgomery County extends those protections to include discrimination on the basis of age, sexual orientation, source of income, and family responsibilities. This scenario would require the County to extend those protections even further to include criminal history, immigration status, eviction history, and credit score.

Objective 3: Make the Housing Stock Adapt to and Mitigate the Effects of Climate Change

Retrofit existing buildings and require new housing to be carbon negative.

Green retrofitting of homes features in the reform section of this report, bolstered by the recommendations of *Thrive Montgomery 2050* and state subsidies for such retrofitting. As we identified then, such subsidies are insufficient in the face of the existential threat that climate change poses to the plan-area, the county, and the nation.

There are many technologies that enable carbon negative homes such as solar panels, electrification, passive heating, and others. But green retrofitting now is less about specific technologies and more about political and economic investment both in retrofitting and in industrial policies that forward research of green technologies. These changes are expensive, and they will not be possible so long as their costs are borne primarily by the household itself. As such, they require expansive public investment.

Mandate disaster-related tenant protections.

When the national eviction moratorium ended in the summer of 2021, many vulnerable renters confronted the possibility that they may become homeless during a historical peak of wildfires, floods, and heatwaves on top of the economic and health crisis caused by the pandemic itself. Indeed, the pandemic was an exception in that the federal government imposed an eviction moratorium. Most of the time, evictions continue even during disasters, which worsens economic and racial inequalities—experts have found that eviction rates actually increase during such crises, but the rate of evictions differs depending on state and municipal tenant protections (Raymond et al., 2021).

The revolution scenario therefore requires tenant protections that interrupt landlord profit-seeking practices that would exacerbate the effects of disasters for low-income tenants. Some such protections are basic and would benefit tenants both during disasters and other times. Connecticut, for instance, legally protects tenants' right to repair their own dwelling and deduct costs of repair from rent if the landlord refuses to maintain livable conditions. Localities can also mandate disaster-related eviction moratoria based on their geographic conditions. In the Plan-area, for instance, flooding and wildfires are unlikely, but there may be increasing heat waves and heat wave-related deaths, which would particularly impact the homeless and house-deprived. As such, the county could legislate eviction moratoria that would activate when the average temperature exceeds a specified threshold, or it could permanently outlaw evictions during the hottest summer months.

CONCLUSION

Historically, the Fairland and Briggs Chaney area developed inequitably. The area is spatially fragmented by the bisecting roads US 29 and the ICC. Single-family homes have taken up significant portions of the land area. Housing costs continue to rise and renters bear the greatest cost burdens. More impervious pavement has been built, exacerbating climate effects. Vulnerable populations have often been excluded from conversations around economic vitality and struggle to find jobs within the plan-area. Beyond this, the plan-area is no exception to Montgomery County's development trends: it is a typical American suburb.

While there is work to be done to improve life in Fairland and Briggs Chaney, it is vital to remember the things the community already values. The existing green spaces and transit options, the relative affordability of cost of living, the diversity of cultures and languages spoken, the current value of housing, accessibility and mobility, and more are all things that already make Fairland and Briggs Chaney a desirable place to live. The purpose of new plans and objectives is to build upon what is already there, to enhance the positive elements and to uplift shared values and goals.

The people of the Fairland and Briggs Chaney community deserve a just future, one where there is no fear of losing a roof over their heads, where their children can walk and bike to schools and parks safely, where they can commute to jobs that fulfill them and compensate them fairly. This future would mean even stronger community ties among neighbors; a better environment and more green spaces to enjoy; a range of housing options, types, and prices; improved transit options that are convenient and affordable; and a raising wealth of languages and cultures.

These are objectives that the County can and should realize. Action now is essential. Justice in this process is non-negotiable. It is clear from the findings of this report that inaction (withholding the status quo) or incremental change (promoting reform) is not enough. A status quo or reform future will not deliver the quality of life necessary to uplift the people who live in Fairland and Briggs Chaney. Only by having the courage to move beyond these simply unacceptable futures into one where justice and sustainability are truly realized can planners have a lasting impact on the lives of the people for whom we plan



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