

# Planning, Housing, and Economic Development Committee Draft



October 25, 2021

## Highlights of the PHED Committee Draft of Thrive Montgomery 2050

Since early July, the Planning, Housing, and Economic Development (PHED) Committee has held 10 worksessions on the Planning Board Draft of Thrive Montgomery 2050 (including a review of the Fiscal Impact Statement). The Committee affirmed many of the policies and practices put forth in the Planning Board's Draft. These recommendations support and encourage a vision of growth for the County which includes:

- Maintaining a constrained growth area that focuses growth in centers of activity and along growth corridors;
- Reintroducing East County growth corridors as a key to racial equity and economic competitiveness;
- Emphasizing walking, biking, and transit;
- Introducing the importance of social connectedness and health in land use planning;
- Incorporating arts and culture into public and private infrastructure and recognizing quality of place as integral to economic health; and
- Encouraging environmental sustainability and resilience by focusing growth in targeted areas and protecting areas outside targeted areas such as the Agricultural Reserve and parkland.

The following Committee Draft of Thrive Montgomery 2050 starts from a revised version of each chapter prepared by Council staff, Planning staff, and the Planning Board Chair (following direction from the Committee's July worksessions). Most revisions reorder information in the Planning Board Draft, add information from the Public Hearing Draft, or provide additional text for clarity. Some deletions were made to address redundancy for sections of text that moved, or for readability. All of these edits made a "tracked change" version of the draft extremely difficult to read; therefore, the PHED Committee Draft does not indicate specific changes to the text of the Planning Board Draft. Below are highlights of the PHED Committee's Draft. It

- Provides a more thorough introduction, including expanded sections on the three overarching objectives of economic health, racial equity and social justice, and environmental resilience. Adds a symbol for each objective to each recommended practice where applicable to illustrate support for the overarching objectives throughout the draft. Strengthens the sections in each chapter that explain how the proposed policies support each objective.
- Includes definitions and descriptions of the terms used to illustrate the 2050 Growth Map, such as Corridor-Focused Growth Area, Limited Growth Area, and the various sized centers. Removes the River Road corridor from the Beltway to Potomac Village.
- Reorganizes and adds text to highlight the importance of context sensitive development of Complete Communities and centers, as well as to clarify that the concept of "15-minute living" will mean different things for different types of communities.

- Emphasizes improvements in the transit, bicycling, and pedestrian infrastructure as alternatives to the auto and promotes expanding the street grid within growth centers with more connecting streets, bikeways, and sidewalks, and smaller blocks.
- Supports the conversion of existing travel and parking lanes to dedicated transit lanes, walkways, bikeways, and street buffers, where consistent with other County policies.
- Promotes the construction of high-speed fiber optic and wireless infrastructure, focusing on connecting those in parts of the county that lack convenient access to jobs and educational opportunities.
- Clarifies that the General Plan's housing chapter guides policies for housing for all residents and will require an increase in the supply and diversity of housing types for households at all income levels and for people in all stages of life.
- States that Montgomery County must view access to safe, affordable, and accessible housing as a basic human right – where every resident of Montgomery County should have a place to call home and no resident should be homeless.
- Ensures there is consideration of increased opportunities for housing low and very low-income households in the analysis of how best to leverage county assets or dispose of real property.
- Clarifies that incentives to boost housing production for market rate and affordable housing, especially near transit and in Complete Communities, not be limited to financial incentives.
- Supports policies to increase energy efficiency, stormwater management, and other factors that increase environmental sustainability – such as improved construction and renovation practices, greater emphasis on clean energy generation, and enhanced resource conservation and stewardship – including natural green infrastructure.
- Clarifies that metrics used to evaluate progress will include data that is dis-aggregated by race to facilitate measuring progress on the County's equity goals.

**Please note:** The PHED Committee Draft does not include the entirety of the photographs, graphs and tables contained in the Planning Board Draft – all photographs, graphs and tables will be reviewed for relevance to the edited text and updated accordingly.

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## INTRODUCTION

When Montgomery County adopted its first general plan, known as the “Wedges and Corridors Plan”, in 1964, much of our land was undeveloped. The 1964 plan – as modified by “refinements” adopted in 1969 and 1993 - embraced many of the principles and ideas that are still of value today, such as an emphasis on the preservation of the Agricultural Reserve, development of physically concentrated centers of all sizes, and encouragement of land use patterns that could be effectively served by a multi-modal transportation system. These plans helped to make the County one of the most desirable places to live and work in the United States. Our success has been built on an award-winning park system, high-quality schools, preserving our agricultural and natural resources, fostering the emergence of urban centers and mass transit, and shaping the design of attractive suburban subdivisions.

The Wedges and Corridors Plan was visionary, and its refinements were largely effective in adapting its principles and ideas to the needs of a growing population; however, today we find ourselves facing new challenges and changing circumstances. We have evolved from a bedroom community to a complex jurisdiction with major employment centers and mature residential neighborhoods. As a group, our residents are older, more diverse, and less likely to live in traditional family arrangements. We have a highly educated workforce, proximity to the nation’s capital, and a culture of openness to newcomers, but we also are struggling to attract businesses and house our residents, grappling with a legacy of racial and economic inequality, and facing the effects of climate change.

In addition, we now see that not all of the changes in our approach to planning were beneficial. For example, the 1993 refinement established the residential wedge, identified as an area for “maintaining a low-density residential character” and directed most growth to the “urban ring” and I-270 corridor. The removal of the eastern portion of the County as a location suitable for corridor-focused development discouraged public and private investment in this area. The establishment of the residential wedge consigned more than one-third of the County to zoning exclusively for single family homes, leaving many of our neighborhoods reliant on automobiles and disconnected from many amenities and services. These decisions, in conjunction with discriminatory land use and planning-related practices such as redlining and restrictive covenants, established inequitable patterns of development that must be recognized and addressed.

Today the combination of rapid social, environmental, technological, demographic, and economic shifts at the national and global levels along with our new context requires us to take a clear-eyed look at our strengths and weaknesses. We have tremendous assets, but if we hope to continue to thrive, we must be prepared to make difficult decisions and take bold steps to prepare for the future. Thrive Montgomery 2050 is the vehicle for assessing the implications of these shifts for land use, transportation and public infrastructure and adapting our approach to planning and growth for the next 30 years.

## WHAT IS A GENERAL PLAN?

A general plan is a long-range guide for the development of a community. Every jurisdiction must adopt some form of general or “comprehensive” plan as a legal predicate for the exercise of the government’s land use and zoning powers. The purpose of a 30-year plan is not to predict and respond to a single future, but to provide broad guidance for land use decisions as we face multiple, unpredictable future opportunities and challenges that influence growth and development such as disruptions brought about

by climate change, pandemics, or terrorist attacks as well as the consequences of innovations such as autonomous vehicles and micro transit.

Thrive Montgomery 2050 is the county's update to our general plan. It is a framework for future plans and development that defines the basic land use policies and context for all public and private development in the county. It provides direction for decisions about land use, transportation, and related issues under local government influence, but it does not change zoning or other detailed land use regulations. Its recommendations also touch on the objectives and actions of other public and private entities that are responsible for implementing and providing land use related services and amenities.

Thrive Montgomery 2050 does not abandon or reject the Wedges and Corridors concept but instead modernizes it to remain relevant. Area master plans, sector plans, and countywide functional plans will remain valid until modified pursuant to the guidance provided by this plan. Like the previous general plan its broad policy recommendations pave the way for future actions, such as amendments to other plans, policies, and development rules.

Thrive Montgomery 2050 has a 30-year time horizon, but it is designed to be flexible and adaptable to changing circumstances. It is designed to provide long-term guiding principles and objectives that can deal with a constantly changing economic, social, and environmental landscape.

## **A BLUEPRINT FOR THE FUTURE**

Thrive Montgomery 2050 is about addressing historic inequities, embracing new realities, and shifting the way we think about how the county should grow. Montgomery County has many assets and advantages. Our strengths will enable us to continue to thrive, but we must also take a hard look at where we have been, where we are going, and how we want to get there.

Montgomery County is growing more slowly than in past decades, but our population is still projected by the Metropolitan Washington Council of Governments to increase by about 200,000 people over the next 30 years. We have little undeveloped land left to accommodate this growth, even if new construction is compact. With 85 percent of our land already developed or otherwise constrained, accommodating even the modest growth expected over the life of this plan is an ambitious undertaking. The way we think about growth needs to change. We need to reconsider sites previously considered unsuitable for development, such as parking lots or the air rights over existing buildings, and find ways to use land more efficiently.

Thrive Montgomery 2050 offers a blueprint for new approaches that are needed immediately and will extend over a period of decades. These strategies will accommodate growth in ways that make room for new residents and also improve the quality of life for the people who already live here. The plan anticipates a county that will become more urban, more diverse, and more interconnected. It guides us to leverage growth and redevelopment to create places that are more economically competitive, foster a stronger sense of trust and inclusiveness among people from different backgrounds, and improve environmental quality and public health in the process.

## **Plan Framework and Overarching Objectives**

Thrive Montgomery 2050 aims to create communities that offer equitable access to jobs, more housing, transportation, parks, and public spaces. Just as importantly, it can help guide the design of the built environment to strengthen the social and physical health of our residents, supporting active lifestyles and

encouraging interaction and engagement. This framework embraces and builds on the Wedges and Corridors plan, with a greater emphasis on the development of compact, complete communities and the role of major corridors as places to grow. The plan is designed to integrate arts and culture into the fabric of our community and open opportunities for creative expression.

The ideas and recommendations in this plan are organized to achieve three overarching objectives: economic competitiveness, racial and social equity, and environmental sustainability.

## **Economic performance and competitiveness**

### **Opportunities and Challenges**

The county has significant concentrations in two private industry sectors: hospitality and life sciences, in addition to a strong Federal presence of offices and laboratories. These elements form a strong foundation to produce higher wage jobs and spur economic growth. Montgomery County is home to companies representing half of the market capitalization of the entire hospitality sector, and the Washington area is consistently ranked as one of the nation's top life science clusters, with I-270 as its epicenter. Local institutions such as the University of Maryland are leading ground-breaking research in emerging fields such as quantum computing.

We are also part of a dynamic regional economy with a rich mix of public institutions and private companies. Many residents of the Washington region travel to, from or through Montgomery County to reach jobs or homes in other jurisdictions within the region. The effects of decisions about housing, environmental stewardship, economic development, and other issues in any DC-area jurisdiction are felt by its neighbors. We enjoy many benefits from cooperation with our neighbors but also compete against them for opportunities, and consensus on how to address regional problems is often elusive. We need to think about Montgomery County as a part of the larger region and find ways to work more effectively with other area governments on policies and projects that will help make us all stronger.

As we work to fortify the county's economic performance, we must simultaneously bolster our dominance in existing sectors, diversify our 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 our ability to compete effectively in the future. Our quality of life depends on the ability to attract and retain employers and the employees they need.

We continue to benefit from our proximity to the nation's capital, which draws highly skilled, educated, and motivated people from all over the world, but we must also recognize that some key measures of Montgomery County's economic performance have been stagnant since the Great Recession of 2008. The total number of jobs in the county grew by five percent from 2004 to 2019, while 20 similarly sized counties across the country grew by an average of 21 percent. In addition, household income growth in the county has lagged the national average (-2 percent vs. 10 percent) and was the slowest in the region during this period. Montgomery County added jobs, albeit slowly, but growth came largely in lower-wage sectors of the economy.

### **How Thrive Montgomery 2050 addresses economic health**

Thrive Montgomery 2050 plays an important role in strengthening our economic competitiveness by creating the kind of places where people with diverse choices want to live and work. Its recommendations

for land use, transportation, parks, and other public and private infrastructure lay the groundwork for economic development initiatives undertaken by other entities. For example, the county's Capital Improvement Program (CIP) should be aligned with Thrive Montgomery 2050's recommendations to make our neighborhoods more attractive for private development by providing high quality transit, sidewalks and a walkable grid of streets, great urban parks, and high-performing and racially integrated schools. The combination of these kinds of investments is a reliable long-term strategy for attracting workers to well-designed and planned complete communities, which in turn will entice businesses and employers to locate here.

Thrive Montgomery emphasizes that the county should support a diverse array of work environments. Re-energizing the county's commercial centers is a major goal of the plan, but so is the recognition that small offices or storefronts in Complete Communities and even home offices will be common workplaces in the 21<sup>st</sup> century. Different skill and education levels and linguistic, racial, ethnic, and cultural backgrounds infuse the local economy with the varied pool of skills, experiences, and perspectives necessary to solve problems and innovate. The Plan's compact land use pattern and walkable communities supported by an efficient transit network will connect the county's diverse population to economic opportunities.

## **Racial equity and social inclusion**

### **Opportunities and challenges**

Diversity and inclusion are essential to our economic success as well as to our ability to produce more equitable outcomes for all our residents, who deserve high quality housing, education, jobs, transportation, and recreational opportunities. The county's population has grown more diverse as a result of a steady influx of foreign-born immigrants. Montgomery County is home to some of the most culturally diverse places in the United States, including Silver Spring, Rockville, Gaithersburg, and Germantown.

But past patterns of discrimination – some intentional, some unintentional – have left many communities geographically, economically, and socially isolated. After the Civil War and the end of slavery, African Americans suffered from pervasive discrimination and exploitation in the provision of economic and educational opportunities, housing, health care, and basic public services. The resulting alienation led to the creation of self-reliant kinship communities in many parts of Montgomery County in the late 19th century. Over time, these communities suffered from lack of public investment in infrastructure such as new roads, sewer and water, schools, health clinics, and other public amenities and services. Some communities were hurt by the urban renewal policies of the 1960s. Others faced pressure to sell their houses or farms to developers for new subdivisions.

Planning decisions and real estate development practices aggravated these injustices for most of the 20th century. Redlining and restrictive racial covenants created geographic and economic divisions that have left a legacy of injustice, that not only separated people by neighborhood or community, but also barred Black Americans from building wealth (the type of wealth used to invest in higher education, start businesses, and pass to heirs). The effects of these efforts to separate people by race and class continue to be felt today. More recently, disinvestment from and abandonment of neighborhoods previously considered highly desirable, combined with the suburbanization of poverty, have created new geographic divisions and barriers to equity and inclusion. The Wedges and Corridor plan's focus on the I-270 corridor



and related planning decisions exacerbated this problem by discouraging growth in the East County, focusing public and private investment to the west.

### **Impacts of past practices**

Today communities with high concentrations of racial and ethnic minorities also show lagging median household incomes, not because of their race or ethnicity but because financial precarity due to low wage jobs, high rates of being uninsured, declining business starts and lack of housing are experienced to a greater degree as a result of past and institutionalized practices. Not surprising is the resulting gaps in quality-of-life indicators [can be] seen among Black, Hispanic, and Asian residents.

This separation of neighborhoods along lines defined by race and income has important consequences for access to educational opportunities and the life prospects of our county's children. In 2019, three-quarters of Black, Hispanic, and English-learning students in Montgomery County Public Schools – along with more than 80 percent of all low-income students in the system – were enrolled in high-poverty-focus schools. By comparison, more than two-thirds of all white, Asian, and multi-racial students were enrolled in low-poverty schools.

As we seek a future that is more equitable and inclusive, improved access to infrastructure and amenities in racially, socially, and economically isolated areas will not be enough. We also must facilitate the integration of neighborhoods by race and income, across all ages. Increasing the share of racially and economically mixed neighborhoods and schools across all parts of the county is critical to ensure that the inequities of the past will not be perpetuated in the future.

In parallel with steps to reduce inequity in the geographic distribution of resources and opportunities, Montgomery County must work to build a shared sense of purpose that can help strengthen efforts to promote respect for diversity, demonstrate the value of inclusion, and build a foundation for greater trust. This concept, often described by academics under the umbrella term “social capital,” can pay dividends not only in sustaining support for racial and social justice but in bolstering civic capacity more broadly.

### **How Thrive Montgomery 2050 addresses racial equity and inclusion**

In this regard, decisions about land use, transportation, and public infrastructure can play an important role in building a sense of community. Different measures of social capital, including trust in public and private institutions, political participation, whether neighbors know each other, and other indicia of connection and cohesion are influenced by qualities of the built environment. The design of our communities can greatly influence levels of community cohesion and social interaction. Creating social capital requires the built environment to encourage and make it easier for people to meet others and engage in activities. For this reason, Thrive Montgomery 2050 emphasizes the roles streets, parks, and public spaces play in creating a physical environment where a sense of community can flourish.

Advancing racial equity through just planning policies and public investments in underserved communities, promoting the racial and economic integration of neighborhoods, and focusing on the potential for the design of communities to help build social trust and inclusion while encouraging civic participation are among the most significant elements of Thrive Montgomery 2050. Thrive Montgomery 2050 strives to create racially integrated and just communities. Like economic competitiveness and

environmental sustainability, policies designed to advance racial and social equity are integrated into every part of this Plan.

## Environmental resilience

### Opportunities and challenges

The Wedges and Corridors Plan laid the groundwork for the adoption of forward-thinking policies that emphasized land preservation for resource conservation and agriculture, protection of our streams, forests, and trees and reduction of greenhouse gas emissions. One-third of the county's land is now protected within the Agricultural Reserve and another 13.8 percent is under the stewardship of the Parks Department. Along with aggressive stormwater and forest conservation regulations, these efforts have established a strong framework for the protection of natural resources.

Despite these policies, the county cannot avoid the impact of global climate change. Precipitation in northeastern United States increased by 55 percent between 1958 and 2016. This trend has meant more frequent violent weather events like the flash flooding that occurred in July 2019, when the D.C. region received a month's worth of rain in a single day, causing streams to rise 10 feet in less than an hour, inundating vehicles, businesses, roads and closing the Metrorail system. The past decade has also been the hottest 10-year period in the region's recorded history, with rising hospitalizations due to extreme heat impacts. Public health issues are exacerbated by climate change and intertwined with the quality of the built and natural environment. The adverse effects of a changing climate will be felt most acutely by low-income residents and people of color, who are likely to suffer a disproportionate share of the damage to real property and personal health due to past and current patterns of discrimination.

Montgomery County has made progress in reducing its greenhouse gas emissions, a key contributor to climate change, but has much farther to go to meet its goal of eliminating these emissions by 2035. It will require significant changes in both the transportation and building sectors of the County. For transportation, the County should contemplate policies to facilitate a transition to zero-emissions vehicles (or other zero-emissions technologies). For buildings (both existing and new construction), the County should consider a combination of energy conservation measures and clean energy generation (such as rooftop solar PV). Together, buildings and transportation are responsible for more than 90 percent of our county's greenhouse gas emissions, making reduced reliance on driving and more energy-efficient buildings and compact development patterns essential to meeting our climate objectives.

### How Thrive Montgomery 2050 addresses environmental resilience

Thrive Montgomery's focus on a compact form of development with a mix of uses supported by transportation systems that make alternatives to driving practical and attractive are essential pieces of any comprehensive strategy to fight climate change. A stronger focus on walking, biking, and transit infrastructure will be crucial, but the significance of mixed uses and compact development in reducing driving is equally important. The environmental benefits of dense, walkable neighborhoods dovetail with the increasing preference across age groups to live in walkable places served by a mix of uses and amenities.

Of course, not even the most sustainable transportation planning and growth strategies will be able to resolve every environmental challenge facing the county. Thrive Montgomery 2050 builds on the tradition of robust conservation and protection of the natural environment. It prioritizes the equitable distribution of green infrastructure throughout the County. It supports alternative clean energy generation, distributed energy, grid modernization, improved composting and food waste recovery, and advances in other circular economy initiatives. And it proposes a series of strategies to mitigate the effects of climate change and minimize pollution. The plan also anticipates the need for public and private infrastructure to be made more resilient to withstand more severe weather and protect us from the effects of environmental degradation from sources that are beyond our ability to control.

Thrive Montgomery 2050 was drafted in coordination with the county's Climate Action Plan (CAP). While Thrive Montgomery 2050 is a high-level land use document that focuses on long-range planning and policies to guide the physical development of the county, the CAP recommends specific actions to be taken in the near-term to achieve the goal of eliminating greenhouse gas emissions by 2035 and to mitigate or adapt to the effects of increased heat and flooding, high winds, and drought. Thrive Montgomery 2050 incorporates a wide range of recommendations related to climate change and its connection to land use, transportation, and parks. To effectively reduce greenhouse gas emissions and slow the effects of climate change will require "greening" of our electricity grid through a significant increase in clean energy generation in the County, likely employing both large-scale solar PV projects where feasible and smaller distributed solar PV installations. The Planning and Parks Departments also will implement recommendations in the CAP that are within the scope of the M-NCPPC's responsibilities. Together these plans will create a comprehensive approach to climate change at the local level.

## **Other important objectives**

The plan also addresses other important goals that complement the three overarching objectives discussed above.

### **Improving public health and encouraging active lifestyles**

The length and quality of human life are strongly influenced by both the natural and built environment. In 2018, more than three-fifths of adults in Montgomery County were overweight or obese. Five of the seven zip codes in the county with household incomes in the lowest quartile are also among the zip codes with the lowest average life spans. And even though low-income residents and people of color are more likely to suffer from negative health outcomes for several reasons, all residents can benefit from a more active lifestyle supported by an emphasis on transit, walking, and biking, and easy access to parks and recreational opportunities. The importance of healthy living for seniors will also remain a significant area of focus as our ageing population continues to grow. Active lifestyles supported by improved housing choices in compact, complete communities can serve to improve public health for all, while simultaneously reducing the ecological footprint of human activity.

### **Elevating quality of design and highlighting role of arts and culture**

The Wedges and Corridors Plan envisioned a variety of living environments and encouraged "imaginative urban design" to avoid sterile suburban sprawl. Nonetheless, that plan was a product of its time. It relied on design approaches that were typical of the 1960s, emphasizing the convenience of driving and rigid separation of land uses.

Good design is not a luxury but a critical economic development tool. Businesses and workers now prefer walkable, accessible, amenity rich, mixed-use places that facilitate the interaction and exchange of ideas that feed innovation. A greater share of residents, across all ages, prefer walkable, transit-rich neighborhoods too. Combined with the lack of undeveloped land far from transit, these forces dictate a shift toward redevelopment and infill that converts “parking lots to places” near existing or planned transit lines and incorporating walkable form.

Our arts and culture sector, taken as a whole, would be the county’s sixth-largest employer. The sector taps into creative, social, and economic networks, and its practitioners have developed tools to share stories, encourage empathy, and empower creative exchange. Supporting a healthy arts and culture ecosystem will not only enrich the lives of our residents and bring us closer together but also will help attract talent and spur innovation.

## **URBANISM AS ORGANIZING PRINCIPLE**

Thrive Montgomery 2050 applies the principles of urbanism – a term this plan uses as shorthand for a set of ideas about what makes human settlements successful – to guide their future growth. Urbanism draws on the lessons of thousands of years of experimentation and evolution in the design and development of villages, towns, and cities to apply the ideas that have proven to endure as the foundation for adaptable and resilient communities everywhere. An urbanism-focused approach to the development of land and related infrastructure (such as roadways, transit systems, and parks) emphasizes the value of: (1) a compact form of development; (2) diverse uses and building types; and (3) transportation networks that take advantage of and complement these two land use strategies, at all densities and scales.

This approach calls for focusing growth in a limited number of locations rather than dispersing it, avoiding “sprawl.” It means encouraging the agglomeration of different uses such as retail, housing, and office space as well as diversity within each type of use. For example, a variety of housing sizes and types near employment and retail helps to ensure that people of diverse income levels can live and work in proximity to each other. This over time produces more racially and socioeconomically integrated neighborhoods and schools, providing more equitable access to economic opportunities, public services, and amenities. It also emphasizes the importance of walking, biking and transit and reduces reliance on cars.

Of course, other factors – particularly quality and thoughtfulness in the design of buildings, streets, neighborhoods, and public spaces – are also essential. Combined with the fundamentals of urbanism, design excellence can help create a sense of place, facilitate social interaction, and encourage active lifestyles. Compact development also provides other advantages including efficient use of scarce land, more natural areas for recreation and preservation, and reduced expense for building and maintaining infrastructure.

These principles of urbanism are equally relevant to rural, suburban, and urban areas. In fact, the preservation of land for agriculture in a place like Montgomery County depends on concentrating development in urban centers instead of permitting sprawl, and even suburban and rural areas benefit from a mix of uses and housing types – at appropriately calibrated intensity and scale – to serve their needs.

With attention to both the functional and aesthetic aspects of design, urbanism is not only consistent with a commitment to maintaining the best of what has made Montgomery County attractive in the past but

is necessary to preserve and build on these qualities while correcting the challenges of auto-centric planning and its effects on the environment, racial equity, and social cohesion.

## HOW THRIVE MONTGOMEY 2050 WAS DEVELOPED

### Organization of the Plan

Related to the three primary objectives of economic competitiveness, racial and social equity, and environmental sustainability, the plan is organized into six chapters:

- Compact Growth: corridor-focused development
- Complete Communities: mix of uses and form
- Design, Arts, and Culture: investing and building community
- Transportation and Communication Networks: connecting people, places, and ideas
- Affordable and Attainable Housing: more of everything
- Parks and Recreation for an Increasingly Urban and Diverse Community: active and social

The ideas in each chapter are intended to complement each other and outline approaches calibrated for varying scales of planning. The first three chapters move from the countywide scale (Compact Growth) to the district and neighborhood scale (Complete Communities) and finally to the details of individual blocks and buildings (Design, Arts, and Culture). The chapter on Compact Growth describes a countywide approach that aims to concentrate development along corridors to maximize the efficiency of infrastructure, preserve land, and focus investment. The Complete Communities chapter covers strategies for individual neighborhoods and districts that build on the foundation of a compact footprint for growth by incorporating a mix of uses, building types, and lot sizes to create livable places that are accessible and inviting to people with a variety of income levels, household sizes, and lifestyles. The Design, Arts and Culture chapter discusses the finer-grained analysis of design concepts applicable to blocks and individual development sites, the architecture of public and private buildings, the landscape of plazas and public spaces, and elements of street design.

These concepts are reinforced and supported by the remaining three chapters, which address specific topics related to development and public infrastructure. The Affordable and Attainable Housing chapter recommendations are intended to diversify our housing stock across incomes, building types and geography. The Transportation and Communication Networks chapter outlines the multi-modal and digital infrastructure required to support compact growth and the creation of walkable, well-designed complete communities as well as the communication networks in the county. The Parks and Recreation chapter describes the role of public and privately-owned parks and gathering spaces in encouraging social interaction, promoting a healthy lifestyle through physical activity, and mitigating the effects of climate change through environmental stewardship. Each chapter explains how its recommendations serve the broader objectives of Thrive Montgomery 2050 and provides metrics to measure progress in implementing the chapter's ideas. No plan that is designed to provide guidance over a period of decades can anticipate every difficult problem, attractive opportunity, or useful idea that may emerge, so these metrics should be used to assess new proposals as well as to measure the success or failure of the plan's recommendations over time.

## A plan based on community input

This Plan is the result of community feedback and collaboration over more than two years of extensive outreach by Montgomery Planning. Planners reached out to a wide spectrum of stakeholders including students; homeowners and civic associations; non-profit advocacy groups and community-based organizations; and representatives of large and small businesses. The outreach effort was designed to emphasize engagement with residents who will live longest with the recommendations made in this plan – Millennials and Gen Xers and high school and college students— as well as members of racial and ethnic groups who historically have been left out of land use and planning processes.

Thrive Montgomery 2050’s community engagement activities were implemented through four phases beginning in summer 2019. Each of these phases—Excite, Educate, Engage, and Endorse—included specific objectives and communication and engagement strategies.

### Equitable Communications and Community Outreach

For historically underrepresented audiences – such as Latinos, African Americans, foreign born residents, renters, and small business owners-- outreach focused on connecting with community influencers who have established trust within their communities. This included co-hosting listening sessions and events, providing content for events and communications, and engaging their organizations with educational tools.

From June 2019 through April 2021, Montgomery Planning organized multiple in-person and virtual engagement activities to imagine what life in Montgomery County will be like in 2050 and what will be needed to ensure that we thrive in the decades to come. Planners participated in more than 180 meetings with community members and organizations; created and distributed a “Meeting-in-a-Box” for residents and organizations to host their own discussions about Thrive Montgomery 2050 and the county’s future; created an online quiz soliciting feedback on values and priorities for the plan; built a dedicated website, [thrivemontgomery2050.com](http://thrivemontgomery2050.com) (and [MontgomeryProspera.com](http://MontgomeryProspera.com) in Spanish), with a wealth of materials in multiple languages and distributed tens of thousands of postcards and e-newsletters to reach community members across the county. Montgomery Planning estimates that these efforts resulted in interactions with approximately 12,000 people.

*Thrive Montgomery 2050 looked at the largest minority languages where limited English proficiency was greater than 10% and created materials and advertising in multiple languages.*

### Thrive Montgomery 2050 Engagement by the Numbers

- Over 180 meetings with community
- 1,635 people completed online Thrive Montgomery 2050 Quiz
- 1,300 Meeting-in-a-Box postcards sent to HOAs + Community Associations
- 91,000 postcards to equity emphasis areas
- ThriveMontgomery.com – 102,641 web views
- E-letter signup – 1,384, with open rate of 40% (double industry average)
- Estimated participation – approximately **12,000**

### Top five topics that received the most comments:

1. Public transit
2. Affordable housing
3. Parks

4. Walkability
5. Education/Schools

## **COMPACT GROWTH: Corridor-Focused Development**

### **Introduction: Compact Footprints along Multiple Corridors are Central to Future Growth**

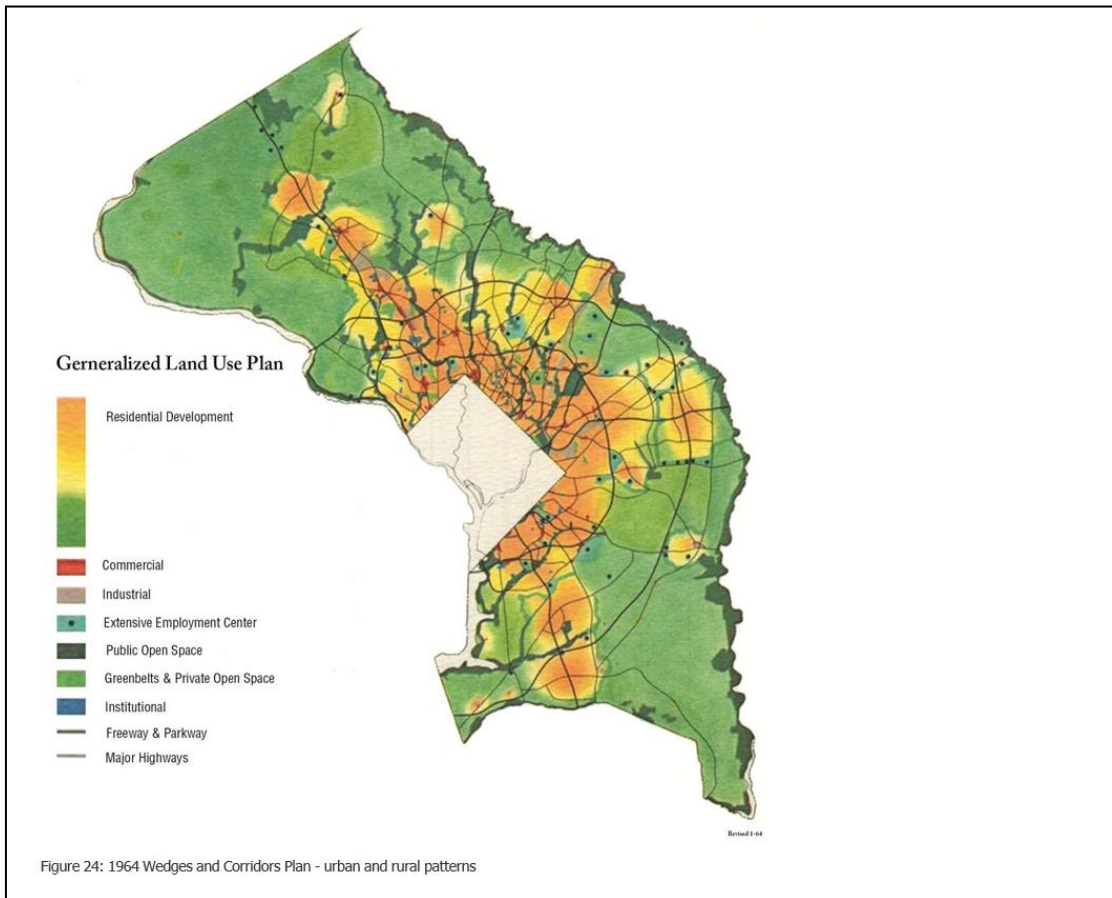
When the Wedges and Corridors Plan was adopted much of Montgomery County was undeveloped. The plan recognized, however, that what seemed to be abundant available land must be used wisely:

“Land should be treated as one of our most precious possessions, using efficiently what we need for accommodating expected urban growth, and conserving the rest for the unforeseeable future. Land is too valuable an asset to be heedlessly wasted by allowing it to be developed aimlessly in a scattered pattern.”

Accordingly, the Wedges and Corridors Plan recommended two distinct patterns of growth: the urban pattern and the rural pattern. The urban pattern was envisioned as a compact form of urban development, concentrated in the existing urban ring and proposed corridor cities along significant transportation corridors within the region, including the I-95/Route 29 corridor as well as the I-270/Route 355 corridor. The rural pattern, by contrast, was envisioned as serving four broad purposes:

“1) to help mold the urban pattern into an efficient and pleasant one; 2) to provide and protect large open spaces for the “change of pace” and recreational opportunities needed by present and future generations; 3) to provide a favorable rural environment in which farming, mineral extraction, hunting, fishing and other natural resource activities can be carried on without disruption; and 4) to conserve natural resources and protect the public water supply.”



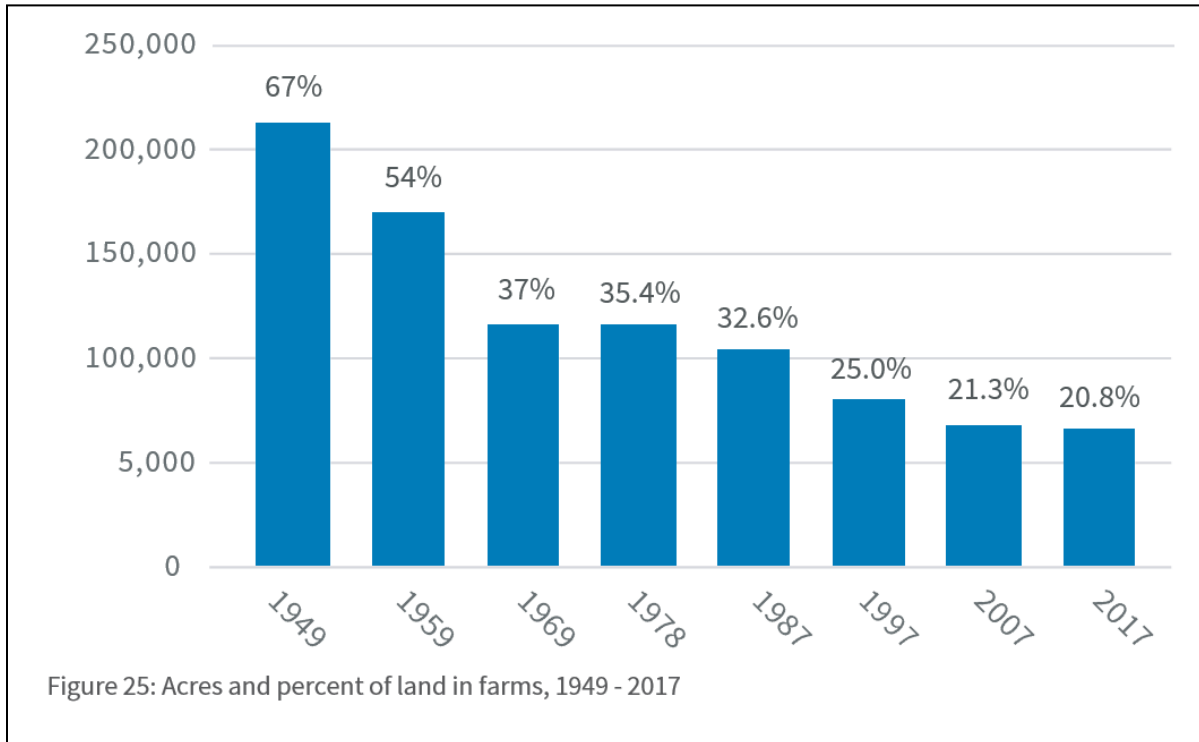


## What is the problem we are trying to solve? Focusing Growth, Connecting Communities, and Reinvigorating East County

While the Wedges and Corridors Plan was visionary in recognizing the consequences of sprawl and the value of land preservation, subsequent land use and transportation planning decisions did not always adhere to the 1964 plan's guidance, illustrating the political economy of sprawl. On one hand, resistance to the kinds of dense infill and development in areas within the growth footprint identified by the 1964 plan left the urban form unrealized in many areas, with – for example – only a few Metrorail station areas developed with high density. On the other hand, the desire of property owners to maximize the value of their land in some cases led to more development in outlying areas than contemplated in 1964, with a proliferation of garden apartments and townhouses in places like Aspen Hill. The absence of tighter limits allowed development to disperse, consuming large amounts of land and increasing the cost of roads, water, sewer, and other public infrastructure by limiting economies of scale. This pattern of development also limited opportunities to offer cost-effective transit service.

Conversely, the 1964 plan envisioned corridor cities along I-270, I-95, and Route 29, yet subsequent planning decisions, including the 1993 Refinement, disregarded and ultimately removed the growth corridor along Route 29 and I-95 in the eastern portion of the county. The excision of the Route 29 corridor

contributed to effectively directing new public and private investment away from the East County and toward the established urban ring and I-270 corridor. As a result, the I-270 corridor has benefited from successive cycles of investment and reinvestment, even as other corridors – including Georgia Avenue, where Metrorail’s Red Line was built – were largely left behind. This recurring pattern aggravated the racial and economic disparities between the eastern and western parts of the county that remain today.



Moreover, the Wedges and Corridors plan neglected to fully articulate how the broader public should expect to benefit from maintaining a rural pattern over much of the county’s land area. The plan explained that land preservation is important to recreation, agriculture and conservation of natural resources but did not describe how people living in urban parts of the county would access these opportunities. The result is that many people who live outside what became the Agricultural Reserve are unfamiliar with it and do not take full advantage of opportunities to visit, enjoy and develop an appreciation for the value of continued preservation of land for farming, recreation, and environmental stewardship. Awareness of -- and access to -- the Agricultural Reserve should be improved by providing ways for people throughout the county to experience and take full advantage of this unique resource. Our residents and visitors should not miss out on opportunities to learn about the county’s rural heritage, eat and drink locally produced food and beverages, and participate in outdoor activities such as hiking, biking, camping, and fishing.

If we fail to make efficient use of land, the available space for growth, outdoor recreation, agriculture and natural resource conservation will rapidly diminish. The cost of building and maintaining water and sewer infrastructure, roads, and public services will become harder to manage. Problems such as traffic congestion and climate change will be exacerbated.

## What policies will solve the problem? Refining – and Recommitting to - a Compact Footprint

Thrive Montgomery 2050 proposes redoubling and refining efforts to concentrate growth in downtowns, town centers, rural villages, and intensively developed centers of activity, or nodes, and a new commitment to promoting growth along major transportation corridors to maximize the efficient use of land and create Complete Communities. These corridors establish a web, connecting residents to existing and future centers of activity and Complete Communities. These corridors also either have robust transit service in place or planned or are located close to existing concentrations of jobs, services, and infrastructure in ways that lend themselves to supporting more intensive development to produce the kinds of Complete Communities described later in this plan.

The intensity of development along these corridors should be aligned with the urban, suburban, and rural context and calibrated to account for existing or planned transit and other transportation infrastructure. Detailed analysis of each area will come through future planning efforts. Some corridors, such as Rockville Pike, connect several centers of activity, making these corridors appropriate for more intensive development. Other corridors will have less intensive development due to their context and level of transit service.

Outside of these corridors, limited, organic growth should be allowed to meet localized needs for services and provide a balanced, diverse, and appropriate range of housing choices; increase racial and socioeconomic integration; and achieve more Complete Communities in all parts of the county. This limited development must be managed in ways that help to form more Complete Communities without expanding established development footprints or encouraging significant intensification of land uses outside of Complete Communities. Preservation of land for recreation, agriculture and environmental management must be ensured for the benefit of the entire county.

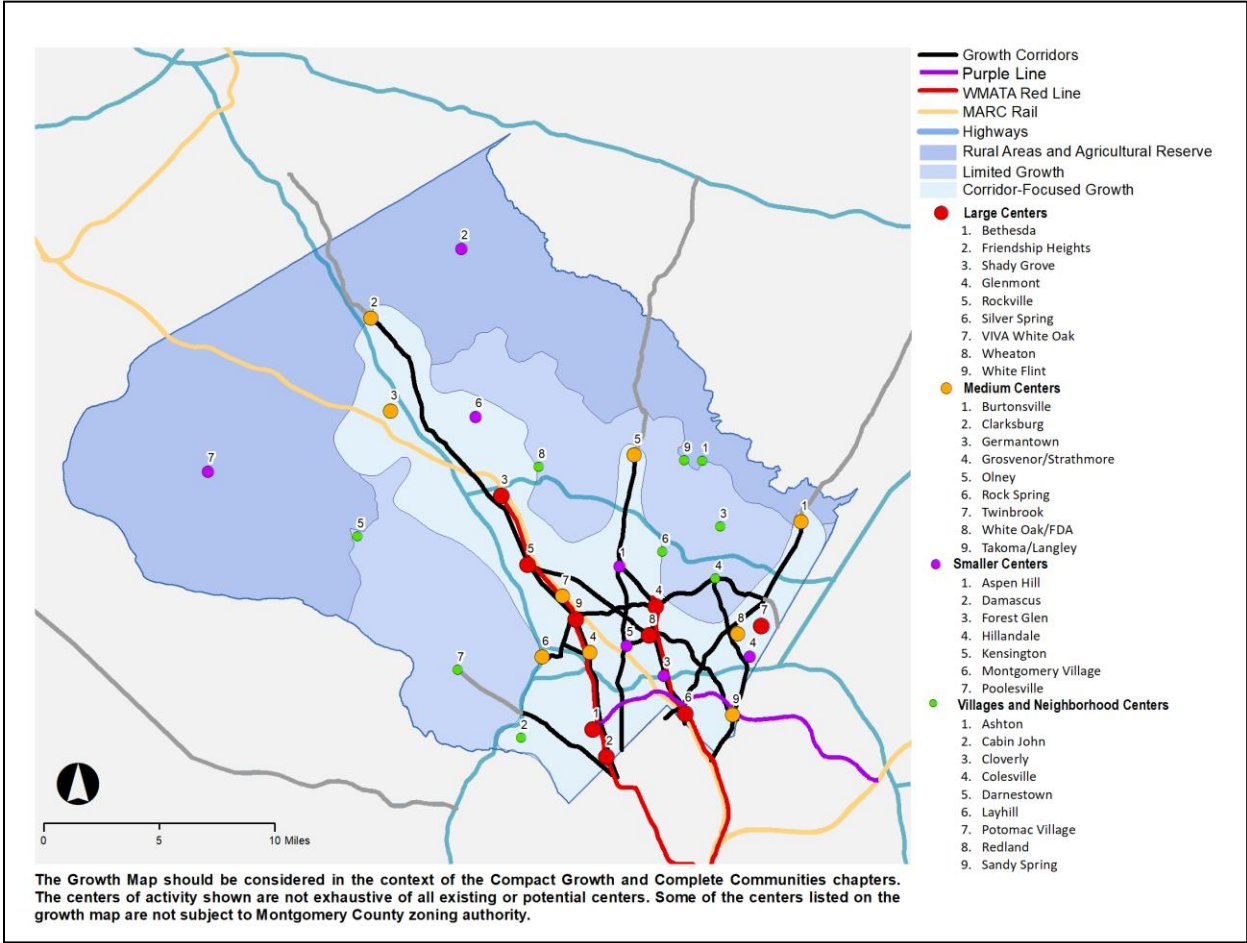
Figure 26: Georgia Avenue looking south from Evans Parkway Neighborhood Park—today

Figure 27: Georgia Avenue looking south from Evans Parkway Neighborhood Park—possible future

The concept of corridor-focused growth is a fundamental organizing element for Thrive Montgomery 2050, as it recognizes not only that intensively developed centers of activity and preservation of land both play a vital role in our quality of life but that neither pattern can exist without the other. By identifying the places where growth should be encouraged, this chapter establishes the foundation for Complete Communities, which depend on a compact footprint to give them the coherence, focus, and mix of activities necessary to succeed. The scale of development, building types, and diversity of uses envisioned within this footprint are discussed in greater detail in the Complete Communities chapter. In turn, the

design elements that complement and reinforce Complete Communities are discussed in the Design, Arts, and Culture chapter.

Figure 28: Major transit corridors can be transformed from existing unsafe traffic arteries to a series of Complete Communities with a variety of housing and other uses.



The Corridor-Focused Growth area (lightest blue) should have the largest share of new growth. It encompasses the most developed part of the county with highest-density population and employment centers, and the infrastructure to support existing and new development. The Limited Growth area (medium blue) contains the mainly suburban residential communities where limited, organic growth is envisioned to meet localized needs for services, provide a diverse range of housing choices, and increase racial and socioeconomic integration to achieve Complete Communities. Rural Areas and the Agricultural Reserve\* (in dark blue) will continue to be dedicated primarily to agriculture, rural open space, and environmental preservation. It can absorb some growth as agriculture evolves and existing residential communities' needs change over time.

The Growth Map identifies several existing and potential centers of activity at a variety of scales, including Large, Medium, and Small as well as Villages and Neighborhood Centers. The centers identified are not exhaustive of all existing or potential centers, but rather are included to demonstrate that centers of activity, where existing and future compact growth should be concentrated, occur within the county's urban, suburban, and rural areas. While future growth should occur in these centers, the amount growth and intensity of development should be commensurate with the center's location and context.

The Growth Map reflects current land use and is representative of the location and types of growth expected through 2050; however, the corridors and centers shown on the map or fitting the descriptions provided below may evolve over time through future approved and adopted master plans and functional master plans.

**Large Centers** are envisioned as the highest intensity areas generally characterized by significant residential and/or commercial density either existing or planned and are typically close to high quality transit. They include the county's Central Business Districts, existing and future employment centers, the municipalities of Gaithersburg and Rockville, and most of the Metrorail stations which provide an opportunity for significant redevelopment.

**Medium Centers** would be less intense and cover a smaller geography than Large Centers. The Medium Centers could include significant clusters of existing or planned residential density, as well as clusters of commercial density, including large shopping centers and office campuses. Medium Centers are likely to be close to transit.

**Smaller Centers** are generally characterized by low- to medium-density residential neighborhoods, with clusters of commercial activity, including shopping centers and neighborhood-serving retail.

**Villages and Neighborhood Centers** are the lowest intensity centers containing a small number of neighborhood-serving uses and located in rural areas and low-density residential neighborhoods.

\* The Rural Areas and Agricultural Reserve are areas of the county substantially zoned for rural or agricultural land use under the Rural, Rural Cluster, Rural Neighborhood Cluster, or Agricultural Reserve zone.

More specifically, the following policies and practices should be adopted in order to maximize the efficiency of land use and public investment and establish the building blocks for development of vibrant centers of activity while preserving land for recreation, resource conservation, and agriculture:

**Concentrate growth in centers of activity and along corridors through compact, infill development and redevelopment to maximize efficient use of land.**

- Focus future land use and public infrastructure planning on growth corridors so as to direct development in ways that facilitate the emergence of Complete Communities. Evaluate appropriate land uses, transportation facilities, and community design that will encourage and enable full use of centers of activity and creation of Complete Communities. (Ec, Env, Eq)
- Amend land use, design, and zoning regulations, including the Zoning Ordinance and Subdivision Regulations, to support corridor-focused compact development. Appropriate densities will vary but should be sufficient to support, at a minimum, the efficient provision of transit service along these corridors. (Ec, Env, Eq)
- Improve the environmental sustainability of growth by encouraging infill and redevelopment to curb sprawl and bring areas built out in an era with little or no environmental regulations up to robust standards for stormwater management and other state-of-the-practice environmental standards. (Env)

**Promote and prioritize public investment in infrastructure along growth corridors and leverage it to attract future private investment in a compact form.**

- Consider new methods of financing public infrastructure, such as value capture, tax increment financing, and other mechanisms to facilitate investment and provision of appropriate infrastructure in areas identified as appropriate for more intensive development. (Ec)
- Establish high-quality transit infrastructure along growth corridors through capital investment and ensure reliable, frequent service through operational investment. (Ec, Env, Eq)
- Leverage federal, state and local incentive programs, publicly owned land and land investment opportunities for corridor infill development and redevelopment. (Ec, Env, Eq)

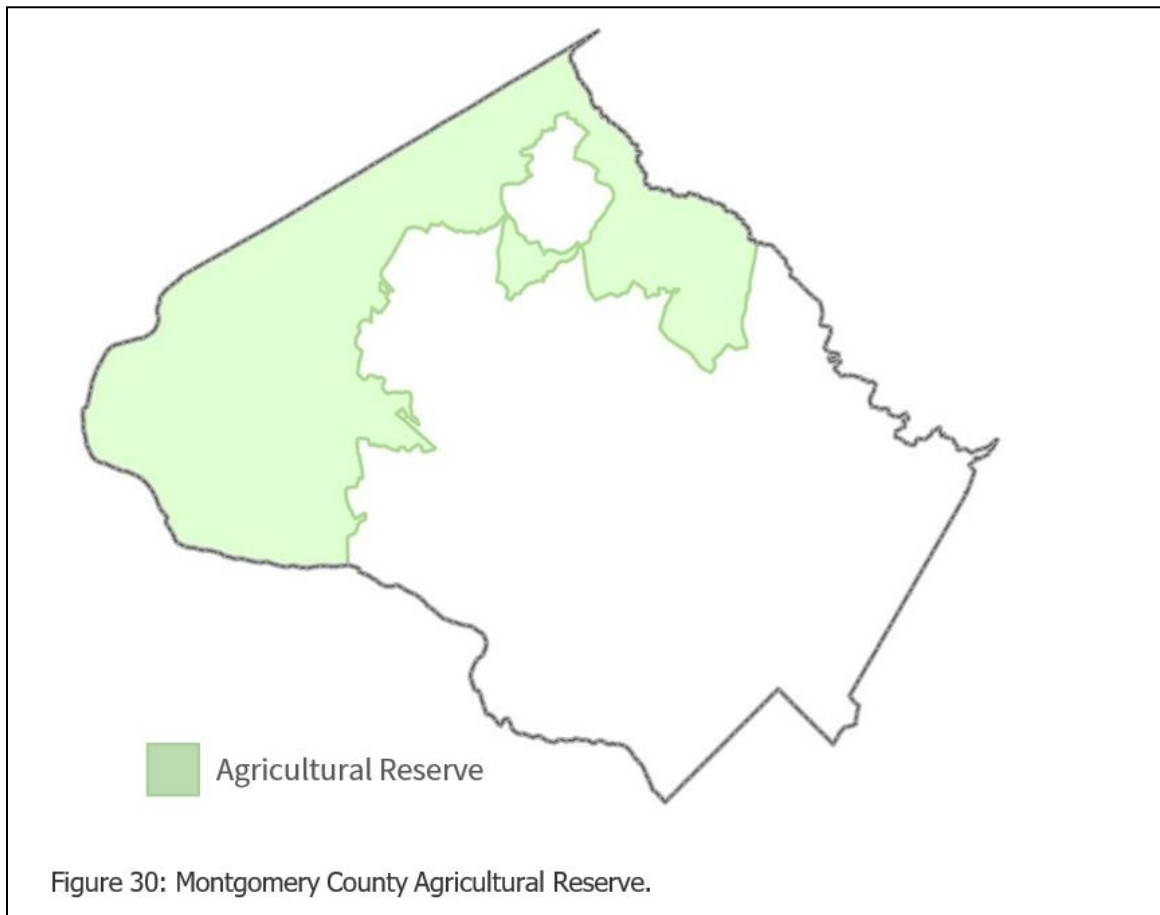
**Limit growth beyond corridors to compact, infill development and redevelopment in Complete Communities to prevent sprawl. Apply principles of urbanism at an appropriate scale along a rural-to-urban transect as outlined in the Complete Communities chapter.**

- Sustainably manage land outside growth corridors and Complete Communities to increase biodiversity, improve the health of natural habitats, preserve privately owned forests, protect watersheds and aquifers, and improve water quality while providing expanded opportunities for outdoor recreation, including vigorous physical activity. (Env, Eq)
- Support alternative clean energy generation, distributed energy, battery storage and grid modernization; and better facilitate composting/food waste recovery and other circular economy initiatives. (Env, Eq)

**Preserve and enhance the Agricultural Reserve and manage it to maintain a rural pattern of development for the benefit of the entire county.**

- Maintain agriculture as the primary land use in the Agricultural Reserve through policies, regulations, easements, and incentives, including those that maintain a critical mass of contiguous farmland. (Ec, Env)

- Maximize the benefits of the Agricultural Reserve through policies designed to ensure the continued viability of farming as an economically productive and sustainable activity, discourage sprawl, facilitate a broad range of outdoor recreation and tourism activities, conserve land and natural resources, and promote practices that advance environmental quality. (Ec, Env)
- Improve awareness of and access to the Agricultural Reserve for the public to experience and directly benefit from this valuable resource for locally grown food, outdoor recreation, and tourism. (Ec, Eq)



## **How will these policies further the key objectives of Thrive Montgomery 2050?**

### **Compact Development to Support Vibrant, Diverse, and Sustainable Places**

Montgomery County's population is projected to grow by approximately 200,000 people over the next 30 years, and these policies and practices are critical to not only accommodating this growth but also to achieving Thrive Montgomery 2050's key objectives, including combating and adapting to climate change. Nearly 85 percent of the county's land is already developed or otherwise constrained. If we fail to maintain effective barriers to sprawl, we will paint ourselves into a corner where space for farming, recreation, and resource management is exhausted along with space for additional growth.

We must encourage compact, infill development and redevelopment to accommodate anticipated population growth in a way that supports dense, vibrant, energized communities. The strategy of concentrating growth within nodes along corridors will direct population and employment to locations served by infrastructure, services, and amenities – including transit – and create focused centers of activity. This focus will in turn reduce the cost of public infrastructure and deliver more favorable returns on both public and private investment. Compact, infill development and redevelopment also align with the increasing desire of residents, businesses and employers seeking walkable, transit-oriented communities, as demonstrated by transit-oriented areas across the region and country.

### **Economic Health: Compact Form as the Foundation for More Appealing Places**

Keeping the county's development footprint and growth in a compact form along corridors will help to create the kind of places that are attractive to employers and attract new investment. Studies of trends in office development show that major employers are looking for amenity-rich, walkable areas near transit. Traditional, low-density office parks are no longer in favor. The related ideas of Compact Form, Complete Communities and Design Excellence will result in places that attract both businesses and residents.

Compact development footprint is an important tool in creating the kind of centers that support a strong economy. The lack of large tracts of vacant, unconstrained land does not mean that Montgomery County cannot grow its economy. However, the focus needs to switch to thinking differently about where growth happens and compactly developing areas that have not been considered in the past, such as surface parking lots and colocation of facilities. Even though the county is running out of greenfields to accommodate sprawling employment centers or new residential neighborhoods, this plan does not recommend expanding our development footprint well beyond the Corridor-Focused Growth area. Instead, it emphasizes that the current supply of redevelopable land – if developed compactly and



creatively – is sufficient to attract and retain a variety of employers, especially advanced knowledge-based industries looking for vibrant centers and a highly trained, diverse workforce.

It is important to note that form alone will not create more jobs. Increased density, great transit options and a regulatory environment that supports investment are all required. Other changes are needed in terms of financial incentives, tax reform and investment in infrastructure.

## Racial Equity and Rebalancing the Geographic Distribution of Opportunity

The identification of growth corridors in the East County – particularly along Route 29 and the Georgia Avenue corridor along Metrorail’s Red Line – is vital to reversing decades of no growth and ensuring that the benefits of growth are more equitably distributed across lines of geography, class, and race. Political opposition to development in the East County – most clearly expressed by the removal of the I-95/Route 29 corridor in the 1993 Refinement of the Wedges and Corridors Plan from the areas identified as appropriate for growth – pushed public and private investment to the west. Subsequent public and private investment was focused along the I-270 corridor because this area appeared to offer the best prospects for growth and success. Meanwhile, the East County became relatively less attractive for employers and residents, feeding a cycle of stagnation.

This pattern is consistent with what real estate developer and scholar Christopher B. Leinberger has described as the phenomenon of the “favored quarter.” Leinberger observes that in many metropolitan areas, decisions about the geographic allocation of resources made decades in the past are reinforced and repeated. Once an area receives resources and attention from the government and private sector, Leinberger argues, future investment tends to follow in the same location, reinforcing its head start and leaving other areas farther behind.

Figure 31: Colesville Road/Columbia Pike (Route 29) looking east from its intersection with New Hampshire Avenue—today

Figure 31: Colesville Road/Columbia Pike (Route 29) looking east from its intersection with New Hampshire Avenue—possible future

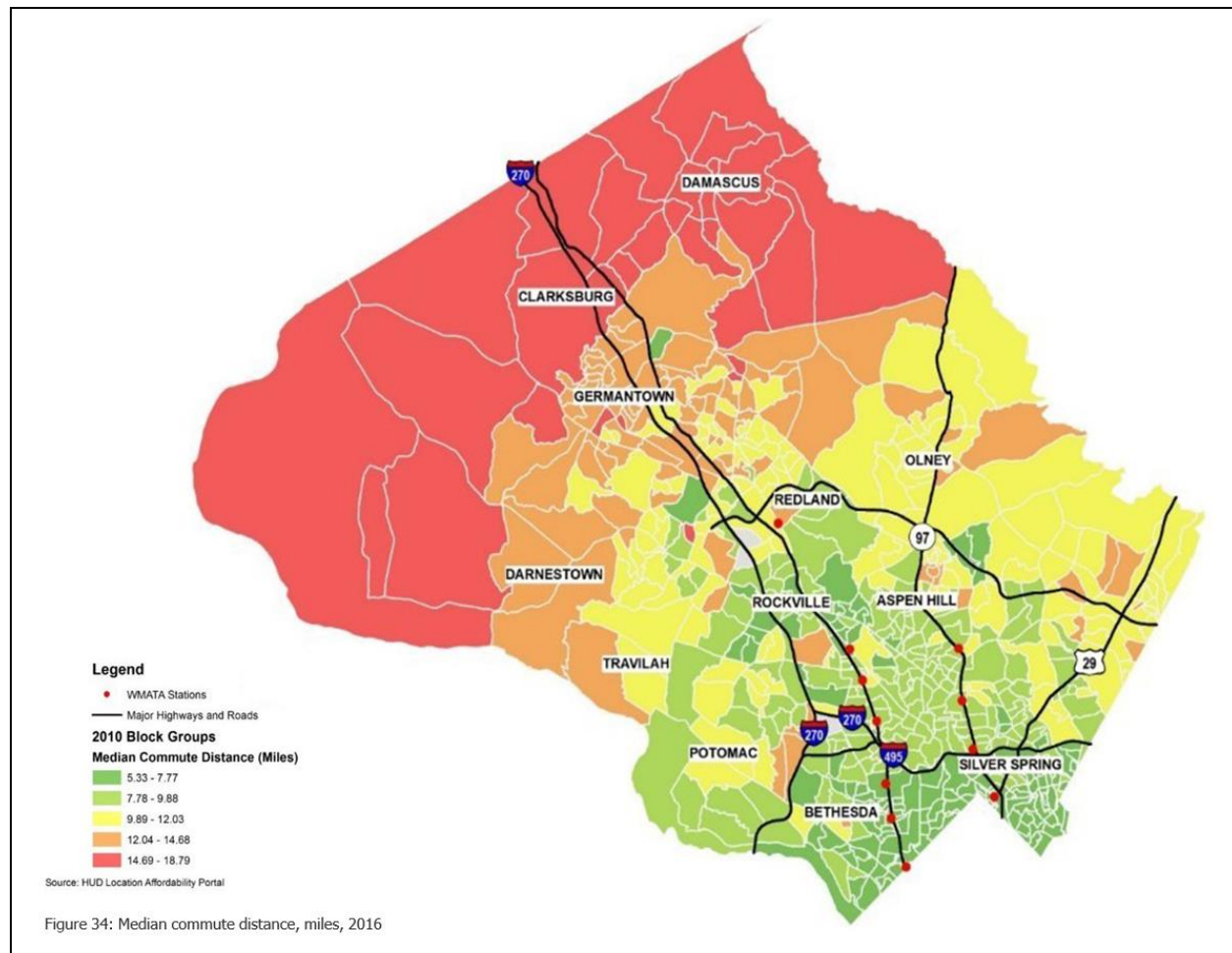
The evolution of the I-270 corridor as the “favored quarter” and accompanying limits on development in the East County were not the sole – or even the most important – cause of the racial and economic divide between the eastern and western part of the county. The logic of the favored quarter, however, was and is a significant factor in reinforcing disparities in access to investment, infrastructure, and services as well as the concentration of poverty and diminished access to opportunity. While the potential for displacement must always be considered – and this plan calls for monitoring and addressing dislocation caused by rising real estate values – by the same token public and private investment are essential to expanding economic opportunity for people and communities that have been left behind or economically and socially isolated. By focusing investment and encouraging development along corridors in the East

County, this plan will establish the foundation for Complete Communities that will create a more prosperous and equitable future in all parts of the county.

## Compact Growth and Environmental Performance: Improved Air and Water Quality with More Efficient Use of Land

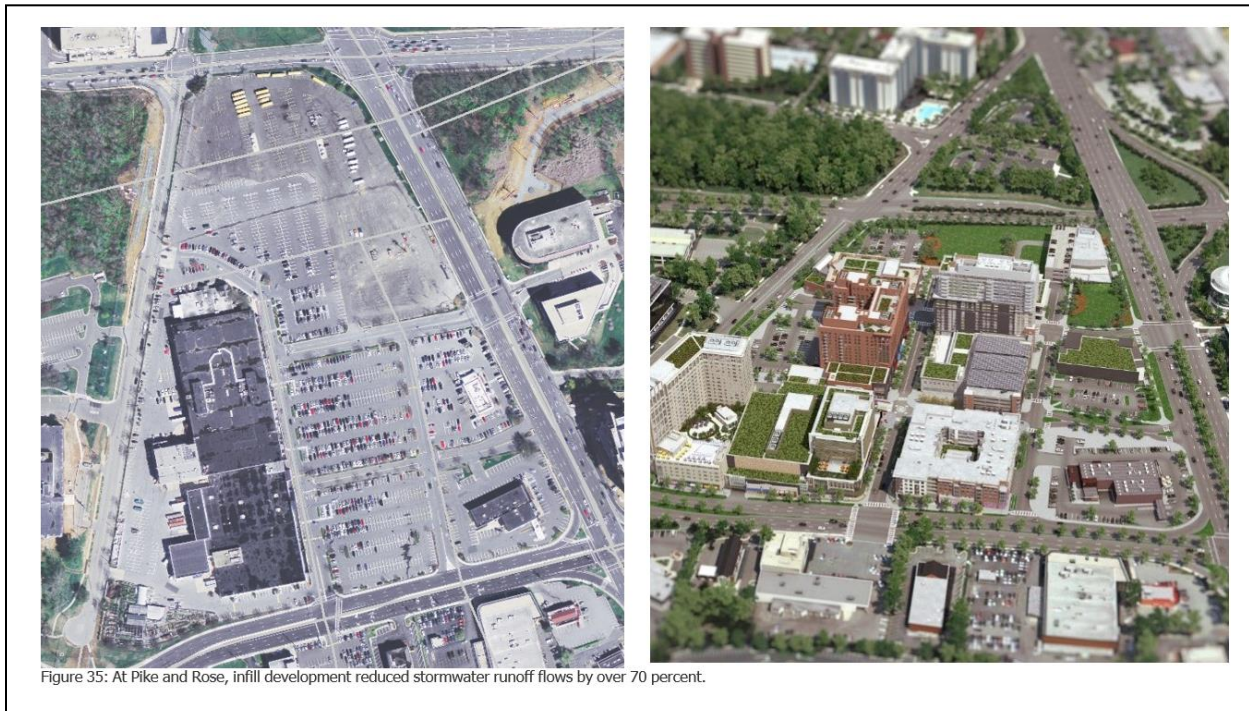
Among the most clear-cut benefits of the efficient use of land, including compact corridor-focused growth together with reinforcement of the rural pattern outside of the corridors, is to make development more environmentally sustainable in general and to reduce greenhouse gas emissions in particular. By concentrating development in a limited footprint, corridor-centered growth facilitates walking, biking, and transit use and reduces emissions from motor vehicles. A compact form of development reduces driving even among people who continue to rely on cars, because trip distances decline as a wider range of needs can be met within a short distance, reducing vehicle miles traveled.

Figure 33: Lining corridors with appropriate densities provides housing options (Before and after of Georgia Avenue north of Silver Spring)



Compact growth also improves the environmental performance of both sites and buildings, as it allows the redevelopment of areas developed prior to the adoption of modern stormwater controls and often characterized by high proportions of impervious surface cover. A compact form of infill development or redevelopment can reduce stormwater runoff and heat island effect by using green infrastructure, green roofs, and other green cover, as well as building design and orientation to reduce urban temperatures.

Finally, compact, corridor-focused development is essential to the continued protection of the Agricultural Reserve and preservation of land for environmental stewardship and recreation. As our population grows and the region continues to develop, pressure on rural areas and natural systems will increase. The preservation of the Agricultural Reserve reinforces the concentration of growth and maximizes the land available for farming, recreation and natural resource conservation.



While farming should remain the primary use in the Agricultural Reserve, the area set aside for the rural pattern also provides opportunities for recreation, tourism and natural resource conservation, uses that must be acknowledged and supported. The Agricultural Reserve improves the attractiveness and livability of the county because it provides opportunities for locally grown food, outdoor recreation, education, and tourism. The continued preservation of the Agricultural Reserve, along with the county's park system, also protects the county's forests, wetlands, meadows and streams, supports biodiversity and natural habitats, and protects watersheds, aquifers, and water quality.

## How will we evaluate progress?

In assessing future plans, projects, and proposals related to the efficient use of land and measuring the success or failure of the approaches recommended in this plan, relevant measures may include:

- Amount of infill development/redevelopment along major corridors.
- Proportion of new population, employment and housing within a mile (or half-mile) of priority corridors.
- Non-auto driver mode share (walking, biking, transit use) and corresponding reduction in VMT.
- Amount of public and private investment in infrastructure, services, and amenities along corridors, overall and by area of county.
- Acres of farmland, natural habitats, forests and environmentally sensitive areas protected.
- Economic productivity of farming.
- Amount of space for outdoor recreation and variety of activities supported.
- Percentage increase in environmental performance of buildings and sites, overall and by area of county.
- Number of visitors from outside the Agricultural Reserve for recreation, commerce, and tourism.
- Maintenance and improvement in measures of stream water quality.
- Reduction in impervious cover and increase in area of impervious cover treated.
- Increase in alternative clean energy generation and composting/food waste recovery.

## COMPLETE COMMUNITIES: Mix of Uses and Forms

### Wedges and Corridors and the Separation of Uses – and People

While the Wedges and Corridors Plan was extraordinarily progressive in advocating a transit-oriented, compact form of development, it rejected the idea of mixed commercial and residential uses. The plan said the spaces designated for different uses should ultimately work together to achieve a “pleasant and economically feasible whole” but that these uses should be physically separated. It recommended Euclidean zoning, with areas set aside for multifamily, townhouse, and single-family housing along with isolated commercial and industrial zones, saying:

“[C]ommercial and industrial zones should exclude residences both because good residential neighborhoods cannot be maintained in such areas, and because business and industry can function more effectively where space allotted them is uninterrupted by housing.”

In addition to a rigid separation of uses, the plan insisted on the desirability of barriers, buffers and transitions between land uses to achieve harmony and compatibility:

“[L]ong established commercial centers expand into nearby residential neighborhoods, causing more transitional problems. The end result is a disease known as urban blight. This disease is contagious and is almost sure to spread where preventative measures are not taken.”

### What is the problem we are trying to solve? A Mixed Record with Mixed Use

While the polycentric urbanism embodied by the 1964 plan’s corridor cities concept was fundamentally sound, its approach to the separation of uses and emphasis on transitions and buffers was at best not entirely successful in producing pleasant and economically vibrant commercial districts and at worst served to justify land use decisions that reinforced racial and socioeconomic segregation. Other shortcomings have become increasingly obvious, namely:

- The separate-and-buffer approach failed to anticipate – much less meet – the demand for housing in mixed-use centers of activity. For the most part, the corridor cities neither achieved the densities nor provided for the variety of uses, building types and services necessary to maximize their value in attracting residents and workers looking for more vibrant and appealing places to live and work.
- A handful of locations in Montgomery County have attracted investment in office, retail, and residential uses, but most lack the combination of elements – including a compact form with diverse housing types, commercial uses, transit, and a walkable public realm – that support the kinds of human interaction common to the most successful places. Meanwhile, the areas surrounding our most eclectic centers of activity largely remain characterized by a separation of land uses and uniform lot sizes, lot coverage, and building forms.

The separation of uses and associated homogeneity in lot sizes, development standards and building forms, coupled with the commitment to barriers, buffers and transitions had the effect – whether intentional or not – of discouraging connections among people and places and sharpening racial, social and economic divisions between neighborhoods and parts of the county.

The implementation of these approaches also made access to the full range of economic, educational and cultural opportunities (as well as services, amenities, and infrastructure) far too dependent on access to cars. By separating uses and investing heavily in roads, we have historically made driving the only practical way for many residents and workers to meet their daily needs – including trips that should be feasible on foot, on a bicycle, or on a train or bus.

The preservation and protection of neighborhoods dedicated exclusively to detached single-family houses has left residents disconnected from retail and other services, encouraged the construction of stand-alone public facilities, and perpetuated the inefficient use of land.

Our land use policies have evolved in recent years to reflect a changing social and demographic context as well as changing preferences. The county also has evolved from a bedroom community to the District of Columbia to a county with several distinct employment centers. These changes have coincided with the emergence of increasingly strong market preferences for transit-oriented, mixed-use communities with a unique sense of place. Our plans have been responsive to these trends, but implementation of transit-oriented, mixed-use development has been limited due to economic and regulatory constraints. The basic underlying pattern persists in much of the county despite the 1993 refinement’s endorsement of mixed uses and subsequent changes to the zoning code. Of course, some suburban and rural areas may not achieve the mix of uses or support the kinds of transit service that should be expected in more urban areas. Thrive Montgomery 2050 envisions increasing the variety of uses and achieving a people-oriented public realm within the corridor-focused growth areas and centers discussed in the Compact Growth chapter at scales appropriate to their context, so as to provide people in all parts of the county access to a wider range of services and amenities in closer proximity to their homes and workplaces.

## **Beyond Transit-Oriented Development: Complete Communities and 15-Minute Living**

Thrive Montgomery 2050 recognizes the benefits of transit-oriented development, which often uses mixed use zoning as a complement to high-quality transit service, but it updates and recalibrates ideas about the role of mixed uses by adding “complete communities” and “15-minute living” as organizing principles for thinking about planning of neighborhoods and districts.

Complete Communities are places that include the range of land uses, infrastructure, services and amenities that allow them to meet a wide range of needs for a variety of people. They include housing suitable for different household types, income levels, and preferences, helping to support racial and socioeconomic integration. The specific mix of uses and building types in Complete Communities vary depending on factors such as the size and location of the neighborhood or district; proximity to transit, parks and public facilities; variation in physical features such as topography and environmental resources; and other factors unique to the history and context of each place.

The related concept of “15-minute living” has emerged as a way of reimagining existing communities to maximize their attractiveness and efficiency by mixing housing, offices, and retail uses in each neighborhood or district so services, infrastructure, facilities, and amenities to serve the daily needs of people who live or work there are within walking distance. While a literal or rigid application of 15-minute living may not be practical outside of the corridor focused growth areas and centers, the concept is a useful way to generate concrete recommendations to make communities more complete and help them succeed.

## **Different Ingredients for Different Communities**

The combination of strategies that can help create a more Complete Community in any particular place depends heavily on context. The scale (village vs. town center vs. downtown), location (inside vs. outside the growth footprint, within one of the State’s four growth tiers) and type of district or neighborhood (office park vs. central business district vs. residential neighborhood vs. suburban shopping center) all influence which elements should be incorporated and how they should be tailored. Despite the varying needs and conditions of different parts of the county, however, the concept of encouraging more diversity of use and form is relevant in almost every location. For example:

- Existing suburban office parks in locations such as Rock Spring or Clarksburg’s COMSAT site have large existing buildings that can accommodate employment but lack the integration of uses, services, and amenities necessary to succeed in an increasingly competitive office market. Complete community strategies can help reposition these employment centers through infill and redevelopment to incorporate housing, restaurants, and public spaces along with better transit service, making them more attractive to both residents and employers.
- Likewise, for places the county hopes to see emerge as important centers for office employment, such as White Flint, White Oak, or Germantown, the integration of additional housing options can help to encourage activity beyond regular business hours, creating the sense of energy and activity during the evening and on weekends.

Centers of activity in suburban and rural areas, which range from large retail shopping centers such as Aspen Hill, to clusters of commercial and neighborhood serving retail uses like the shopping areas in Potomac Village or Four Corners, offer convenience retail for surrounding subdivisions but often lack safe pedestrian accommodations, good transit connections, or high-quality parks and public spaces. In some places, new kinds of commercial development, such as medical offices, will be viable even where office space or other employment-related uses are difficult to attract. The recommendations in this chapter and elsewhere in the plan can help make these neighborhoods more walkable and livable.

## **The Connection Between Complete Communities and Corridor-Focused Growth**

As explained in the chapter on Compact Growth, development of new or substantially expanded centers of activity should be focused along growth corridors to avoid sprawl and achieve the critical mass required for each center to be economically sustainable. Limited, organic development beyond the corridors and defined growth areas should be allowed to increase the diversity of housing types in existing residential

neighborhoods and make these areas more complete, particularly near existing centers of activity or development. Opportunities for increased housing diversity outside the defined growth areas will allow neighborhoods to evolve over time to address current and future housing needs and become more racially and socioeconomically integrated.

Implementation will be organic and incremental, through infill and redevelopment within centers of activity along corridors as well as within existing downtowns, town centers and rural villages. This implementation will be primarily market driven, using the development review process to funnel contributions from private developers to streetscape improvements, dedication and construction of parks and public spaces, and the addition of bicycle and pedestrian infrastructure. Specific strategies will be needed to recognize and minimize the negative impacts of gentrification on communities and businesses at risk of displacement, including the recommendations described in the chapter on housing together with policies outside the scope of this plan, such as direct assistance to small and minority-owned businesses.

## What policies will solve the problem?

To ensure that demand for future development in Montgomery County is harnessed to embrace Complete Communities and 15-minute living – both by building new centers of activity along corridors and by making existing ones more complete – the county should pursue a number of policies, which must be suitable for all areas of the county. The specific policies and practices recommended to further Complete Communities and 15-minute living include:

### **Identify and integrate elements needed to complete centers of housing, retail, and office development and plan to make 15-minute living a reality for as many people as possible.**

- Promote zoning allocations and standards to encourage the integration of varied uses, building types and lot sizes. (Ec, Env, EQ)
- Apply flexible approaches to accommodate infill and redevelopment that improve access to amenities, active transportation, parks, and open spaces, and a broader range of housing types at the neighborhood scale. (Ec, Env, EQ)
- Prioritize neighborhood-level land use planning as a tool to enhance overall quality of community life and avoid reinforcing outdated land use patterns. (EQ)
- Allow sufficient densities to make a wide range of uses economically viable in Complete Communities. Encourage densities sufficient to support convenience retail and other local-serving amenities at the neighborhood level. Provide guidance for accommodating additional density in a context-sensitive manner. (Ec, Env, EQ)
- Ensure that Complete Communities are integrated into their surroundings and supported by a public realm that encourages walking, biking and rolling, as well as social interaction through the configuration of sidewalks, paths, landmarks, and gathering spaces. (Ec, Env, EQ)
- Adopt planning approaches that prioritize providing more Complete Communities in service to improving the quality of community life throughout the county. (EQ)

### **Encourage co-location and adjacency of all essential and public services, especially along growth corridors and in Complete Communities.**



- Maximize the utility of public facilities by locating them in places that promote integration with other public and private uses and infrastructure. (Env, EQ)
- Promote active transportation improvements that prioritize walking, biking, rolling, and transit use to enhance public access to these co-located facilities. (Env, EQ)
- Develop standards for colocation of public facilities that promote mixing of uses or services and compact development strategies. Encourage public-private partnerships and ensure they promote social interaction and physical activity. (Ec, Env, EQ)

**Retrofit centers of activity and large-scale older facilities such as shopping centers, abandoned federal campuses, office parks, and other single-use developments to include a mixture of uses and diversity of housing types and to provide a critical mass of housing, jobs, services, and amenities for vibrant, dynamic Complete Communities.**

- Ensure employment uses in economic clusters develop in a mixed-use format along with housing, retail, amenities, and transit, and ensure they are integrated into the surrounding communities. (Ec, Env, EQ)
- Allow creation of co-located housing, discussed further in the Affordable and Attainable Housing Chapter, including for industries that employ large numbers of employees (permanent or seasonal). (Ec, Env, EQ)
- Encourage higher density economic and housing cooperatives (live/work areas such as home occupations, artist villages, farmers' market/villages, tech/life-science startup incubators). (Ec, Env, EQ)

## How will these policies further the key objectives of Thrive Montgomery 2050?

### Economic Health: Complete Communities as Magnets for a Variety of People, Businesses, and Jobs

Montgomery County has reached a stage where greenfield opportunities largely have been exhausted and the general locations of business districts, residential neighborhoods, and farmland have been established, or are at least planned. For example, the downtowns of Silver Spring and Bethesda; the new life sciences hubs anticipated in the Great Seneca Science Corridor and White Oak; and the emerging town centers in Germantown and White Flint have zoning capacity as well as physical space for tens of millions of square feet of development.

The task of this plan, therefore, is less about identifying new locations for large government or corporate tenants and more about making parts of the county that already have been developed or planned more attractive to residents and workers, which in turn will help attract employers. The central premise is that making individual neighborhoods and districts more complete is among the most effective ways to accomplish this goal. Combined with a compact development footprint, clear standards to ensure quality

of design; complementary transportation infrastructure to support walking, rolling, and riding; and appealing parks and recreation offerings for active lifestyles; more complete communities are essential to our competitiveness.

Planning for Complete Communities, with a true integration of uses, diversity of building types, and variety of lot sizes, represents a departure from the automobile-oriented land use planning of the last several decades and the embrace of a planning paradigm that is far more likely to help attract employers, workers, and residents by offering convenience, walkability and a quality of place only available when the needs of people are considered ahead of the needs of cars.

As previously explained, the creation of vibrant, dynamic Complete Communities that include housing, a diversity of jobs, services, amenities and opportunities for social gathering and interaction will attract employment, advancing our economic performance and competitiveness. This approach will not be sufficient standing alone and it is not intended as a substitute for other elements of a comprehensive economic development strategy. In an era with limited demand for new office construction and a strong market preference for locating businesses in high-quality, mixed-use, walkable and transit-oriented areas, however, it is one of the best strategies available to local government to attract and retain employers.

## **“Completeness” and Equity: Diverse Places to Support Diverse People**

In addition, flexible use and development standards that allow variety in lot sizes, building types, and building placement offer an opportunity to increase commercial and residential diversity within neighborhoods. A broad assortment of retail, office, and live-work spaces designed to fit the needs of individual businesses can support different kinds of work and employment arrangements. The diversity of housing and employment types provides a means for renters, first-time homebuyers, or new business owners to access and participate in competitive markets.

Diversity in development is especially important to producing housing that matches the needs of our future. The integration of accessory dwelling units, duplexes, and multi-family buildings within the same community supports a broader range of households and incomes, reduces the concentration of poverty, and increases racial and economic equity. A mixture of housing types – coupled with strategies to use the built environment to encourage social interaction – can help create integrated communities where people across the ethnic, racial, social, and economic spectrum not only live and work together but develop a sense of shared purpose and community. These elements also create opportunities for housing suitable to every stage of life, allowing residents to stay in the same neighborhoods as they age.

## **The Role of Complete Communities in Environmental Resilience: Community Gap-Filling as Sustainability Strategy**

Finally, Complete Communities will also create long-term sustainability for both human and environmental health. A mixture of uses and forms, together with a built environment that facilitates active lifestyles, allows more trips to be completed by walking, biking, rolling, and transit, reducing vehicle miles traveled and dependence on cars while increasing physical fitness and opportunities for social interaction. Establishing Complete Communities in the corridor-focused growth areas and within centers

throughout the county reduces the distance that people, particularly those within suburban and rural areas, must drive to meet their daily needs, further reducing vehicle miles traveled and greenhouse gas emissions. Likewise, the mixture of uses, co-location and adjacency of public services and amenities improves sustainability by reducing building footprints and cutting energy use. Co-location also helps to maximize community use and social interaction.

## How will we evaluate progress?

In assessing proposals related to the creation of Complete Communities and measuring the success or failure of the approaches recommended in this plan relevant measures may include:

- Population density in centers of activity along corridors as well as within existing downtowns, town centers and rural villages
- Diversity of uses and structures
- Racial, ethnic, and income diversity
- Median age/life stages concentration
- Percentage of employment growth overall and by area of the county
- Car ownership levels
- Transit usage for inter-county travel
- Weekend transit usage
- Numbers of co-located facilities/amenities
- Public investment ratios for walking, biking, rolling, transit, and automobile
- Median vehicular expense per county household
- Median housing expense per county household
- Emergence of key population and mixed-use centers
- Increasing commercial activity in otherwise residential neighborhoods

# DESIGN, ARTS & CULTURE: Investing and Building Community

## Introduction: Why Design Matters

Design of the built environment strongly influences our quality of life. The pattern of development across a city, county, and region; the configuration of neighborhoods and districts; and the architecture of individual buildings collectively shape our perception of places and shape how we choose to travel, recreate and socialize. Arts and cultural practices touch every corner of life and are among the most visible indicators of the social values and diversity of a place. Public art and cultural institutions highlight new perspectives, preserve local history and traditions, deepen our understanding of others, and expand our imaginations.

Design serves functional and aesthetic purposes. Functional considerations dictate where structures are placed and how they connect to the sidewalks, streets and spaces around them to facilitate movement, social interaction, and physical activity. Aesthetic aspects of design, along with the integration of arts and cultural elements, influence how streets, buildings and spaces look and feel to create beauty and a sense of place and inclusion.

As we strive to enhance the quality of life in Montgomery County for all of our residents and strengthen the appeal of our community as a place to live and work, both the functional and aesthetic aspects of design are more important than ever. For example, adding sidewalks and bicycling infrastructure can help make alternatives to driving safer, but detailed attention to the relationship between buildings and streets, the placement of street trees and quality of landscaping, and the cultivation of a sense of place are essential to making walking, biking, and transit attractive – and these are the same elements that make a neighborhood or business district inviting and inclusive.

Montgomery County has evolved into one of the most diverse jurisdictions in the nation and our arts and culture sector is impressive in its scope and depth. Public art and cultural institutions contribute significantly to the county's economy by attracting talent and spurring innovation through exchange of ideas. Taken as a whole, the sector would be the sixth-largest employer in the county. Arts and cultural practices touch every corner of life and are among the most visible indicators of the social values and diversity of a place. The arts and culture sector helps to foster the growth of creative, social, and economic ecosystems, and its practitioners have developed tools that can share untold stories, encourage empathy, and empower civic voices, fostering dialogue and building connections among people with different backgrounds and perspectives.

This chapter focuses on the urban design principles applicable to blocks and individual development sites, the architecture of public and private buildings, the landscape of plazas and public spaces, and elements of street design. And it emphasizes supporting a healthy arts and culture ecosystem that can highlight new perspectives, preserve local history and traditions, deepen our understanding of others, and expand our imaginations.

## What is the problem we are trying to solve?

The Wedges and Corridors Plan envisioned a variety of living environments and encouraged “imaginative urban design” to avoid sterile suburban sprawl. Unfortunately, design approaches intended to serve a range of functional objectives and aesthetic aspirations took a backseat to the convenience of driving and the assumption that different land uses, building types, and even lot sizes should be separated. Over time, these priorities produced automobile-centered design approaches that compromised quality of place at the expense of lasting economic and social value. The shift to mixed-use development in the last two decades has created more vibrant and walkable places around major transit hubs but the legacy of automobile-oriented development is evident even in our most walkable neighborhoods and districts.

## **Greenfield Regulatory Tools in a Post-Greenfield County**

When the subdivision of farmland was the primary strategy for accommodating growth, the focus of land use regulation was on the entitlement process, which allocates development rights and responsibility for the provision of basic infrastructure such as roads and sewer pipes. The form and orientation of buildings to each other and to the public realm were a subsidiary consideration.

Entitlement-centered rules are well-suited to standardized subdivisions but poorly adapted to enable the design of distinctive projects that respond to local geography, history and culture and address the needs of increasingly constrained development sites. We must prioritize the attributes of neighborhood and site design that strongly influence perceptions of the quality and potential of a place. Dispersed buildings and sprawling parking lots lead to underbuilt sites that are poorly suited to repositioning, infill, and redevelopment and reduce the utility of investment in parks, transit, and other public amenities and infrastructure.

In addition, a future focus on form-based rules will allow for a more equitable process and outcome. The process is more equitable in that all stakeholders – the property owner, the community, the reviewers – understand the parameters governing the review of a development application and can address community concerns about growth. The outcome is more equitable because it may facilitate the implementation of diverse housing types and neighborhood-serving retail, which will lead to more mixed income neighborhoods with essential services within walking distance.

## **Design for Cars at the Expense of People – and Adaptability**

Automobile-oriented design led to the provision of abundant and visually prominent surface parking, with buildings placed in the middle of large asphalt lots or entrances and front doors obscured by driveways and garages. Buildings were disconnected from public spaces and set back from streets. Streets were widened, pushing buildings farther apart and preventing a sense of enclosure, which discouraged walking by making it less convenient and comfortable. Space for sidewalks, seating, and greenery was sacrificed to make more space for parking and roads, shrinking the size and utility of public spaces. Other elements of street design such as lighting and signage were enlarged to make them more visible to passing motorists, making streetscapes less engaging to pedestrians and degrading the quality of the public realm.

Commercial buildings designed to accommodate single uses, while less expensive when considered in isolation, are inflexible and costly to reuse. Malls, office parks, and other large, single-use buildings are often difficult to repurpose and the high cost of adapting their layouts to meet new spatial needs due to technological shifts, demographic changes, and market preferences shrinks their useful lives and makes them less sustainable. The consequences of the limited adaptability of our building stock are evident in persistently elevated office vacancy rates accompanied by an acute shortage of housing.

These problems are every bit as evident in the design of public buildings as in private development. Typical parcel size standards for public buildings such as schools are too large to fit most available sites, limiting the location of new facilities. The shortage of “adequate” sites along with a growing student population leads to a tear-down-and-rebuild approach with larger and larger numbers of students in bigger and bigger buildings. Boundary areas draw students from farther away, leading to the allocation of more space for parking, less walking and bicycling, longer bus rides and drives for parents as well as longer commutes for staff.

## Recalibrate Investments in Arts and Culture with Equity in mind

Placemaking and public art are essential in building great and inclusive communities. However, while the county makes significant investments in arts and culture, these investments are not always equitably distributed. Emerging organizations that support underserved communities often lack the funding and base of support enjoyed by some of their more established counterparts. Artists and arts organizations cite the lack of affordable living, working, and sales spaces as a major challenge. The field of public art has been expanding to embrace a wider range of approaches including civic and placemaking practices, but the county’s art programs lag in its ability to apply these approaches. Making countywide investments in public art and placemaking will educate, connect, and build communities that thrive into the future.

## What policies will solve the problem? Better design and more reliance on form-based tools to provide clear direction and build great places

In order to maximize the contributions of design – along with arts and culture - toward creating strong communities with lasting value, the county will pursue the following policies and practices:

**Use design-based tools to create attractive places with lasting value that encourage social interaction and reinforce a sense of place and inclusion.**

- Consider changes to codes, design guidelines, and regulatory tools as well as broader use of form-based zoning that focuses on the physical forms of buildings, streets, and spaces to ensure development across the county satisfies the following:
  - Ensure that all architecture and landscape designs physically define streets and public spaces as places of shared use that engage the pedestrian and are configured to encourage social interaction. (Eq)

- Link individual architectural projects seamlessly to their surroundings irrespective of style. Civic buildings and public gathering places must be treated as important sites whose design reinforces community identity and a culture of inclusion and democracy. (Eq)
- Design buildings, streets, and parking to prioritize the pedestrian scale and encourage walking and bicycling through smaller blocks, narrower streets, buffered bike lanes and sidewalks. Slow vehicle speeds and minimize surface parking while adequately accommodating automobiles. (Eq, Env)
- Accommodate new development with a context sensitive approach to architecture and landscape design that acknowledges neighboring structures, local climate, and topography. (Env)
- Physically integrate government and private development sites into their surrounding neighborhoods such that they welcome the public and support economic development by facilitating movement and interaction of people and transfer of ideas and innovation. (Ec, Env)
- Preserve, renew, and reuse existing and historic buildings, districts, and landscapes to affirm the continuity and evolution of communities while celebrating local culture and identity. (Eq)
- Support the development of housing by replacing vague and subjective concepts such as “compatibility” with clear standards for form, site layout, setbacks, architecture, and the location of parking.
  - Examine options for allowing a wider variety of housing types such as tiny houses, cottages, courtyard clusters, duplexes, multiplexes, small apartment buildings; shared housing, co-housing and accessory dwelling units (ADUs). (Eq, Env)
  - Determine what changes may be needed to land-use, design, and zoning regulations, including the Zoning Ordinance and Subdivision Regulations, to remove regulatory barriers and facilitate development of range of housing types. (Eq, Env)
- Update the zoning code to include basic form-based elements for all zones. Adopt context-sensitive design guidance for all master planning efforts.

**Promote design strategies and retrofits to make new and existing buildings more sustainable and resilient to disruption and change.**

- Encourage state-of-the-practice sustainability features such as net-zero/carbon-positive buildings, biophilic design and on-site energy generation for new public buildings and large private developments on sites across the county. (Env)
- Promote cost-effective infill and adaptive reuse design strategies to retrofit single-use commercial sites such as retail strips, malls, and office parks into mixed use developments. (Ec, Env)
- Incentivize the reuse of historic buildings and existing structures to accommodate the evolution of communities, maintain building diversity, preserve naturally occurring affordable space, and retain embodied energy of structures. (Eq, Env)
- Establish standards for public facilities that align with infill and redevelopment strategies and acknowledge the county’s limited land supply and ambitious climate-action goals. (Env)

- Implement policies to ensure that new buildings and parking structures are adaptable to changing technologies and market preferences and are able to mitigate effects of climate change over time. (Env)

**Support arts and cultural institutions and programming to educate, connect and build communities that celebrate our diversity and strengthen pride of place.**

- Promote an inclusive arts-and-culture environment by establishing a refreshed vision that sets goals, criteria, and priorities to support the county’s arts-and-culture sector. (Ec, Eq)
- Promote public art, cultural spaces, and cultural hubs along corridors and in Complete Communities. (Ec, Eq)
- Eliminate regulatory barriers to live-work spaces, home studios, galleries, and other small-scale art-making and creative businesses to improve access for artists and arts groups to affordable living, working, and presentation spaces with a focus on economic, geographic, and cultural equity. (Eq)
- Enable all residents to experience public art daily by incorporating it into the design of buildings, streets, infrastructure, and public spaces. (Eq)
- Use new public facilities to demonstrate principles of architecture as civic art and broader cultural representation. (Eq)
- Encourage property owners, non-profit organizations, and government agencies to maximize use of parks and public spaces for artistic and cultural programming, activation, and placemaking.
- Partner with agencies to strengthen data collection about investments so as to ensure that arts-and-culture related policies align with Thrive Montgomery 2050’s goals of economic competitiveness, social equity and environmental resilience. (Ec, Eq, Env)

## How these policies will serve the goals of Thrive Montgomery 2050?

### Great Design Creates Great Places that Draw People and Businesses

Well-designed places attract all kinds of residents and businesses. Workers in creative or knowledge-intensive occupations are particularly focused on quality of place, which includes an open and tolerant attitude toward different people, cultures, and lifestyles along with attention to the built and natural environment and excellent public services.

Design and public art, through their contribution to the built environment, help to create economically successful communities. Design-based tools will create attractive buildings, streets, and public spaces that retain greater economic value over time. The thoughtful arrangement of these elements will create places that become destinations for commerce and social activity and add value to their surroundings, encouraging neighboring owners to reinvest in their own properties to match and take advantage of adjacencies. Places designed with pedestrians in mind will lead to more healthy physical activity as well as human interaction, facilitating the exchange of ideas, attracting innovative companies and creative professionals. Comfortable, tree-lined streets will meet market demand for walkable places.

In addition to contributing to the built environment, the entire arts-and-culture sector generates energy and creativity that spur economic growth. Affordable living, administrative, working, and presentation

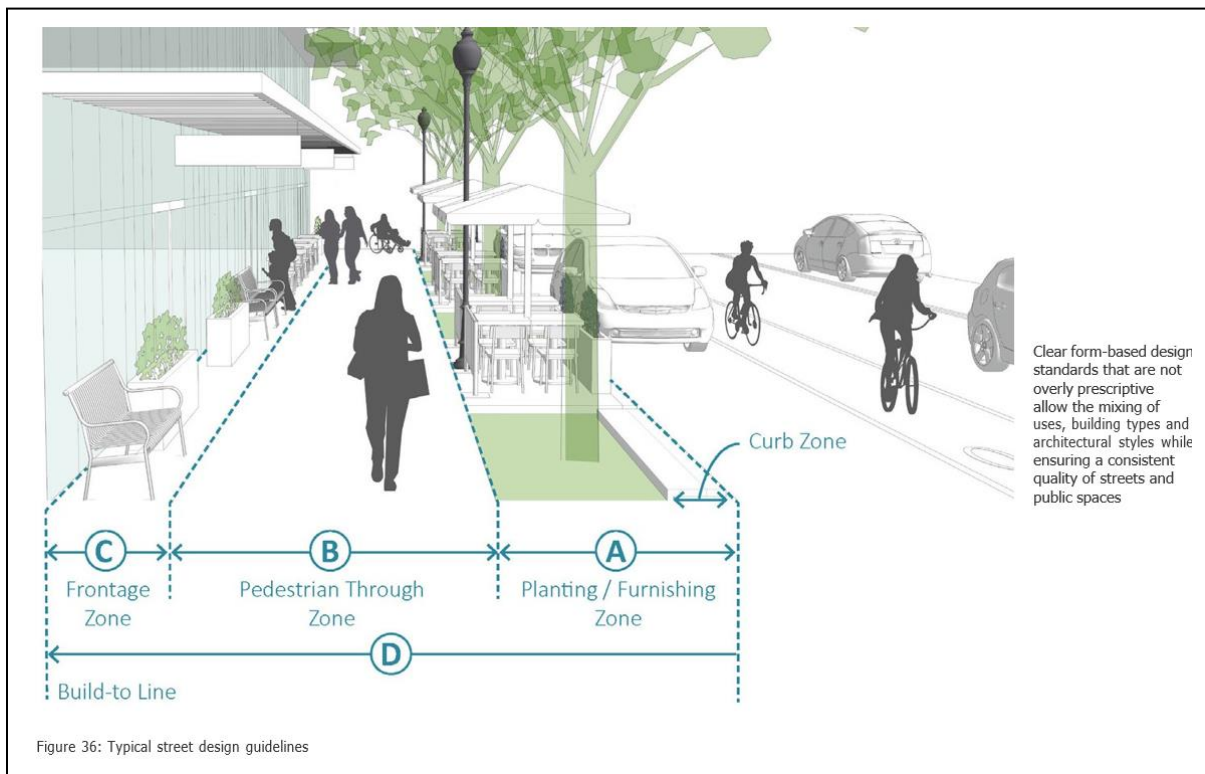


spaces for artists will help to showcase our diversity and attract and retain cultural uses and arts-related businesses. Strategic investments in these kinds of spaces can increase the economic contribution of arts and culture over the long run by reinforcing the role of the sector in building centers for social gathering and cultural events which in turn attract other business and investment.

## Better Design Strengthens Community and Highlights the Benefits of Cultural Diversity

A desire for human interaction cuts across lines of age, race and ethnicity, and class and is critical to the happiness of individuals as well as the collective well-being of a community. Encouraging different kinds of people to interact in public spaces is important to building a sense of community with shared interests and values. Arts and culture spaces and programming can help us better understand and appreciate each other, strengthening support for diversity and inclusion and building trust.

Design codes based on physical form will serve as predictable guides for change, address community concerns over accommodating growth, and illustrate hard-to-define concepts such as “character” and “compatibility.” A shift away from these kinds of vague and subjective standards will help make regulatory decisions more equitable by applying more objective criteria in evaluating development proposals and their relationship to their surroundings. Clear standards governing acceptable form will encourage the introduction of different housing types and neighborhood- serving retail, facilitating the creation of mixed income neighborhoods where essential services are within walking distance of most residences.





Artistic and cultural programming in our public spaces – with a calendar of events varying in scale, time, and location – will help improve the equitable distribution of resources to celebrate our cultural diversity. By focusing investments in public art, cultural spaces, and cultural hubs along corridors and in Complete Communities we can make these places welcoming and attractive to people from different backgrounds. Support for arts and culture can educate and provide creative tools to share untold stories, encourage empathy, give voice to diverse points of view, and foster civic dialogue and participation.

### Design Plays a Critical Role in Environmental Performance

Sustainable design strategies for new construction and retrofits will enhance the environmental performance of buildings and neighborhoods. Promoting sustainability features in new public and private buildings will reduce the ecological impact of growth. Strategies for onsite energy generation, new tree plantings in redeveloped parking lots and along streets, and state-of-the-practice stormwater management will increase the resilience of the power grid and mitigate the negative effects of flooding and excessive heat, resulting in more adaptable development in the face of a changing climate.

Encouraging adaptive reuse of existing buildings and incentivizing cost-effective retrofits of single-use sites into mixed-use projects will reduce energy consumption and greenhouse- gas emissions. Compact

site standards and colocation of public facilities along with state-of-the-practice sustainability features will help achieve ambitious climate action goals and make more efficient use of public land.

A focus on form and adaptability rather than use and density in regulatory systems will provide flexibility to respond to changing market conditions and demographic trends and help us take advantage of disruptive technological and cope with environmental change. Designing buildings and parking with adaptability in mind will prolong the useful life of structures and reduce scrape-and-replace development practices, conserving energy embodied in existing structures.

## How will we evaluate progress?

In assessing proposals related to design, arts, and culture and measuring the success or failure of the approaches recommended in this plan, relevant measures may include:

- Types and amounts of publicly- and privately-owned public-use space
- Pedestrian traffic in downtowns and suburban activity centers
- Visitation and time spent in urban, suburban, and rural gathering places
- Number and spatial distribution of public art installations, temporary and permanent
- Number and spatial distribution of publicly and privately funded community events such as festivals, street fairs, sporting tournaments, etc.
- Number, use type, square footage, and economic activity generated by businesses classified in cultural categories by the North American Industry Classification System (NAICS) or its successor
- Average rent, total square footage, and spatial distribution of available art/creative/maker-space
- Retention and growth of arts- and culture-related businesses
- Number and spatial distribution of cultural heritage and historic designations
- Number of adaptively reused, retrofitted, and repositioned structures and structures designed with flexibility for future uses and/or adaptability in mind
- Number of environmentally certified buildings (e.g. Leadership in Energy and Environmental Design, LEED) in the county
- Amount of tree canopy in the county

# TRANSPORTATION AND COMMUNICATION NETWORKS: Connecting People, Places, and Ideas

## The interdependence of transportation and land use

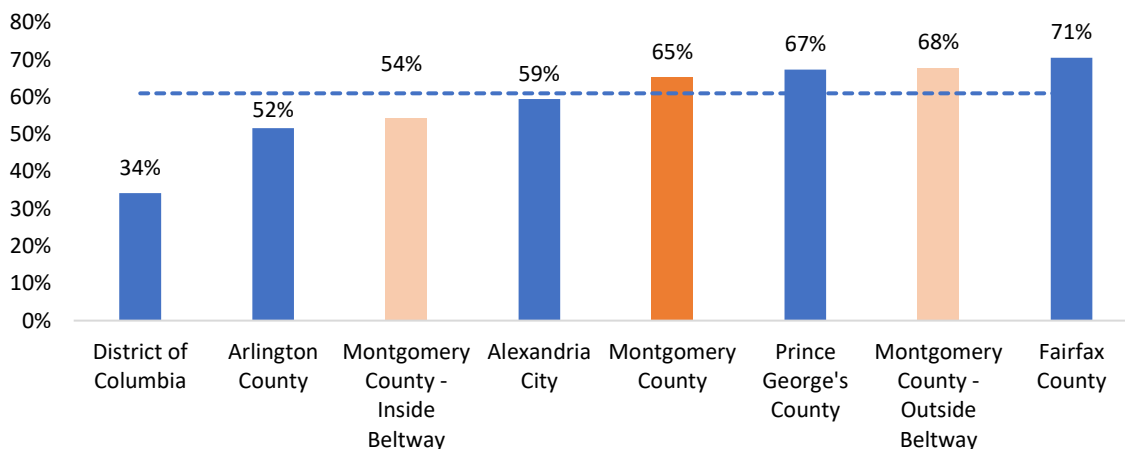
No land use plan can be successful without a complementary transportation plan, because even the most forward-thinking land use policies will fail if they are not supported by transportation infrastructure and services that reinforce – or at least avoid undermining – their objectives. As the Wedges and Corridors Plan recognized more than half a century ago:

“An efficient system of transportation must include rapid transit designed to meet a major part of the critical rush-hour need. Without rapid transit, highways and parking garages will consume the downtown areas; the advantages of central locations will decrease; the city will

become fragmented and unworkable. The mental frustrations of congested highway travel will take its toll, not to mention the extra costs of second cars and soaring insurance rate. In Los Angeles where an

automobile dominated transportation system reigns supreme, there is still a commuter problem even though approximately two-thirds of the downtown section is given over to streets and parking and loading facilities. There is no future in permitting the Regional District to drift into such a ‘solution.’”

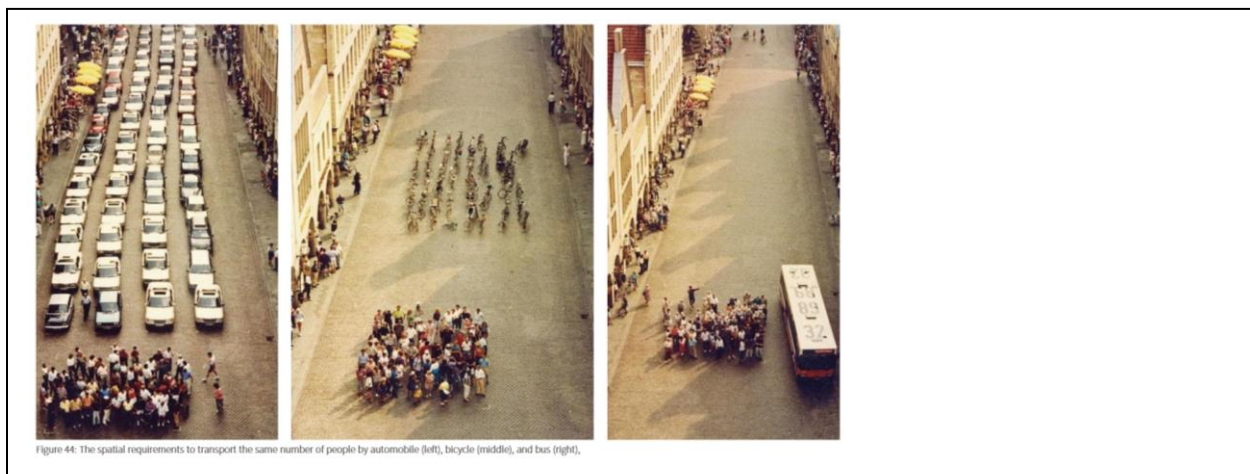
Despite this prescient warning, we remain heavily dependent on automobiles, with more than two-thirds of workers in the county driving alone to and from work. Montgomery County communities outside the Beltway have low percentages of commuters who walk, pedal, roll, or ride transit, and our transportation system is currently a major contributor to greenhouse gas emissions.



Thrive Montgomery’s 2050’s focus on compact growth and infill – along with the limited availability of land for expanding rights-of-way – makes it essential that we decisively reject the impulse to ensure that driving remains as easy and convenient as possible in favor of making walking, rolling, bicycling, and transit the most practical, safe and attractive ways of getting from one place to another. Cars – even cars equipped with autonomous driving technology - require much more space per passenger than buses and

trains, and walking, rolling, and bicycling are the most spatially efficient forms of travel of all. Market preferences have shifted dramatically in recent decades to favor locations with transit, bike and pedestrian access over place oriented around automobile travel, and the importance of reduced reliance on driving to meet our greenhouse gas emissions goals is obvious.

Just as importantly, the addition of highways, travel lanes and grade-separated interchanges may help to relieve congestion in the short term, but new highways, wide roads, and high-speed access ramps are fundamentally at odds with efforts to design neighborhoods and districts to encourage human interaction and foster a sense of place. This makes it imperative to embrace the long-term economic, environmental, and social benefits of walkable, bikeable, and transit-oriented neighborhoods and districts and avoid undercutting our land use goals with auto-dominated road design and transportation infrastructure.



## What is the problem we are trying to solve? Successive generations of investment in automobility have created a vicious cycle

Our dependence on driving is rooted in generations of efforts to facilitate the movement of as many automobiles as quickly as possible while funneling traffic to a handful of north-south arterial roadways that tie otherwise disconnected subdivisions to job and retail centers. Successive widenings to these roads have added more and more lanes for vehicles at the expense of space for pedestrians, bicycles, dedicated lanes for transit vehicles, street trees and anything else that might slow cars. This makes alternatives to driving less practical and appealing, which leads to more driving and in turn generates demand for wider roads.

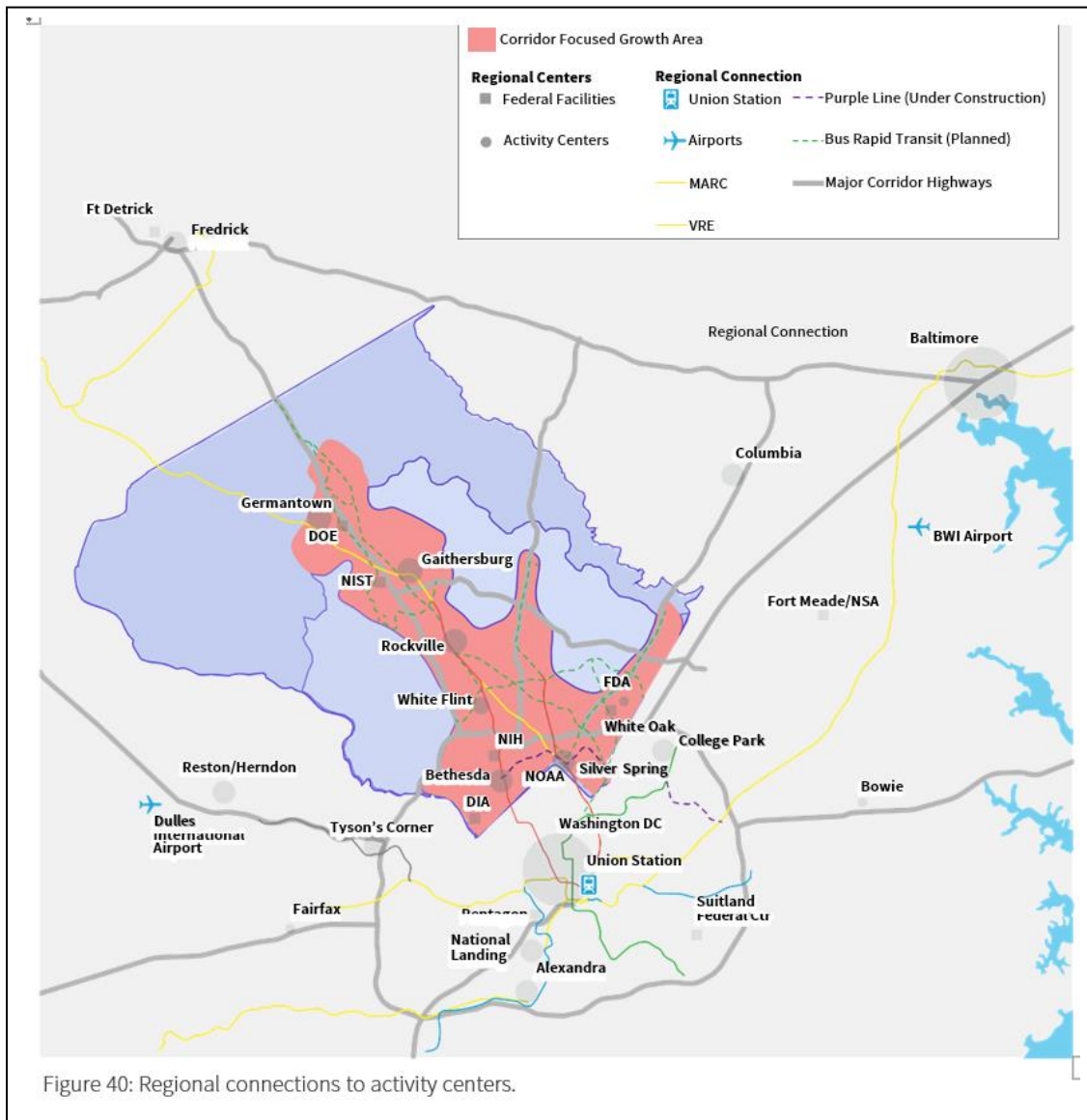
Reinforcing this vicious cycle is the fact that optimizing major arterials for cars has made these corridors unattractive and unsafe, discouraging private investment and compact, transit-oriented development even where high-quality transit infrastructure is already in place (as evidenced by several large, underutilized properties along corridors near Metrorail stations).

**Excessive dependence on cars threatens safety, erodes quality of life and reduces resilience**

The most obviously and acutely damaging consequence of this dynamic is that pedestrians, bicyclists, and drivers are killed or seriously injured with disturbing frequency. Somewhat more subtle, but perhaps just as significant, is the effect that automobile-oriented design has on the vitality and appeal of neighborhoods and commercial districts alike. Safe, attractive streets encourage people to get out and walk, pedal, or roll, whether simply to get some exercise, to run an errand, to go to work or school, or to reach an intermediate destination such as a bus stop or rail station. This kind of activity supports physical and mental health and facilitates the casual social interaction that build a sense of place and community. Ugly, unsafe roadways are barriers that degrade the quality of life of everyone who lives and works near them, even if they are never involved in a traffic collision and even if they do not personally enjoy walking, rolling or bicycling.

Although Montgomery County's investment in transit has contributed to a slight decline in vehicle miles travelled (VMT) per capita, overall VMT has continued increasing, which has a huge impact on the county's efforts to reduce its greenhouse gas emissions. In 2018, 42 percent of the County's greenhouse gas (GHG) emissions were generated by the transportation sector (on-road transportation, aviation, rail, and off-road vehicles). Motor vehicles accounted for 36 percent of emissions in 2018. Private cars accounted for approximately 75 percent of all trips taken in the county followed by buses at 10 percent, rail with 5 percent, walking at 2 percent, taxi/ride hailing services (such as Uber and Lyft) with 1 percent, and biking at less than 1 percent. Without a significant intervention the current pattern will continue to increase our transportation-related greenhouse gas emissions and other forms of pollution.

The radial pattern of automobile-centric corridors, limited infrastructure to support alternatives to driving, and the absence of street grid connections also make our transportation network less adaptable and resilient. The hub-and-spoke model of arterial corridors was a logical way to link suburban enclaves to jobs in and around the District of Columbia, but other important centers of activity have emerged. Our prosperity depends on access to Frederick, Prince George's, Howard, and Baltimore as well as Arlington, Fairfax, and Loudoun. The lack of efficient transit connections to schools, businesses, laboratories, and other important centers of economic, intellectual, and social activity in these jurisdictions leaves us unable to take full advantage of our presence in one of the most dynamic regions in the country, if not the world. In addition to the existing Metrorail and MARC services to the District of Columbia, master plans call for new transitway connections to Prince George's County (the Purple Line and University Boulevard BRT) and the District of Columbia (the New Hampshire Avenue BRT). However, there is a growing need to provide transitway connections to Howard and Frederick Counties, and to Northern Virginia as well.



Even for travel within Montgomery County, our legacy road network has serious shortcomings. Our central business districts and major suburban corridors generally lack the grid of streets that create the building blocks of a thriving community, with frequent intersections and narrower vehicle lanes to facilitate slower speeds and safer crossings to make walking, rolling and bicycling more practical and attractive and to provide access points and routing options for automobiles. More and more residents and workers prefer transit and other alternatives to driving alone – and a significant number do not have access to a car – but most jobs in the county are not located near high-quality transit, and many of our neighborhoods lack even sidewalks. Combined with the absence of efficient east-west connections, especially for transit riders, this pattern limits access to jobs and opportunity, particularly for low-income residents who are more likely to depend on transit and makes our transportation system less adaptable and resilient.



The failure to provide robust alternatives to driving and the inability to provide additional space for roads – in combination with low rates of housing construction – leaves more commuters stuck in traffic and pushes jobs as well as people to other jurisdictions. The result is that the county loses residents, jobs, and tax revenue while simultaneously increasing traffic congestion as more people drive through the county on the way to jobs and homes in other places. Meanwhile, the importance of virtual connections, including the deployment of high-speed wireless networks and fiber optic cable, continues to grow.

### **What policies will solve the problem?**

Successful mixed-use centers require a transportation scheme that supports modes of travel appropriate to the trips users need to make to meet their needs. For example, a rail-based transit line may serve to connect jobs to housing in different parts of the county or region, while sidewalks and bikeways connect offices to shops, restaurants, transit stations, or apartment buildings in a town center or between a downtown and the residential neighborhoods surrounding it. The point of this plan’s emphasis on supporting alternatives to automobile travel is not to eliminate driving, but to make short trips around town by bicycle or bus safe and appealing. A quick trip to the grocery should be manageable on foot, while a visit to another town might require a trip by car, train, or even airplane. The most desirable places to live and work are the ones that offer a menu of choices that make all sorts of travel effortless and delightful while supporting best practices in land use rather than relying on a single mode of travel at the expense of every other consideration.

Recent and ongoing advances in technologies and travel modes may have a dramatic impact on the nature of travel demand. These include—but are not limited to—the introduction of or expansion in electric vehicles, connected and automated vehicles, delivery drones, ridehailing, bikesharing, dockless bikes and scooters, and telecommuting.



Finally, robust investment in the county's digital infrastructure is needed to connect residents to online job opportunities, encourage continued teleworking to reduce commuting trips, dilute rush-hour traffic, enhance worker productivity and improve quality of life, increasing the county's overall attraction and competitiveness.

The county will base its efforts to improve connectivity on the following policies and practices:

**Develop a safe, comfortable and appealing network for walking, biking, and rolling.**

- Expand the street grid in downtowns, town centers, transit corridors, and suburban centers of activity to create shorter blocks. (Ec, Env)
- Stop proposing new 4+ lane roads in master plans. (Env)
- Give a lower priority to construction of new 4+ lane roads, grade-separated interchanges, or major road widenings. (Env)
- Convert existing traffic lanes and on-street parking to create space for walkways, bikeways, and street buffers with landscaping and street trees, in a manner consistent with other County policies. (Env)
- Prioritize the provision of safe, comfortable, and attractive sidewalks, bikeways, roadway crossings, and other improvements to support walking, bicycling, and transit usage in capital budgets, development approvals and mandatory referrals. (Env)
- Transform the road network by incorporating complete streets design principles with the goal of eliminating all transportation-related roadway fatalities and severe injuries and supporting the emergence of more livable communities. (Eq)

**Build a world-class transit system.**

- Build a network of rail, bus rapid transit, and local bus infrastructure and services that make transit the fastest, most convenient and most reliable way to travel to centers of economic, social and educational activity and opportunity, both within and beyond Montgomery County. (Ec, Eq, Env)
- Convert existing general purpose traffic lanes to dedicated transit lanes, in a manner consistent with other County policies. (Ec, Eq, Env)
- Connect historically disadvantaged people and parts of the county to jobs, amenities, and services by prioritizing investments in increasing access to frequent and reliable all-day transit service. (Eq, Env)
- Ensure safe and comfortable access to transit stations via walking, rolling, and bicycling. (Eq, Env)

**Adapt policies to reflect the economic and environmental costs of driving alone. (Eq, Env)**

- Employ pricing mechanisms, such as congestion pricing or the collection and allocation of tolls to support walking, rolling, bicycling, and transit. (Env)
- Manage parking efficiently by charging market rates and reducing the supply of public and private parking. (Ec, Env)

- Encourage the proliferation of non-polluting vehicles by upgrading government fleets and requiring appropriate infrastructure. (Env)

#### **Develop and extend advanced communications networks**

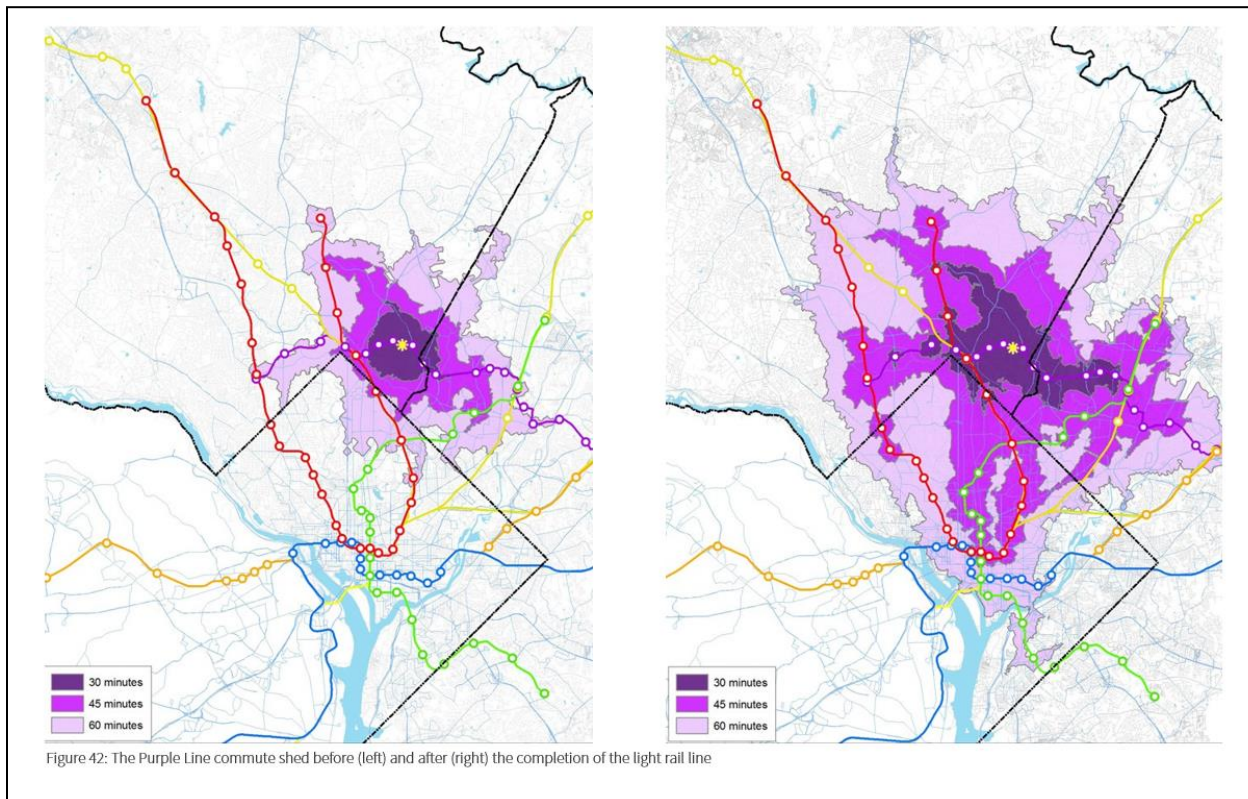
- Facilitate construction of high-speed fiber optic and wireless infrastructure and other information and communication technology to supplement transportation links with improved virtual connections. (Ec, Eq)
- Focus investment in communications infrastructure and services to connect people and parts of the county that lack convenient access to jobs and educational opportunities. (Eq)
- Support teleworking by accelerating deployment of information and communications technology and making working from home easier by facilitating Complete Communities. (Ec, Env)

These proposed policies should be evaluated to ensure equitable impacts from policies affecting certain types of vehicles users – like congestion pricing on minorities with high auto ownership.

## **How these policies will serve the goals of Thrive Montgomery 2050?**

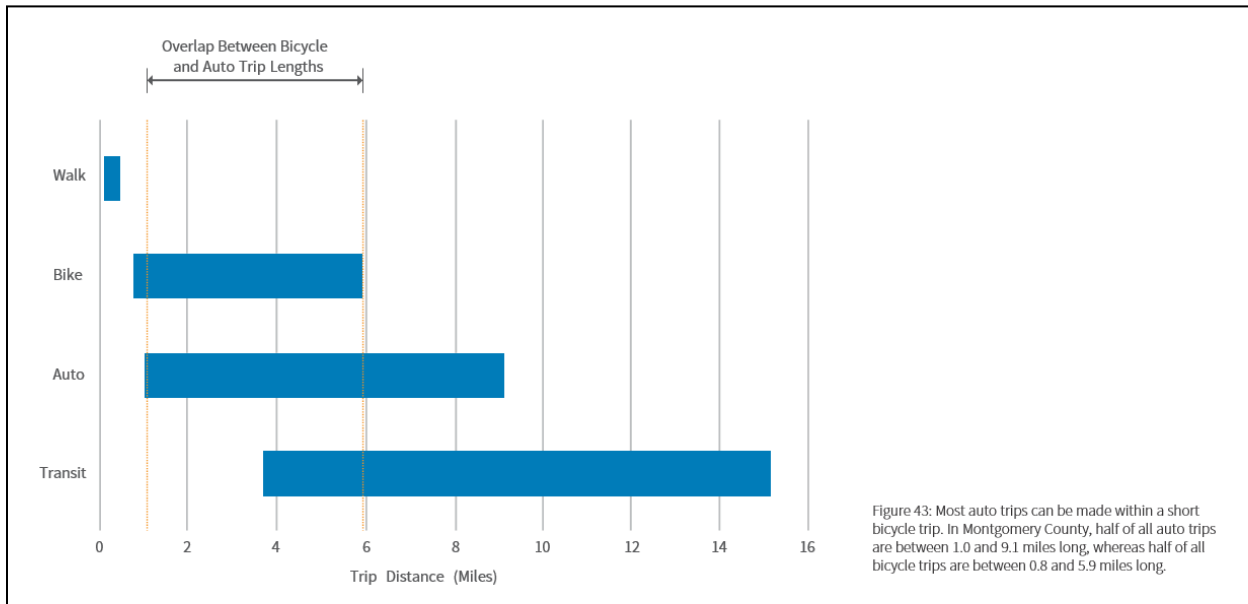
### **Walkable, bikeable, transit-connected neighborhoods and commercial districts support economic vitality**

These policies are not enough by themselves to ensure the county’s economic success, but they are essential building blocks for stronger economic performance. Better transit connections to job centers, for example, will make the county a more attractive choice for employers by making it easier for their current and future employees to get to work. The total number of jobs within a 30-minute commute is a common measure of an area’s suitability for investment. With drive times and pass-through automobile traffic predicted to continue growing, investments in transit can significantly increase our “commute shed” and avoid ever-longer drives to and from work.



A higher priority for investments in transit, walking, rolling, and bicycling infrastructure is also critical to building Complete Communities that have the amenities, sense of place, and level of activity that more and more people of all backgrounds and ages are seeking. This is true because transit exerts a gravitational pull on real estate development by creating incentives and opportunities to locate a variety of uses, services, and activities near station locations – and to each other.

Another essential building block of economic competitiveness is information and communications technology and telecommunications networks. Montgomery County should continue to prioritize advancing new technologies and making deployment of high-speed wireless networks and fiber optic cable – or other new communication systems – an important part of infrastructure planning.

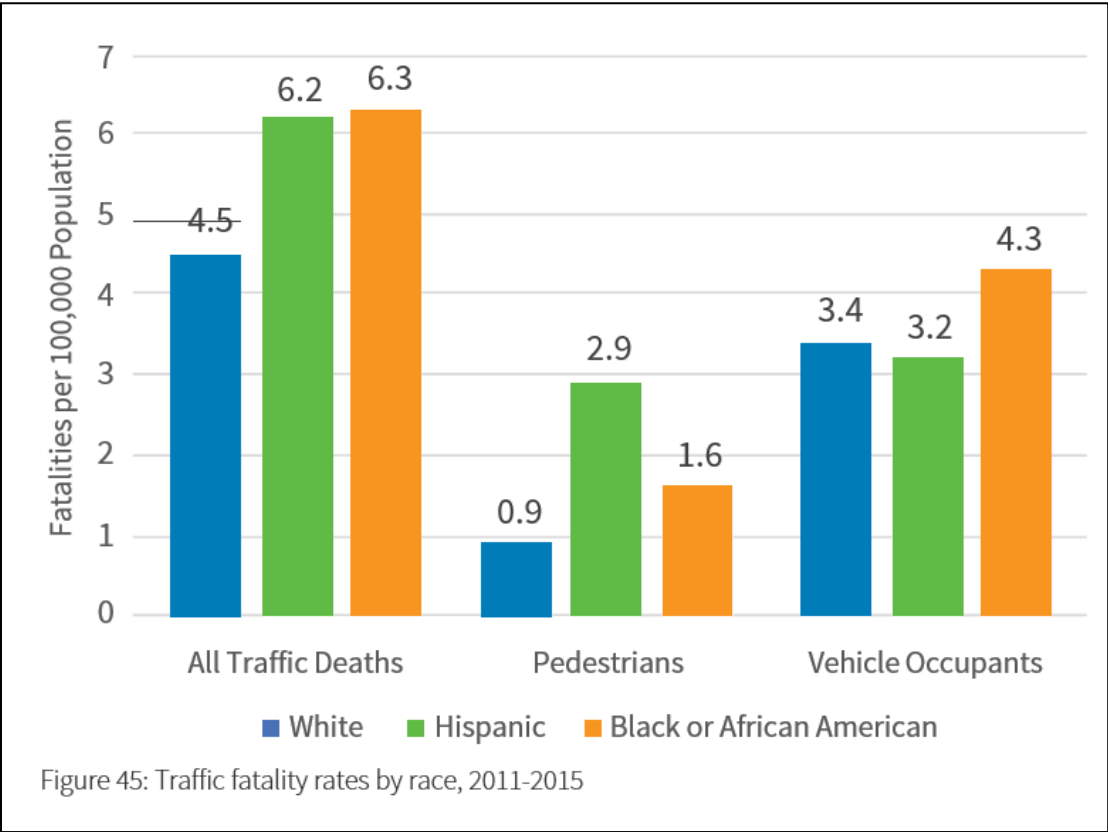


## Expanding alternatives to driving helps build more equitable communities

A transit-focused approach that facilitates walking, rolling, and bicycling also promises to serve our residents more equitably. Enhanced access to jobs via transit, walking, rolling and bicycling will help mitigate inequities for people of color and low wage earners who are more likely to live in areas without adequate infrastructure to meet their mobility needs without an automobile. People in these communities are less likely to own a car and lack access to high-quality transit service that operates frequently and reliably throughout the day and into the evening. Expanded transit service also serves as an affordable and attainable housing tool by connecting areas where housing is relatively inexpensive to jobs, schools, and amenities without subjecting residents to high transportation expenses or impractically long commutes.

The reordered transportation priorities in this plan will help meet the county’s goal of eliminating all traffic-related fatalities and severe injuries by 2030, which is especially important in making transportation more equitable because people of color are more likely to be hurt or killed in crashes. Streets that go beyond safety to make walking, rolling, and bicycling preferred ways of getting around will enhance human interaction and build social capital. Pedestrian-friendly rural, suburban, and urban centers will enjoy the benefits of a stronger sense of place where the conditions for high levels of civic participation and a feeling of community are far easier to create and maintain.

As part of the focus on equity for all communities in the county, it is also important to prioritize providing high-speed internet access to all parts of the county. Future communication infrastructure and technologies should be deployed equitably throughout the county.

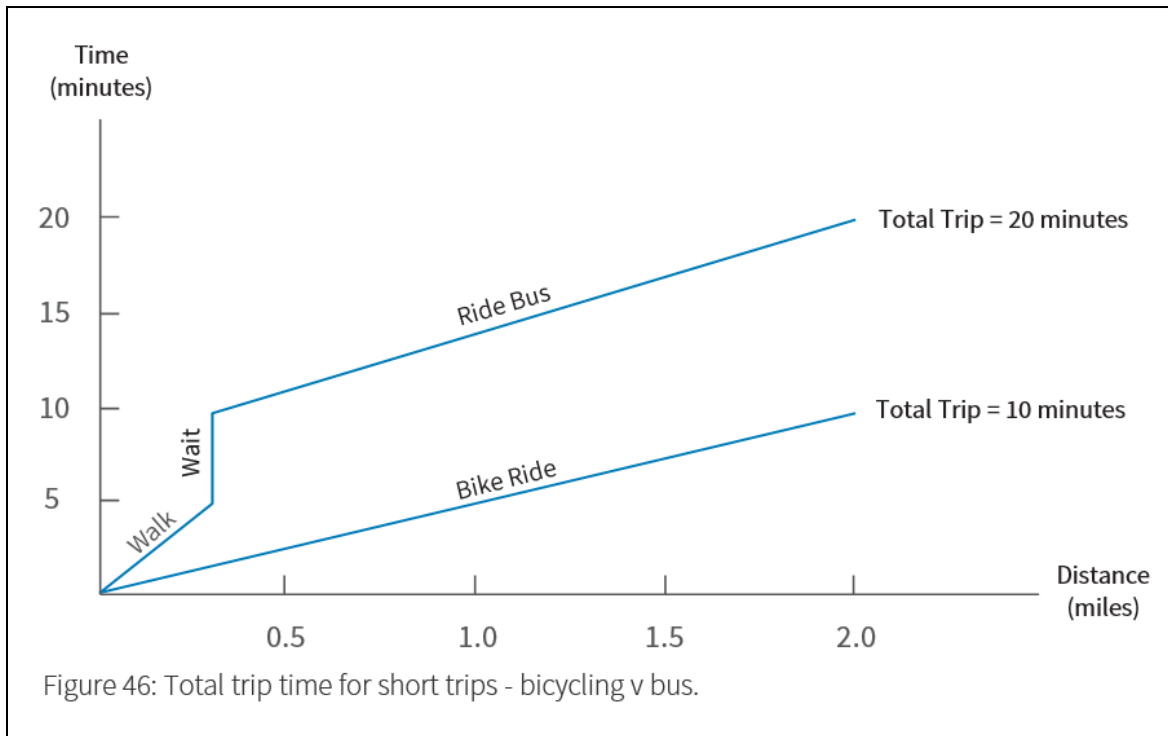


**Land use and transportation strategies that encourage walking, biking and transit use improve environmental performance**

The evolution of corridors originally planned for the convenience of drivers into multimodal streets where transportation and land use are harmonized to support focused development of a compact mix of uses and building types will reduce driving and make our transportation system more sustainable and resilient. In particular, filling in missing connections and breaking up large blocks to create a finer-grained network of streets along our suburban corridors will be challenging, but a more connected street grid is perhaps the single most important step to make our streets safer, more attractive for walking, biking and rolling, and reconnect communities divided by overbuilt highways. An interconnected grid system will increase choice of modes, provide multiple routes for travel, and be better equipped to handle extreme weather and other disruptions. For this reason, the addition of local street connections should be a top priority in both capital budgets and development review.

Investing in pedestrian, bicycling, and transit infrastructure will make active transportation a viable alternative to many vehicle trips and should also be a high priority in capital budgets. Bicycling has especially strong potential as a substitute for automobile trips of less than 3 miles, which comprise about half of all trips taken in the region. Survey research demonstrates that bicyclists are much more likely to say they enjoy their commute than people who use other modes to get to work. Integrating pedestrian and bicycling infrastructure in parks and open spaces will extend the transportation network and expose more residents to nature on a daily basis, boosting mental and physical health.

As indicated in the introductory chapter of this plan, Montgomery County has made progress in reducing its greenhouse gas emissions but has much farther to go to meet its goal of eliminating them by 2035. In addition to transitioning from carbon-based fuels to renewable energy sources, reducing vehicular travel is critical.



Reducing the supply of parking – and the amount of land allocated to parking spaces – over time will increase the amount of space available for economically productive activity, reduce the cost of development, and relieve pressure on undeveloped land, all of which will enhance the county’s economic and environmental performance. Shared parking strategies and eliminating minimum parking requirements for new developments promote mixed-use development, improve pedestrian-friendly design, and encourage social interaction, while redevelopment of parking lots into higher and better uses improves environmental sustainability by creating opportunities to add tree cover, incorporate infrastructure for stormwater management, and create more landscaped areas that provide habitat for local pollinators, birds, and animals.

### How will we evaluate progress?

In assessing proposals related to transportation and communications and measuring the success or failure of the approaches recommended in this plan, relevant measures may include:

- Vehicle Miles Traveled (VMT)
- Non-Auto Driver Mode Share (NADMS)

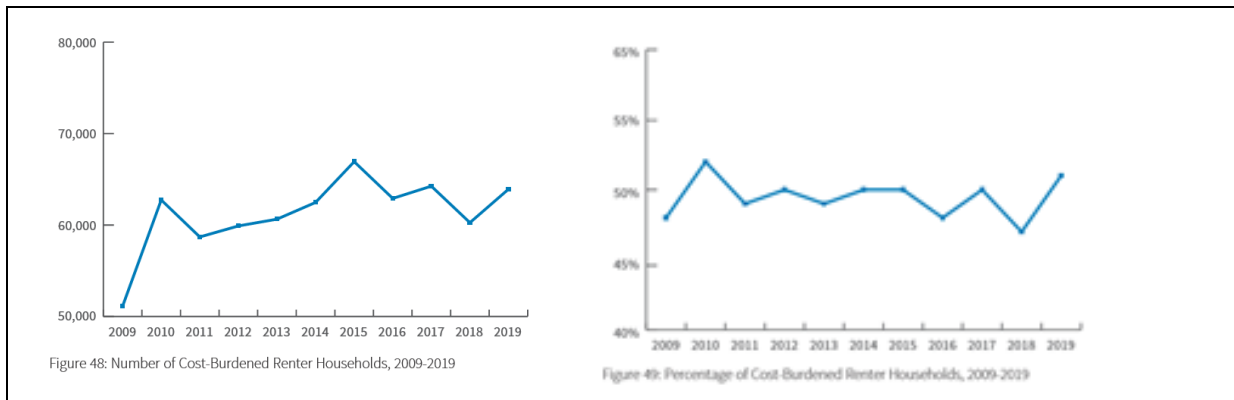
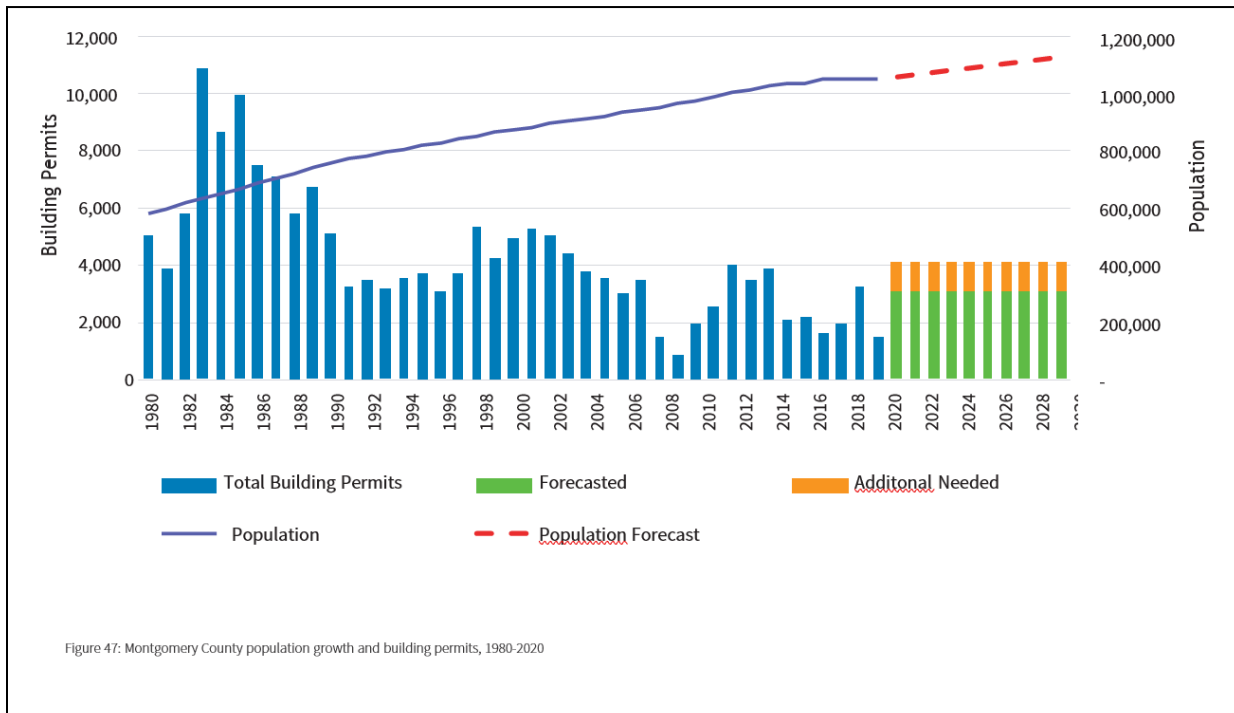
- Average commute time, by mode
- Difference between average commute time by car and transit
- Person Trip accessibility for pedestrians and bicyclists
- Accessibility by all modes and especially via transit
- Number of traffic-related severe injuries and fatalities
- Transportation system's GHG emissions
- Miles of auto travel lanes per capita
- Teleworking
- Motor vehicle parking per unit of development
- Access to high-speed wireless networks

Note that many of these metrics have an equity component and should be evaluated through an equity lens.

# HOUSING FOR ALL: More of Everything

## Introduction: Housing Lags Population and Job Growth

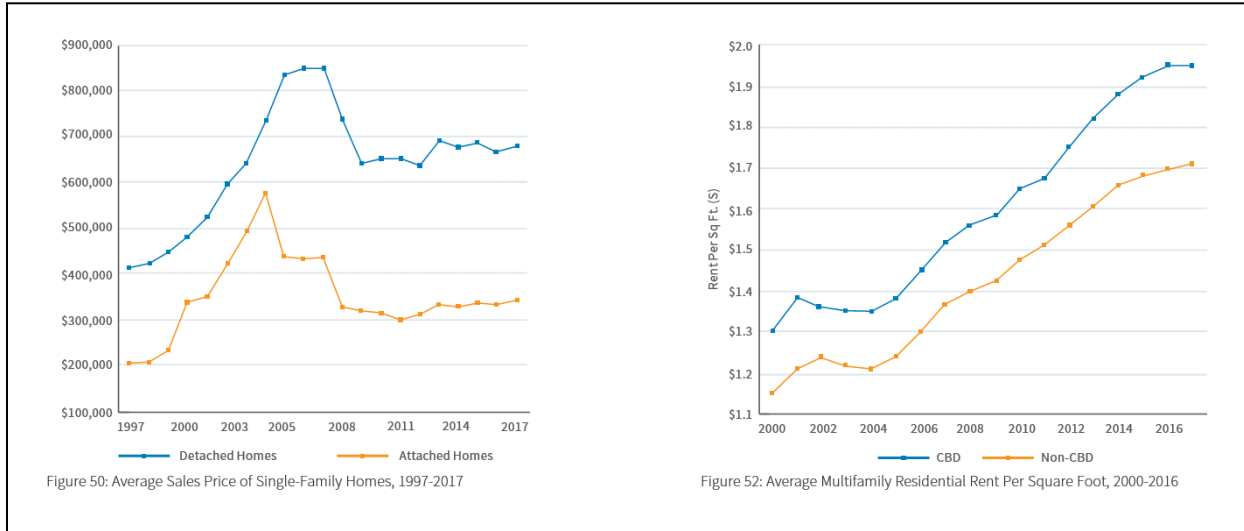
The Washington region has experienced slow but steady growth in recent decades, even as many parts of the country have struggled to attract residents and economic opportunities. Unfortunately, the region (including Montgomery County and most neighboring jurisdictions) has not generated enough new housing – particularly housing that matches the incomes and needs of the workforce – to match this relatively moderate pace of population and job growth. From 1980 to 2018, the average number of dwellings built each year in Montgomery County has steadily declined, both in absolute terms and relative to the rest of the region. Building permits have lagged well behind the 4,200 a year average that the Metropolitan Washington Council of Governments (MWCOC) has estimated are needed to address inadequate housing production and supply.

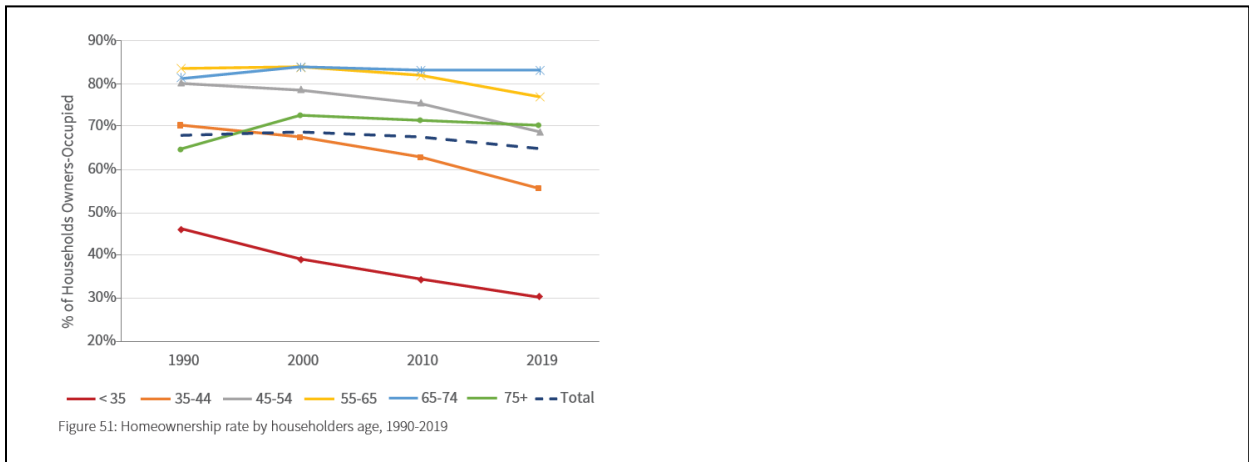




## What is the problem we are trying to solve?

While the county's median household income remains relatively high, disproportionate growth in the number of households at the high and low ends of the income spectrum has created a barbell effect, with increasing numbers of low-income renters burdened by housing costs. Economic development strategies that improve incomes and employment options can help to combat this problem, but more attention and resources directed at affordable housing are also necessary. Weak supply raises the price of housing for both renters and those who want to own their home. The number of households spending at least 30 percent of income on housing has continued to grow. Housing price increases have outpaced growth in incomes, leading some people to leave the county in search of more affordable places to live. Homeownership rates have been in decline, especially for adults under the age of 35. The obstacles faced by young workers in finding housing they can afford makes it harder for employers to attract and retain the employees they need, damaging our economic competitiveness.





The county’s housing challenges are not limited to the slow pace of new construction. Social and economic changes have opened a growing gap between the living patterns of the early 21st century and the housing stock of earlier generations. The stereotypical family household of the 1950s, consisting of a married couple with children living at home, represents a steadily diminishing share of all households. The percentage of households consisting of one person living alone increased from seven percent in 1960 to 25 percent in 2019, partly as a result of a trend toward deferring marriage and childbirth, and partly because a larger number of older people are divorced or widowed.

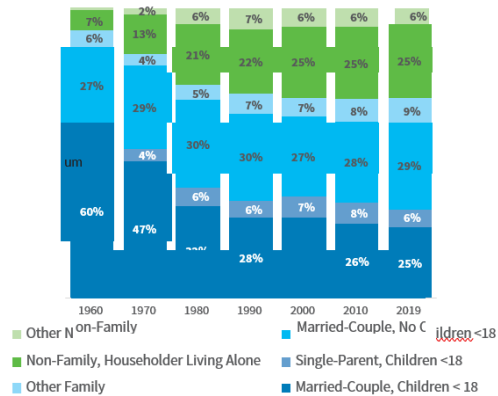


Figure 53: Change in Household Family Types, 1960-2019

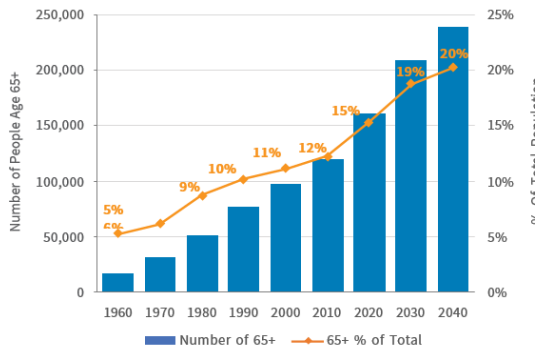


Figure 54: Age 65+ population, 1960-2040

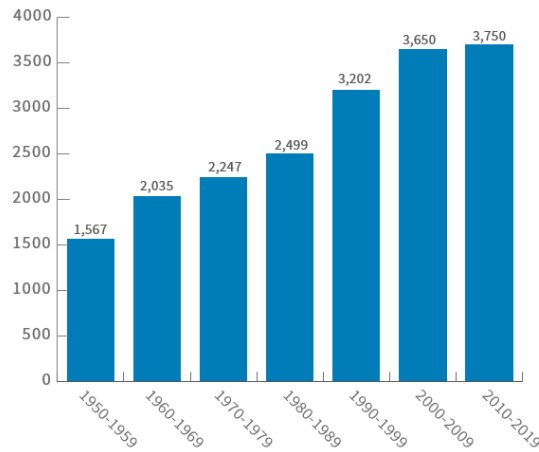


Figure 55: Average gross floor area of a single-family house by year built

Despite the shrinking size of households, new single-family homes are getting larger, and single-family dwellings make up two-thirds of the county’s housing stock. Options to buy a starter home or downsize are limited, and by some estimates, as many as one in three owner households are “over-housed”- that is, they have at least two more bedrooms than residents. Because more than one-third of the county’s land area is zoned for single family housing, more than ten times the area zoned for mixed use development, our ability to provide a greater variety of housing units in desirable locations is constrained. This limits the ability of long-time residents to relocate to a different type of home in their neighborhoods.

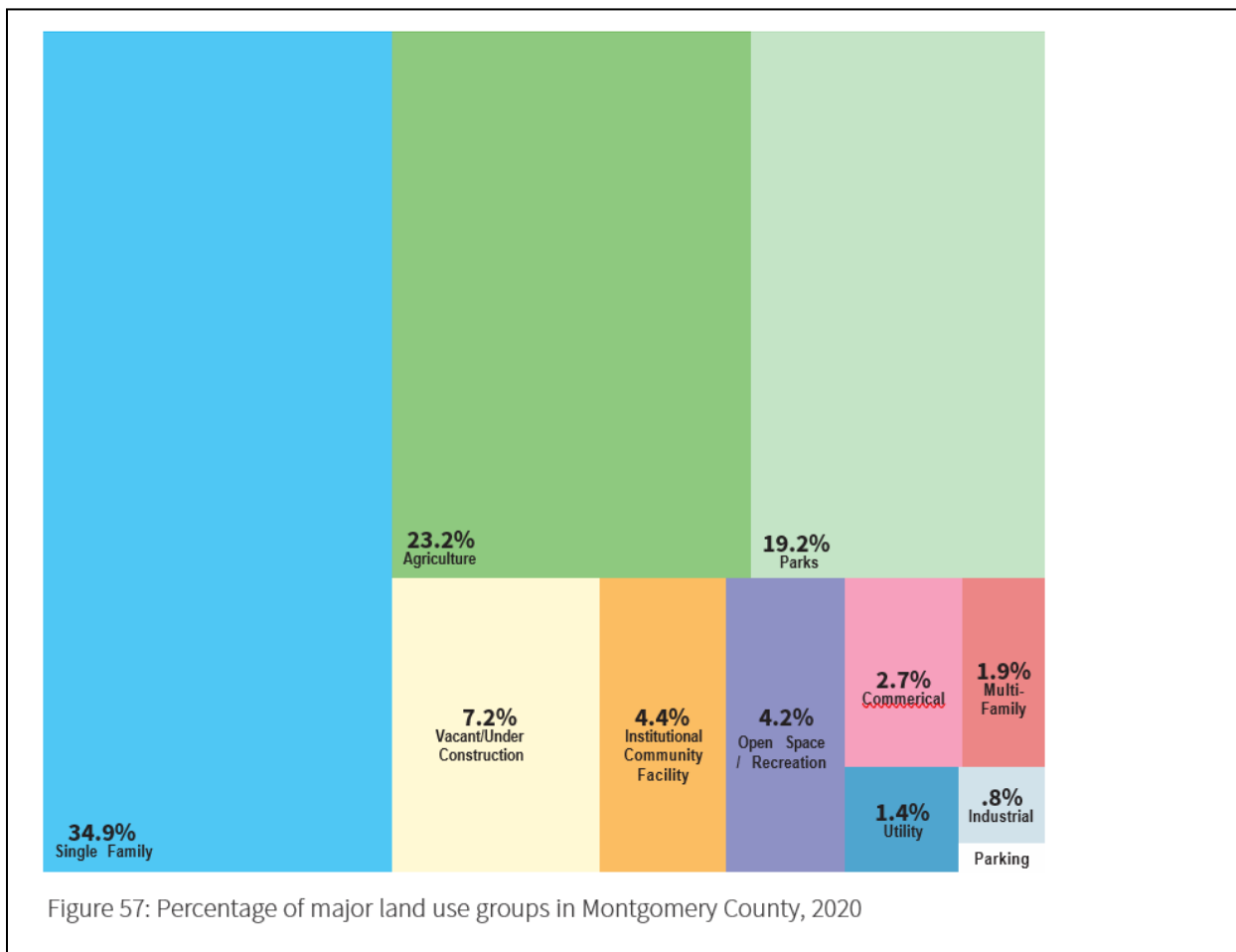
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		Number of People in Household				
		1	2	3	4	5-6
Number of Bedrooms	0-1	5,800	800	400	100	200
	2	11,300	9,800	3,000	1,000	1,700
	3	16,500	28,000	16,400	12,200	10,100
	4	9,200	31,000	17,400	16,900	11,700
	5+	3,400	12,800	7,100	11,400	9,900

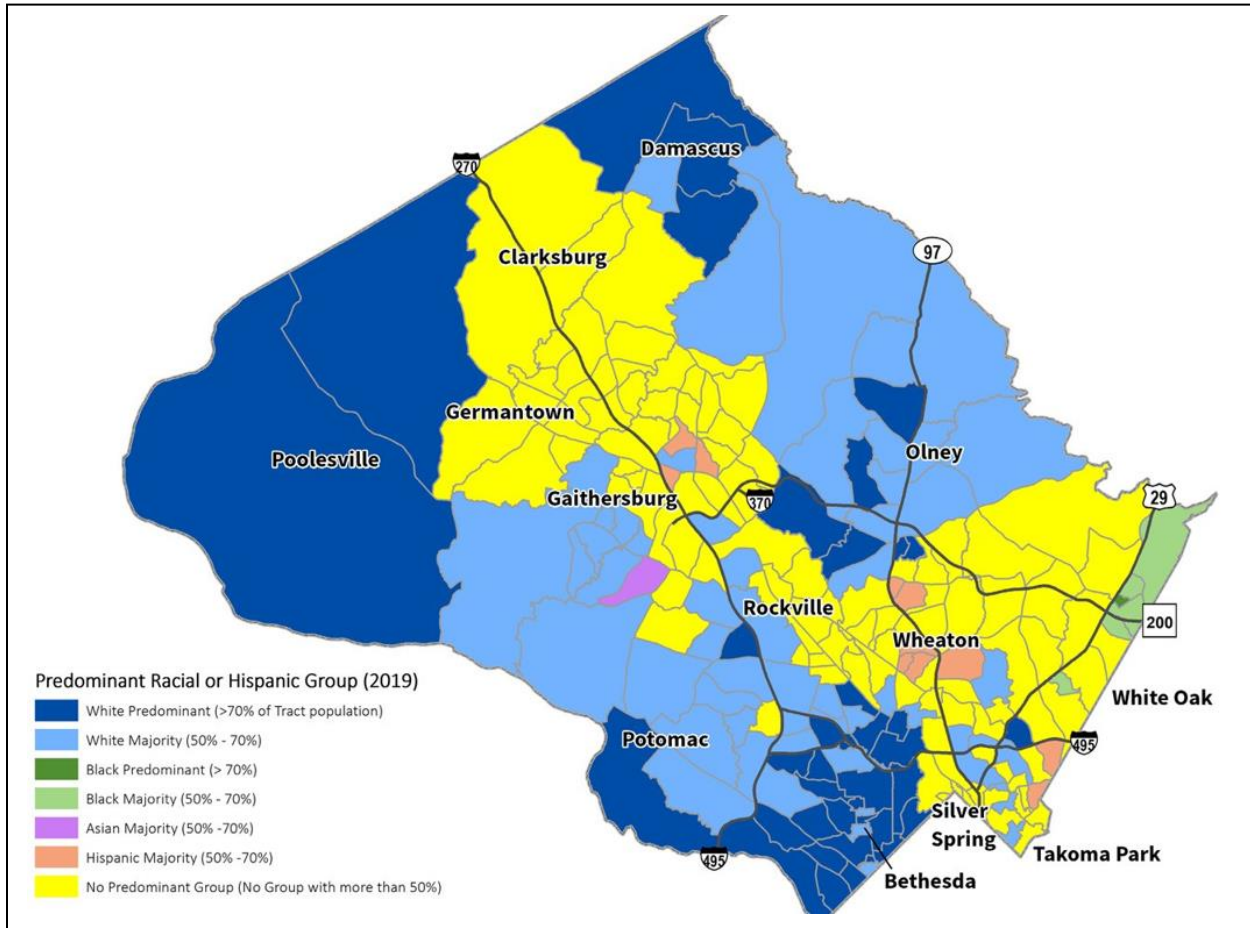
Figure 56: Number of owner households by housing unit and household size, 2018

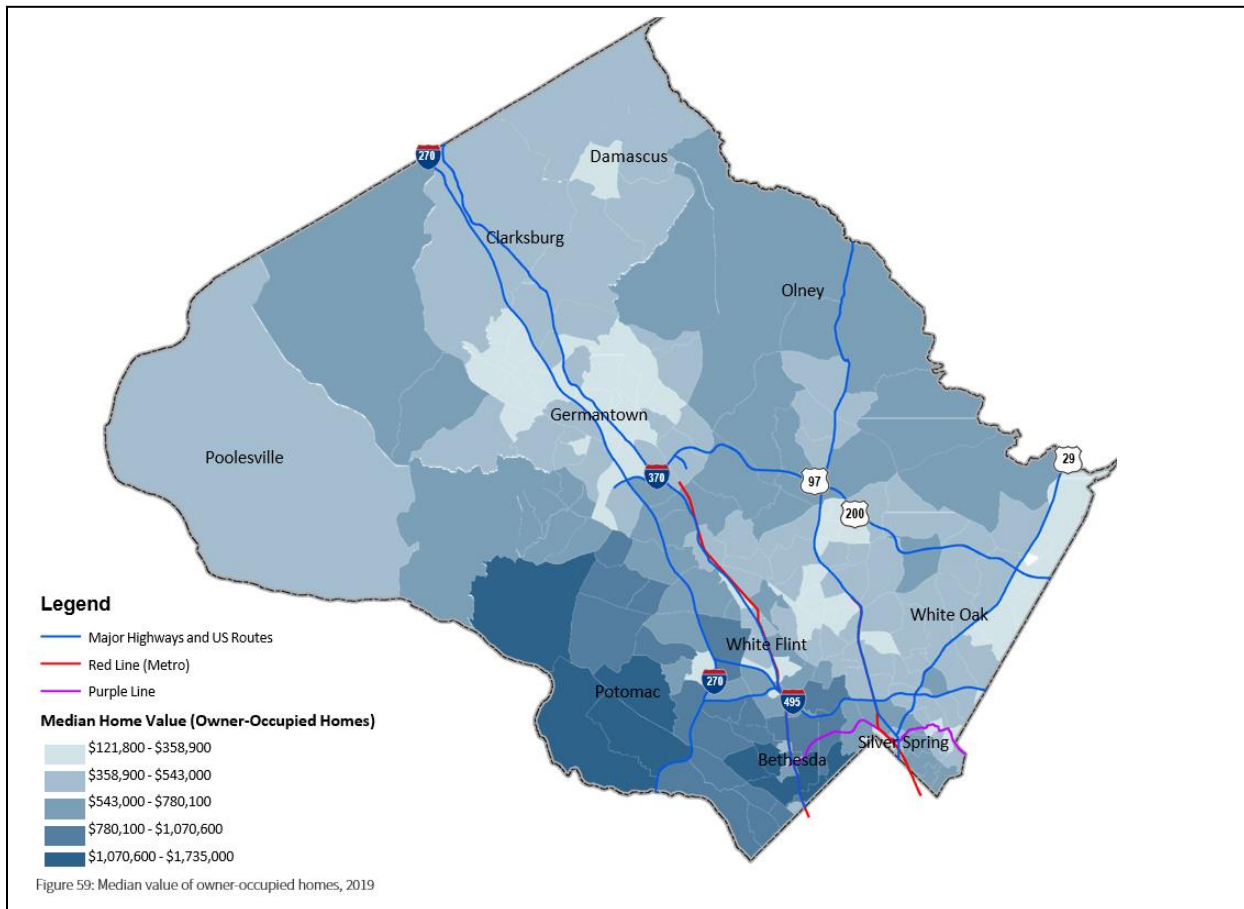
80,000 owner households or 32 percent of owner households, are over-housed, compared to only 3 percent of renters households by the same measure.

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The high cost and limited variety of available housing exacerbate inequality and segregation by race and class. Home prices vary widely in different parts of the county, closely tracking the racial and economic characteristics of neighborhoods, with predominantly white residents living in more expensive neighborhoods with better access to jobs, schools, and transportation options than the African American or Latino residents of less expensive neighborhoods. These inequities reinforce the legacy of racism and both de facto and de jure segregation and continue to influence the geographic distribution of opportunities and resources, leading to inequitable outcomes in educational attainment, economic opportunity, and public health.

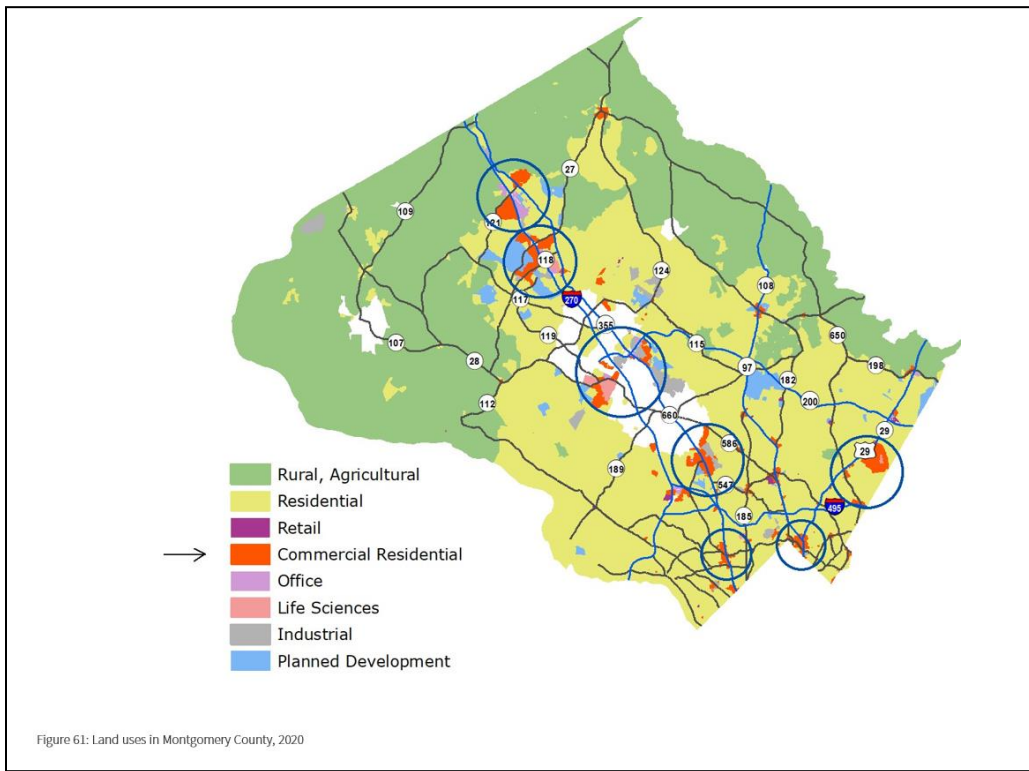
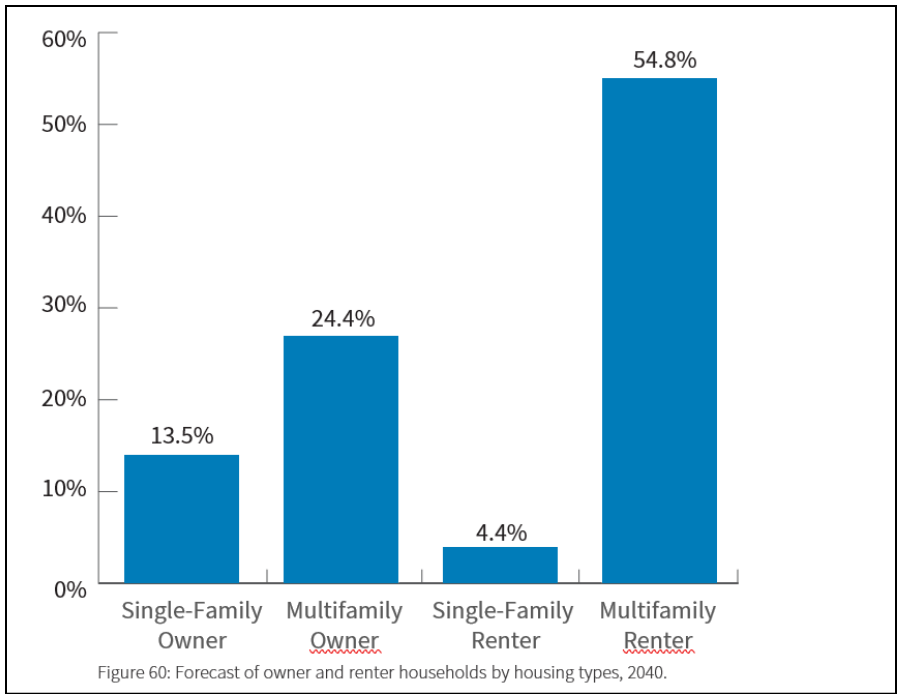




Without more housing in general and an increase in the availability of smaller, less expensive housing in particular, housing will become less affordable to a broad swath of the county’s residents. Some will leave the county, either commuting long distances from home to work or departing the region in search of a more affordable place to live. Others will struggle with the burden of paying their rent or mortgage, reducing their standard of living.

Between 2020 and 2040, Montgomery County is expected to need to add 63,031 new households, both working and non-working households, specifically new residents who are seniors or persons with disabilities.

Over the 2020 to 2040 period, forecast assumptions suggest that Montgomery County will need to add the following types of housing units to accommodate the forecasted households.



## What policies will solve the problem?

Montgomery County needs housing at a wide range of prices because the current crisis of housing affordability affects households at all income levels (except the most affluent), not just low-income households. The term affordable housing, generally used for subsidized housing, does not encompass the housing needs of middle-income households that constitute the largest segment of the county's population who are hurt by the rising housing costs and limited supply. In addition, all non-subsidized market rate housing needs attention if Montgomery County is ever going to change the current trajectory of housing affordability. Montgomery County must view access to safe, affordable, and accessible housing as a basic human right. Every resident of Montgomery County should have a place to call home and no resident should be homeless.

Expansion and diversification of our housing stock also is an essential step toward reducing racial and socioeconomic inequality. By 2045, people of color are forecast to make up 73 percent of the county's population, with a significant percentage of these residents earning less than \$50,000 a year. Unless economic strategies are successful in reducing the projected percentage of households at low incomes,, about half of all new dwellings will need to be rental units in multifamily buildings (including both apartment and townhome, duplex, triplex, and quadplex units) and more than one quarter will need to be for-sale units in multifamily buildings (including condominiums and other attached and semi-detached building types) in order to match the amount and types of housing to the needs of our residents.

In order to address the county's need to increase the amount and variety of housing, the county will pursue the following policies and actions:

### Encourage the production of more housing to better match supply with demand

- Expand opportunities to increase residential density, especially along major corridors and in locations where additional housing can assist in the development of Complete Communities. (Ec, Eq, Env)
- Increase the number of income-restricted affordable housing units, especially for low-income households. (Eq)
- As part of the commitment to the Housing First approach, develop strategies to build deeply affordable housing and provide permanent supportive housing. (Eq)
- Support building code that to reduce costs by accommodating innovative construction methods and materials including modular prefabricated housing and mass timber. (Eq, Env)
- Prioritize use of public land for co-location of housing and other uses, particularly where government agencies design new facilities or dispose of real property. Consideration of increased opportunities for housing low and very low-income households should be included in the analysis of how best to leverage county assets. (Eq, Env)
- Increase regulatory flexibility to incentivize residential infill, redevelopment, and repositioning of office parks, shopping malls, and other underutilized properties. (Ec, Eq, Env)
- Provide financial and other incentives to boost housing production for market rate and affordable housing, especially near transit and in Complete Communities. (Ec, Eq, Env)



### **Plan for a wide range of housing types and sizes to meet diverse needs**

- Facilitate the development of a variety of housing types in every part of the county but especially in areas near transit, employment, and educational opportunities. (Ec, Eq, Env)
- Support creative housing options including personal living quarters and/or micro units; “missing middle” housing types such as tiny houses, cottages, duplexes, multiplexes, and small apartment buildings; shared housing, cooperative housing, co- housing, and accessory dwelling units (ADUs), to help meet housing needs and diversify housing options. (Ec, Eq, Env)
- Consider features of other housing models such as social housing that, in addition to providing long-term affordability for low and moderate-income households, emphasizes architectural quality, environmental performance, and social stability. (Eq, Env)
- Encourage provision of multi-bedroom units suitable for households with children in multifamily housing. (Eq, Env)
- Integrate people with disabilities, people transitioning from homelessness, and older adults into housing with appropriate affordability, amenities and services sized and designed to accommodate their households. (Eq,)

Figure 62—before and after along Univeristy Boulevard in Langley Park

### **Promote racial and economic diversity and equity in housing in every neighborhood**

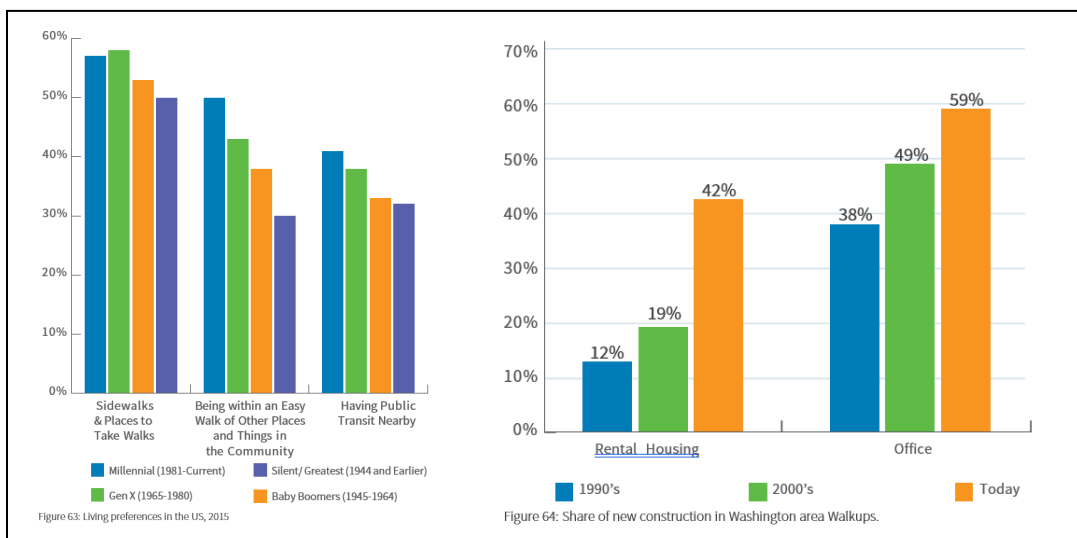
- Calibrate the applicability of the Moderately Priced Dwelling Unit (MPDU) program and other affordable housing programs to provide price-regulated units appropriate for income levels ranging from deeply affordable to workforce. (Ec, Eq,)
- Develop targeted strategies to minimize gentrification and displacement while promoting integration and avoiding the concentration of poverty. (Eq,)
- Refine regulatory tools and financial and other incentives with the goal of avoiding a net loss of market-rate and income-restricted affordable housing stock without erecting disincentives for the construction of additional units. (Eq,)
- Identify and allocate additional revenue for the Housing Initiative Fund (HIF) and other county programs to meet the needs of low-income households. (Eq,)
- Expand existing programs designed to increase access to homeownership, especially among low-income residents, people of color, and young adults; create new programs and entities such as community land trusts to maintain long term affordable homeownership opportunities. (Eq,)
- Improve collection of data on neighborhood change to monitor and address involuntary displacement, disinvestment, and related phenomena. (Eq,)

## How these policies will serve the goals of Thrive Montgomery 2050?

A healthy supply of new housing that is suited to meet the needs of households of different sizes, incomes, needs, and preferences is central to achieving Thrive Montgomery’s key objectives:

### Housing Supports the Workforce Needed to Grow Our Economy

First, increasing the supply of new housing near transit, jobs, and amenities will improve the quality of life for everyone in the county while helping to attract and retain the broadly skilled workforce that employers need, making the county more economically competitive. The increased demand for walkable neighborhoods with a mix of uses – especially near transit – is well documented. Housing in “Walkable Urban Places (WalkUPs)”, command prices 71 percent higher per square foot than other locations in the Washington area, reflecting both the desirability and relative shortage of these kinds of places. By concentrating more housing of different sizes and types near high-quality transit corridors, we can provide housing that will help keep the most productive workers in the county, curb escalating prices in the most desirable locations, and improve accessibility of jobs, transportation, and services.



### A Range of Housing Types Priced for a Range of Incomes Is Essential to Integration and Equity

Second, the construction of a wider variety of sizes and types of housing and a focus on affordability and attainability will help diversify the mix of incomes in neighborhoods across the county, improving access to services, amenities, and infrastructure for low- and moderate-income residents, who are disproportionately people of color.

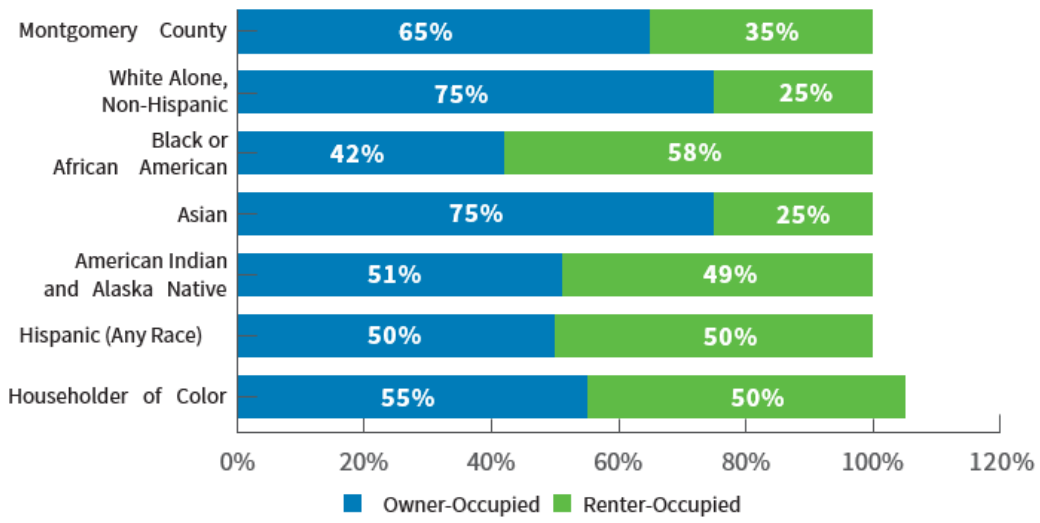


Figure 65: Rate of homeownership by race, 2017

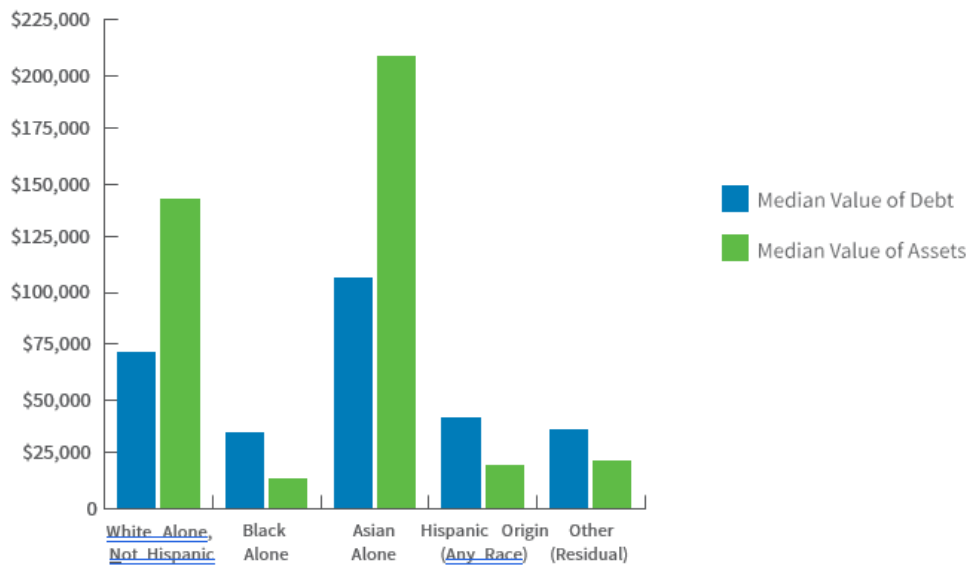
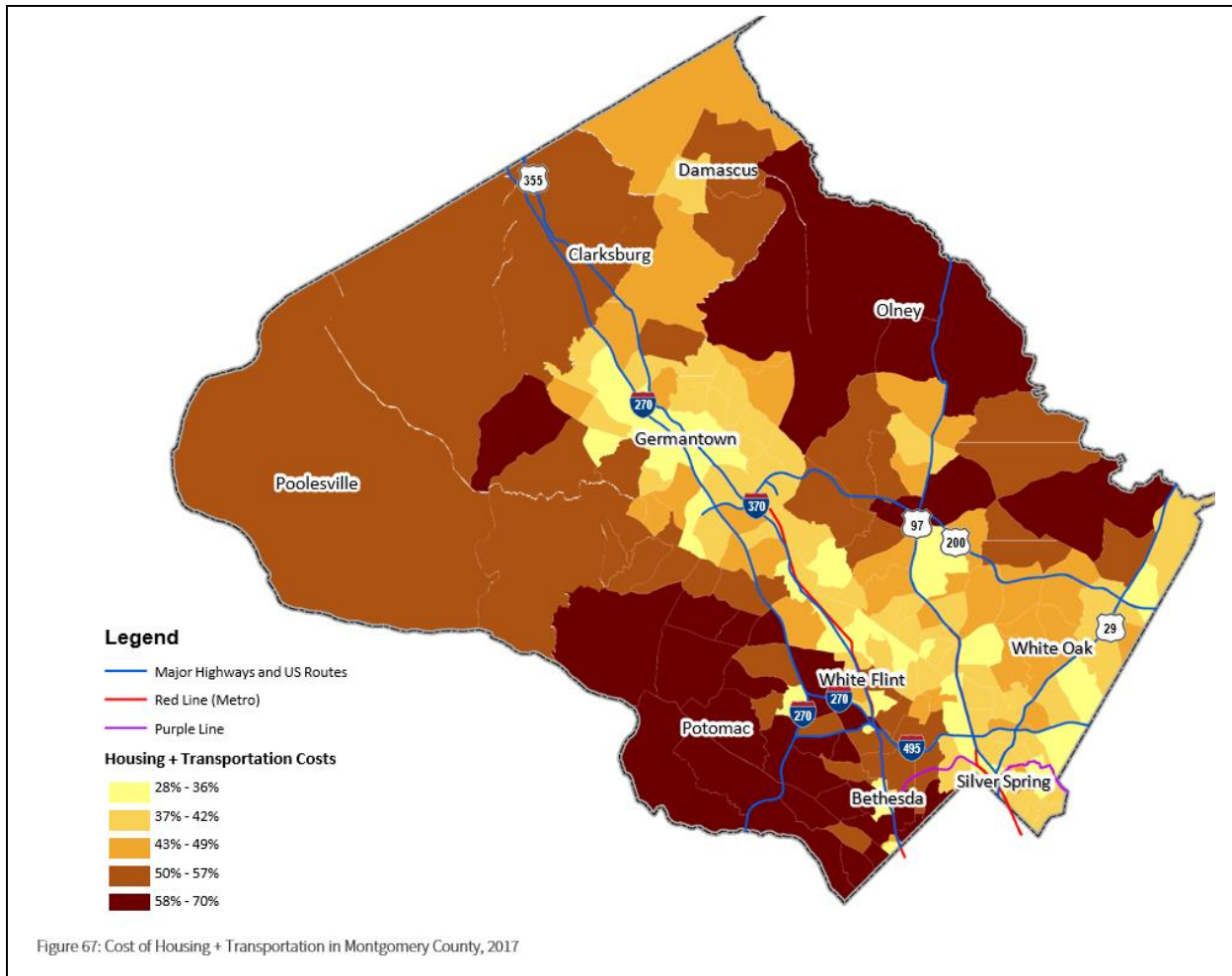


Figure 66: Wealth accumulation and debt by race, 2016



Adding more “Missing Middle” housing types – ranging from low to medium densities such as accessory dwelling units (ADU’s); duplexes; triplexes; quadplexes; live-work units; and clustered housing such as townhouses, courtyard dwellings and smaller apartment buildings to more neighborhoods will provide more choice, enhance intergenerational interaction, promote aging in place, and build social capital.

Missing middle housing will not necessarily be “affordable” in the same sense as price- or income-restricted units that receive public subsidies or are covered by the county’s moderately priced dwelling unit program, but it will fill crucial gaps in the housing market. For first-time buyers who struggle to save enough for a down payment on a large, single-family house, a duplex or tiny house can provide an accessible point of entry to home ownership. For empty nesters who want to downsize but cannot find a smaller, less expensive home in the neighborhood where they raised their family, a small apartment building or a courtyard bungalow could provide a welcome alternative to relocating from the area.

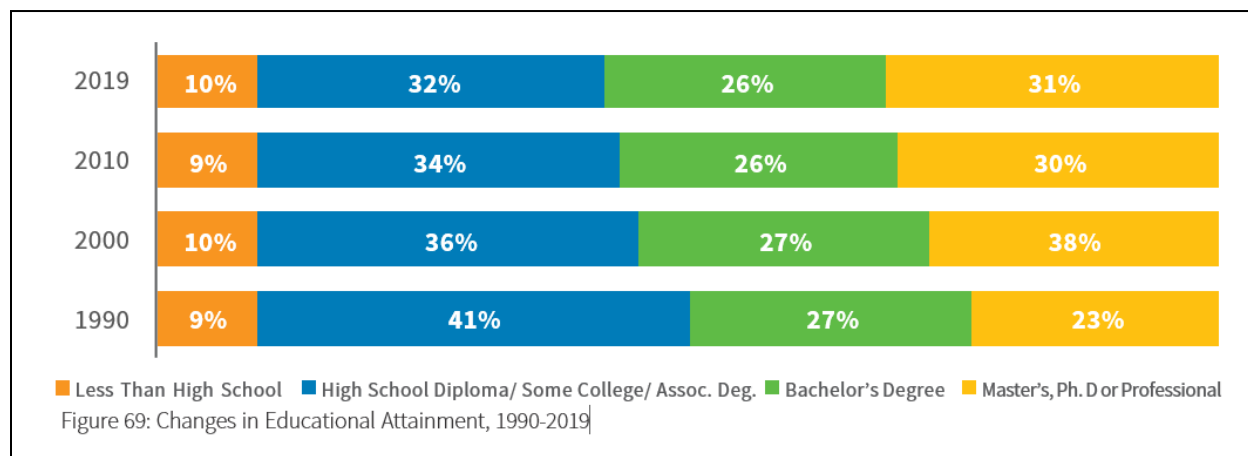
Of course, missing middle housing by its nature is highly likely to be more affordable than single-family detached houses in the same neighborhood because these housing types require less land, employ relatively inexpensive wood frame construction, and are designed for people looking for smaller and more

efficient living spaces. We need less expensive alternatives to single-family detached dwellings because a wider variety of options accessible across the spectrum of incomes, family sizes, and lifestyles will make the housing market function effectively for all of our residents at every stage of their lives.

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Preservation of both naturally-occurring and regulated existing affordable units will minimize gentrification and displacement as these communities see future investments in transit infrastructure, schools, and amenities. Building new affordable housing in existing amenity-rich neighborhoods will expand access to quality education for a wider range of students, leading to more integrated schools and helping close the achievement gap for people of color. Over time, these efforts will minimize de facto segregation based on income between school districts and encourage greater social mobility. Mixed-income housing in communities lagging in investment will help mitigate the concentration of poverty and enhance access to amenities and recreational opportunities for current residents.

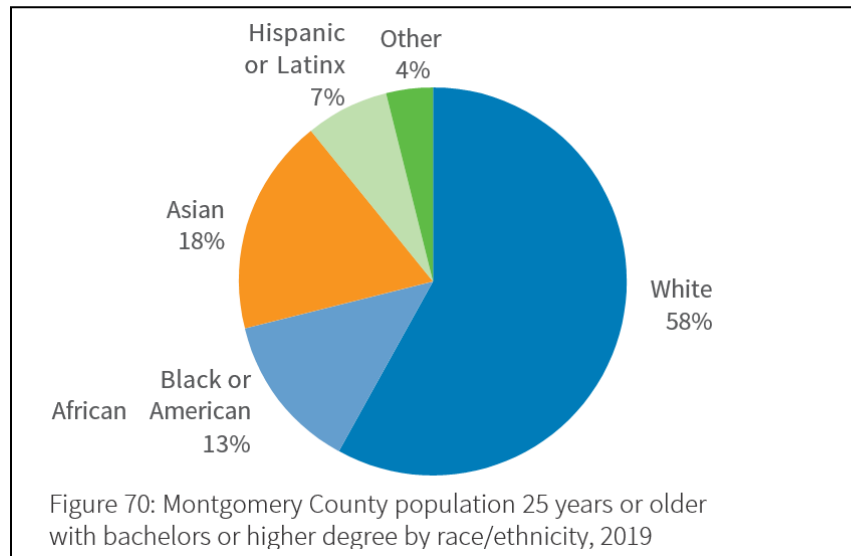


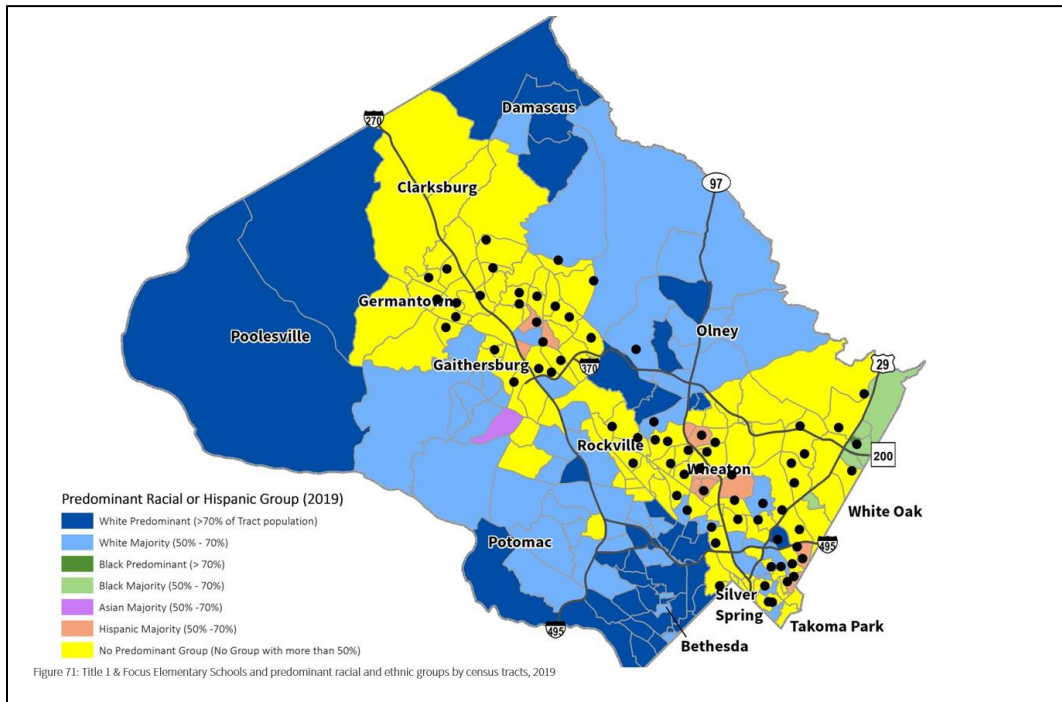
### A Wider Variety of Housing Types Is Crucial to Reducing the Environmental Impact of Growth

Third, a broader range of housing types – particularly the inclusion of multifamily buildings of varying scale depending on their location – will reinforce the benefits of Complete Communities because flexible residential zoning will allow more people to live closer to work, increase the walkability of neighborhoods, and limit the development footprint on the environment. By allowing smaller residences and more multifamily building types, encouraging infill and repurposing, and adding housing near transit and jobs, these recommendations will collectively reduce greenhouse gas emissions and improve other measures of environmental health. New construction can also help mitigate environmental impacts by increased use of stormwater management, use of clean building materials and technology, more energy efficient lighting and appliances, and plumbing fixtures that conserve water.

Historically, many people who fill critical jobs in Montgomery County, such as teachers, police and first responders, and the service workforce have had to move to more remote parts of the County or out of Montgomery County altogether and drive long distances to reach their places of employment. Creating a wider range of more housing options through infill, redevelopment and adaptive reuse of existing buildings will reduce vehicle miles traveled while using valuable land more sustainably.

Montgomery County’s naturally occurring affordable housing also have a role in mitigating their environmental impact as they age. These facilities present an opportunity to shepherd in environmentally sustainable practices as they age and are rehabilitated. Rehabilitation offers environmental benefits through adding more eco-friendly and modern features, like newer appliances and HVAC systems.





## How will we evaluate progress?

In assessing proposals related to the supply of housing and measuring the success or failure of the approaches recommended in this plan, relevant measures may include:

- Rates of homeownership by race, income, and area
- Number of and proportion of cost-burdened households disaggregated by race
- Combined housing and transportation costs disaggregated by race
- Rent and mortgage payments as a proportion of household income disaggregated by race
- Number and percent of low-income households in a census tract (concentration of poverty)
- Number and percent of low-income households lost in a census tract over a period of time (displacement)
- Racial and income diversity within neighborhoods
- Proportion of housing units proximate to transit routes and job centers
- Number of residential units issued building permits, overall and by area of county
- Number of affordable units by type, overall and by area of county
- Naturally Occurring Affordable Housing preserved, overall and by area of county
- Number of homeless residents
- Proportion of missing middle housing units and units in multifamily buildings
- Range of home prices by housing type
- Greenhouse gas emissions and energy use from residential buildings and transportation per capita

## **PARKS AND RECREATION: For an Increasingly Urban and Diverse Community- Active and Social**

### **Introduction: Evolving and Expanding Roles for Parks and Recreation**

Montgomery County has long been a leader in adopting forward-thinking policies for the preservation of land for parks, recreation, agriculture, and resource conservation. The M-NCPPC has won the National Recreation and Parks Association Gold Medal for the country's best large parks system a record six times. Like other aspects of planning, however, the success of our approach to parks, recreation and open space must continue to evolve to meet changing needs.






**The story of the Parks Department closely tracks the ways in which American suburbs – and the attitudes, lifestyles, and values of their residents – have changed:**

- In the 1920s and 1930s, developers of early down-county subdivisions dedicated stream valley floodplains to the M-NCPPC. The resulting parks helped to market these subdivisions and provided a place for water and sewer infrastructure along with parkways for pleasure driving. This was a period when restrictive covenants were used in some residential neighborhoods to exclude racial and religious minorities, and public recreational facilities such as swimming pools were also often segregated.
- In the early post-war period, Montgomery County's role as a bedroom community for a growing capital city increased demand for organized recreation in park activity buildings, ballfields, and tennis courts. The development pattern throughout these early decades of the Parks Department's history was characterized by subdivisions of single-family homes with backyards grouped by residents with similar income and social structure and designed with the assumption that residents could, would and should drive to major amenities.
- By the 1960s and 1970s, the influence of the environmental movement – sparked in part by Silver Spring's Rachel Carson – led the park system to devote more attention to resource stewardship. The 1980s and 1990s saw the introduction of "smart growth" and increased appreciation for the benefits of a compact form of development, with park acquisition and the Agricultural Reserve working together as part of a comprehensive approach to land conservation policy as a tool to protect the environment and discourage sprawl.
- By the mid-1990s, the Parks Department had begun to recognize the importance of preserving and interpreting significant sites in local African-American history. For example, it established the Underground Railroad Trail and related programming to help tell the story of slavery and emancipation as these events played out in Montgomery County. The Department did not, however, give much thought to disparities in the distribution of recreational opportunities or access to nature.
- At the turn of the 21st century, the desire to revitalize central business districts led the Parks Department to plan and build more urban parks, initially as "buffers" to protect abutting single-family neighborhoods from more intensive – or simply different – types of development such as apartment buildings, townhouses, or commercial uses.
- In recent years, the Parks Department has developed analytical tools such as "equity mapping" to ensure racial, socioeconomic and geographic equity in parks and recreation budget and



programming decisions. Projects like the Josiah Henson Museum and Woodlawn Manor Cultural Park help to educate residents about the history and legacy of slavery, and staff with deep expertise in historic preservation, archeology, and cultural programming work to document the stories of African-Americans and their role in the county's history.

**Montgomery County Parks Timeline 1930 to 2010**

<p><b>1930s-1940s</b></p> 	<p><b>1950s-1960s</b></p> 	<p><b>1970s</b></p> 
<p><b>Stream Valley Parks Water Protection</b></p>	<p><b>Regional Parks And Athletic Fields</b></p>	<p><b>Neighborhood Parks</b></p>
<p><b>1960s-1970s</b></p> 	<p><b>1980s-1990s</b></p> 	<p><b>2000s-2010s</b></p> 
<p><b>Environmental Awareness</b></p>	<p><b>Smart Growth Open Space Preservation</b></p>	<p><b>Urban Park Shortage</b></p>

## What is the problem we are trying to solve? Closing the Gaps in Park and Recreation Planning to Meet the Needs – and Serve the Values - of a Changing Community

The Parks Department has built a well-deserved reputation for environmental stewardship, and it has made progress in providing a wider range of recreational opportunities, such as cricket, to meet the needs of a more culturally diverse population. It has room, however, for improvement:

- Our highest density areas are far from most parkland, which is difficult to reach without access to a car.
- Conservation-oriented parks can include carefully designed trails and other low impact recreation areas; however, many of these parks lack appropriate access for hikers and bikers, limiting their availability to the greater public.

- Parks conceived as buffers often act as separators rather than gathering places for people.
- Park facility standards and acquisition strategies conceived during a period of greenfield expansion are incompatible with infill development and adaptive reuse of sites.

Meanwhile, the role of land conservation and stewardship in addressing the county’s environmental sustainability goals is as important as ever. Urban redevelopment and infill will reduce the environmental impact of future growth by reducing greenhouse gas emissions and help reverse the damage from earlier development by incorporating modern state-of-the-practice stormwater management features. Nonetheless, the environmental performance of green infrastructure on public land must keep getting better to improve water quality, limit property damage and erosion from flooding, and add tree and forest cover.

**In addition to maintaining its leadership role in environmental management, the Parks Department must continue to take on new roles:**

- Improve service to residents of downtowns, town centers, and other intensively developed areas
- Focus on social engagement and community building as a central role of parks and recreation
- Encourage vigorous physical activity for people of all ages, abilities, and cultures

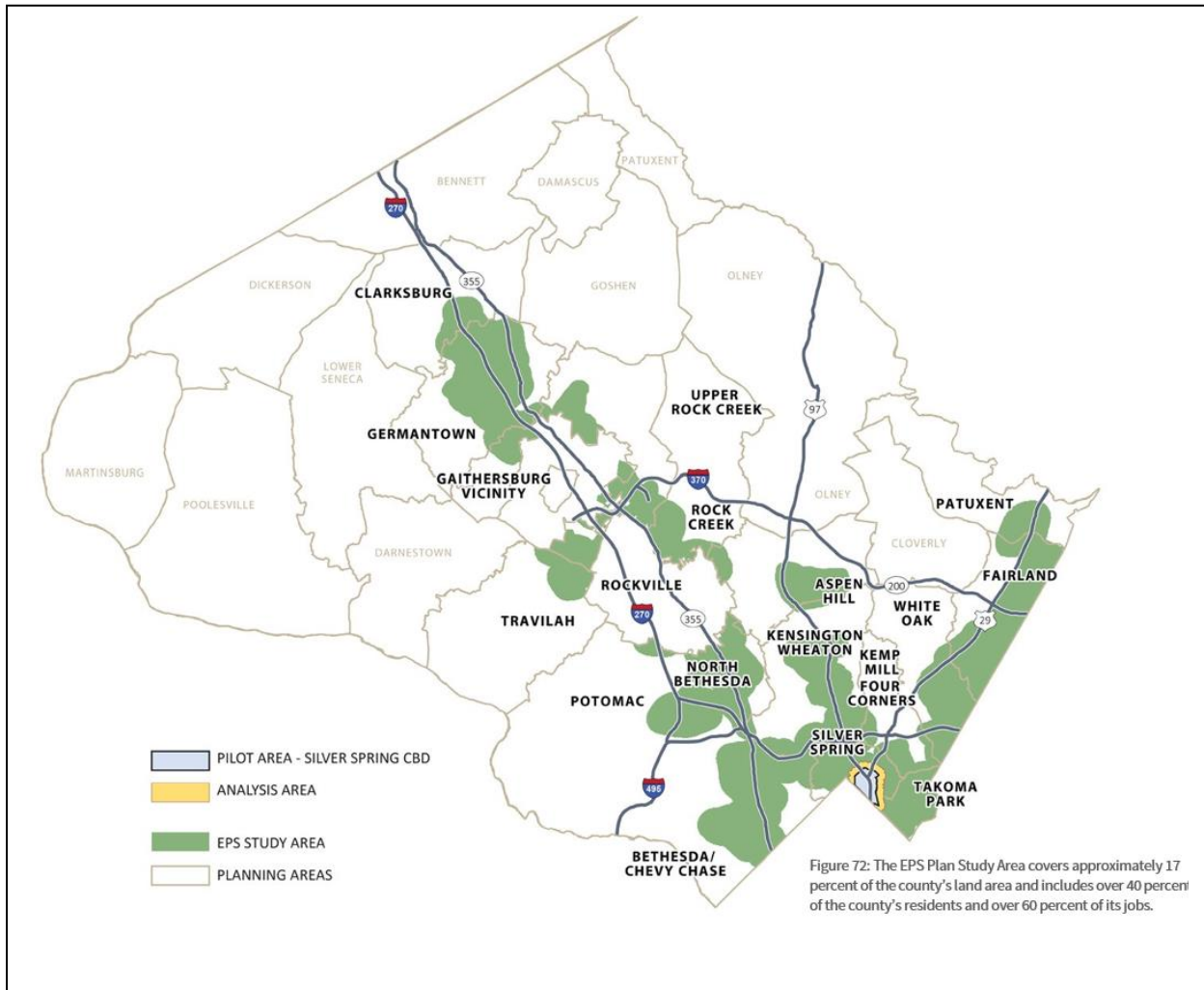
Over the coming decades, our challenge is to acquire, develop and program parks, recreation, and privately owned public spaces that provide a range of active recreation and community building opportunities throughout the most intensively developed parts of the county while continuing to apply sound environmental stewardship practices to public lands.

## What policies will solve the problem?

In order to maximize the contributions of parks and recreation towards creating strong communities with lasting value, the county will pursue the following policies and practices:

**Focus on creating high quality urban parks.**

- Prioritize acquisition of land for parks in urban centers and other intensively developed places along growth corridors and in Complete Communities using the Legacy Urban Space CIP commitment, the Energized Public Spaces Functional Master Plan (EPS Plan) and the Parks, Recreation and Open Space (PROS) Plan as starting points. (Ec, Eq, Env)
- Offer programs in urban parks to encourage visitation, increase the amount of time spent in parks and make these spaces centers of activity. (Eq)
- Implement the EPS Plan to ensure that densely populated parts of the county enjoy walkable access to a full range of park experiences. (Ec, Eq)
- Integrate privately owned public spaces (POPS) with the park/recreation system to supplement publicly owned and managed gathering spaces and athletic facilities, using a range of ownership and management approaches to public space. (Eq)
- Coordinate land use and park planning to ensure Complete Communities have access to a range of park types, including athletic facilities, through a combination of public and privately owned [facilities] resources.

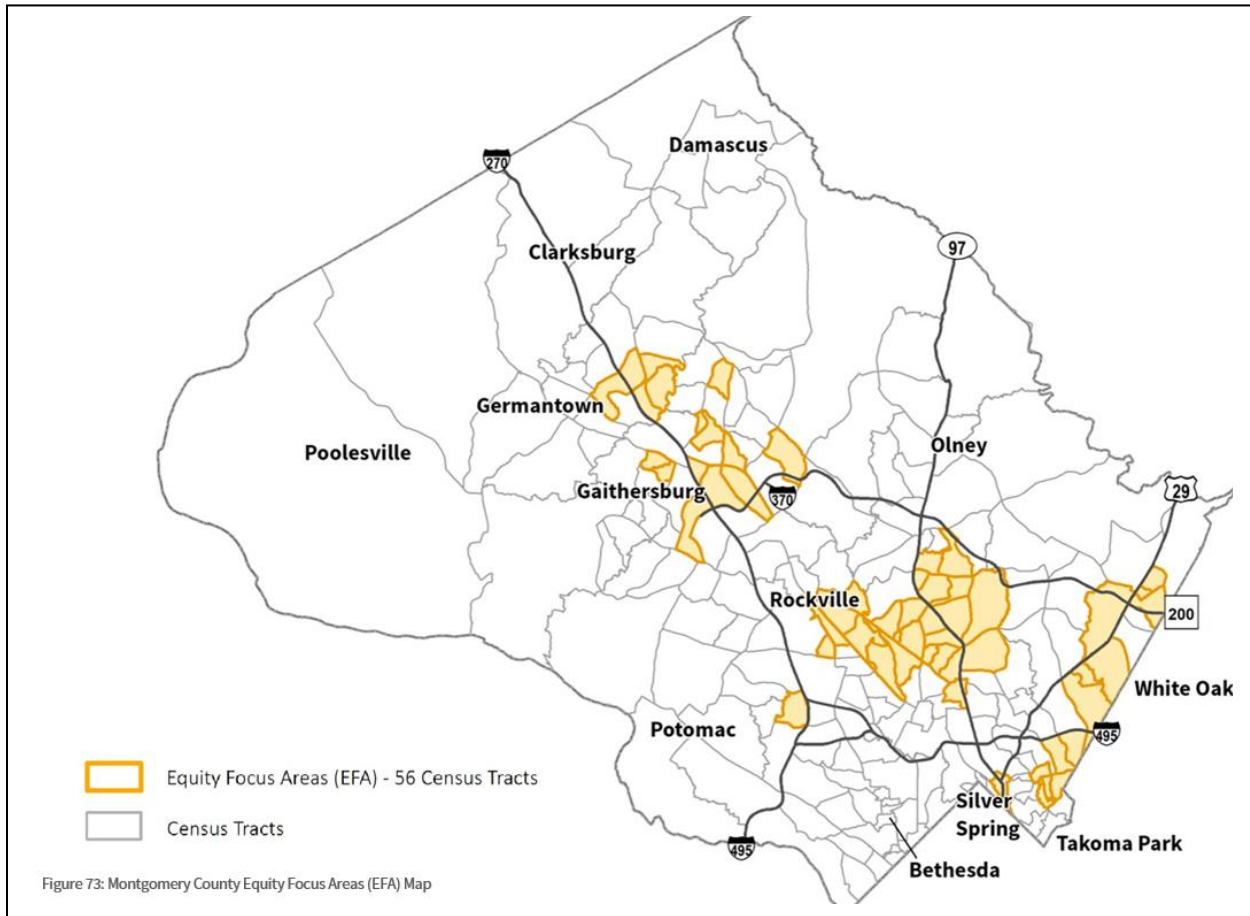


**Use park and recreation facilities/programs to promote active lifestyles.**

- Include active recreation as an integral element in park planning and design.
- Encourage active recreation as a key component of POPS in all parts of the county.
- Deliver park and recreation facilities and programs designed to encourage residents of all ages, cultural backgrounds, and abilities to engage in vigorous physical activity. (Eq)
- Support the continued renovation and maintenance of high-quality athletic fields.
- Integrate park trails and paths into transportation planning and better use them to connect residents to jobs, centers of activity, and other parks and trails. (Ec, Eq)
- Ensure that residents in urban, suburban, and rural areas all have access to a wide variety of parks and programs.

CDC data from 2019 indicates that only 14.6-20.5 percent of Maryland adolescents (grades 9-12) achieve one hour or more of moderate and/or vigorous physical activity daily.

Recent survey data show that the percentage of children under age 12 who played team sports “regularly” has declined in recent years, from 42 percent in 2011 to 38 percent in 2018.



**Ensure that parks and recreation opportunities are equitably distributed along racial, socioeconomic, and geographic lines.**

- Amend the EPS Plan study area to incorporate a more refined analysis of equity in its methodology. (Eq)
- Expand and improve the use of racial and socioeconomic equity measures in developing capital budgets for park and recreation facilities. (Eq)
- Gather data on – and address – barriers to participation in park and recreation programs. (Eq)
- Improve accessibility of park and recreation facilities via walking, biking and transit. (Eq)
- Ensure that urban, suburban, and rural areas all have access to great parks. (Ec, Eq)

**Make social connection a central objective for parks and recreation.**

- Design park, recreation, and related infrastructure and services around building community, creating opportunities for interaction, and making parks and recreational amenities a central element of Complete Communities. (Eq)
- Connect neighborhoods and people to parks with a world-class trail network. (Ec, Eq)
- Include food/beverage in planning and programming parks and recreational facilities where appropriate. (Ec)
- Provide park amenities that appeal to visitors with different interests and physical abilities. (Eq)

**Update park facility standards and acquisition strategies to align with infill development and adaptive reuse strategies.**

**Coordinate with county agencies to accommodate multiple needs, including recreation, education, community-building, and resource stewardship - through colocation, adaptive reuse, co-programming and other combined or shared land and facilities.**

**Maintain high standards of environmental stewardship in park management and operations.**

- Reaffirm the Parks Department's commitment to resource conservation, stewardship, and sustainability practices such as innovative stream and habitat restoration projects. (Env)
- Selectively acquire additional land where needed to protect sensitive natural resources, improve water quality, increase tree cover, enhance wildlife corridors, curb invasive species, and achieve other environmental goals. (Env)
- Create a resiliency plan to improve the ability of park and recreation facilities and natural resources to withstand the effects of climate change. (Env)
- Prioritize the equitable distribution of green infrastructure.

**Integrate parks/rec/public spaces into economic development strategies and land use planning to attract employers and workers, build social connections, encourage healthy lifestyles, and create vibrant places, especially as part of Complete Communities.**

## **How will these policies serve the goals of Thrive Montgomery 2050?**

These policies will strengthen the role of parks and recreation in economic competitiveness, racial equity, environmental sustainability and promote an active, healthy community for all.

**Parks create vibrant, economically competitive places**

World-class places require world-class park, recreation, and cultural amenities. Look to Central Park in New York, Golden Gate Park in San Francisco, Millennium Park in Chicago, or Hyde Park in London and the significance of great urban parks becomes clear. Parks are essential to creating vibrant, economically competitive places. In fact, parks and the amenities they provide are regularly cited as among the most important factors influencing decisions by businesses about where to relocate or expand.

Multiple academic studies have shown that parks increase adjacent property values from 5 percent to 20 percent, providing incentives for property owners to contribute to the creation of public parkland or to build POPS as part of their development projects. This data also shows that taxpayer-funded investment in parks and related programming and amenities deliver strong economic returns on investment to the public.

### **Parks improve Equity, Social Interaction and Public Health**

The quality and accessibility of parks is a basic component of equity in the delivery of public services. Parks are so integral to what makes a community desirable and healthy that ensuring equity in decisions about which land is acquired for parks in what part of the county and how that land is used is essential to achieving our goals for racial and socioeconomic justice. The Parks Department has made major strides in recent years in incorporating quantitative measures of equity in its capital budget recommendations, and this approach should be expanded to include analysis of programs and facilities managed by other agencies, such as Montgomery County Public Schools, the Department of Recreation, and the Department of Libraries.

Well-designed and sited parks are one of the most straightforward ways to establish a clear sense of place. They invite people of all ages, cultures, incomes, and interests to gather and interact in ways not achieved in any other location or context. Not only do they foster social connectedness, but with healthy levels of civic engagement and social cohesion, they can act as community hubs and focal points for response and recovery during natural disasters and other emergencies.

Parks and recreation also are vital to improving health outcomes for all our residents. According to the CDC, more than 60 percent of U.S. adults do not engage in the recommended amount of activity and approximately 25 percent of U.S. adults are not active at all. Because 90 percent of outdoor experiences happen close to home, parks - particularly in urban areas - play an important role in outdoor recreation. Trails for example, are a great way to motivate people to explore public spaces and new parts of the county, expose residents to different neighborhoods and encourage exercise and healthy lifestyles. Likewise, community gardens help to reduce the impact of food deserts in low-income areas, encourage physical activity and social interaction, and give residents who do not have yards access to nutritious foods that contribute to a healthy lifestyle. Access to opportunities for vigorous physical activity is especially important to improve health outcomes and quality of life for people of color, who suffer higher rates of diabetes, high blood pressure and obesity.

### **Parks will play a larger and more complex role in environmental management**

Of course, parks also play a major role in environmental sustainability. Climate change has resulted in increased frequency, intensity and/or duration of fires, flooding and intense rain events, drought, high winds, and extreme temperatures. This rapid destabilization of climate patterns jeopardizes the ecological stability of nearly all global communities. Parks and natural areas help address the effects of climate change and enhance environmental resiliency. Stream restoration and stormwater management projects on parkland protect against flooding and improve water quality. Parks provide wildlife corridors that can account for changes in habitat patterns. Urban tree canopy mitigates thermal pollution, helps limit the heat island effect of intensive development, filters pollutants, and sequesters carbon. Habitat restoration provides wildlife with natural terrain, reduces human-wildlife conflict, and improves overall ecosystem performance.

These benefits to the natural environment are especially important in parts of the county that have not been the beneficiaries of high levels of public and private investment. Sustainability is and will continue to be incorporated into every aspect of the Parks Department's work, and it should be accomplished in ways that complement and support investments in facilities and programs designed to expand access to active recreation and social connection rather than operating in competition with or opposition to these investments.

## How will we evaluate progress?

In assessing proposals related to parks and recreation and measuring the success or failure of the approaches recommended in this plan, relevant measures may include:

- Number of urban parks
- Miles of streams restored, and stormwater runoff treated
- Childhood obesity
- Stream water quality
- Urban tree canopy
- Additional miles of trails built
- Participation in vigorous physical activity
- Park and recreation patronage/participation by race/ethnicity, language spoken and age
- Awards and other recognition of excellence in urban parks and trails
- Patronage at community gatherings
- Proportion of population within 15-minute walk of three park experiences
- Proportion of park and recreational facilities serving equity focus areas
- Access to park and recreational facilities, including athletic fields via walking, biking, and transit
- Number of high-quality athletic fields, noting those with lights, on MCPS, County, and MNCPPC property
- Number of play spaces on MCPS, County, and MNCPPC property

## Conclusion

Our community has experienced major social, economic and environmental changes over the life of the Wedges and Corridors plan, and even more dramatic shifts are on the horizon.

Thrive Montgomery 2050 establishes a framework for responding to economic, demographic, social, and environmental change in ways that are rooted in enduring lessons about what has made places successful in the past, while remaining adaptable to unforeseen circumstances. That is why the plan emphasizes the basic concepts of compact form; diversity of building types and design; and complementary transportation infrastructure instead of attempting to predict the pace and direction of technological innovation or the consequences of catastrophic events, whether natural or man-made, whose long-term effects are impossible to forecast with certainty.

This document is a guidebook, not an exhaustive list of prescriptions. It does not address every topic relevant to our future, but it provides strong direction for decisions about land use, transportation, and related issues within the ability of local government to influence.

## Montgomery County has a lot going for it yet there's room for improvement

In addition to the advantages Montgomery County has enjoyed by virtue of our location in the national capital region, the County has benefitted from a tradition of thoughtful planning that has allowed us to develop and grow while preserving land and other resources in ways that have supported a high quality of life. The Wedges and Corridors Plan was exceptionally progressive for its time, and it helped us to build high quality park and school systems, preserved natural resources and farmland, and laid the groundwork for transit-oriented smart growth. Thrive Montgomery 2050 has attempted to provide an unflinching assessment of the Wedges and Corridors Plan and provide policies and practices that will build on its ideas but also address its shortcomings that have adversely impacted parts of the County.

The federal government's presence has given us a foundation of good jobs and a concentration of public investment in life sciences and information technology that provide enviable opportunities. The stability and reliability of the base of employment tied to government should not make us complacent. Policies and investments need to capitalize on those opportunities and ensure that Montgomery County is a strong competitor with a diverse economy that brings our residents good paying jobs. Because land is scarce, there is less room for error and discipline is needed in how land is used, and design excellence is fostered to respond to market forces and attract both businesses and residents to call Montgomery County home.

We must also address the reality that Montgomery County's prosperity has not benefited all our residents equitably. The urgency of demands for racial justice and the need to rebuild bonds of trust and community are clear. As the demographics of our community change rapidly along dimensions of age, race and



ethnicity, income and wealth, culture, and language, the need to confront inequitable practices has grown increasingly urgent.

As for environmental sustainability, Montgomery County's past record of support for water quality protection, forest conservation, and land preservation are helpful but ultimately will not be sufficient to shield us from the effects of climate change. More creative strategies to build resilience and improve sustainability of both the built and natural environments are critical.

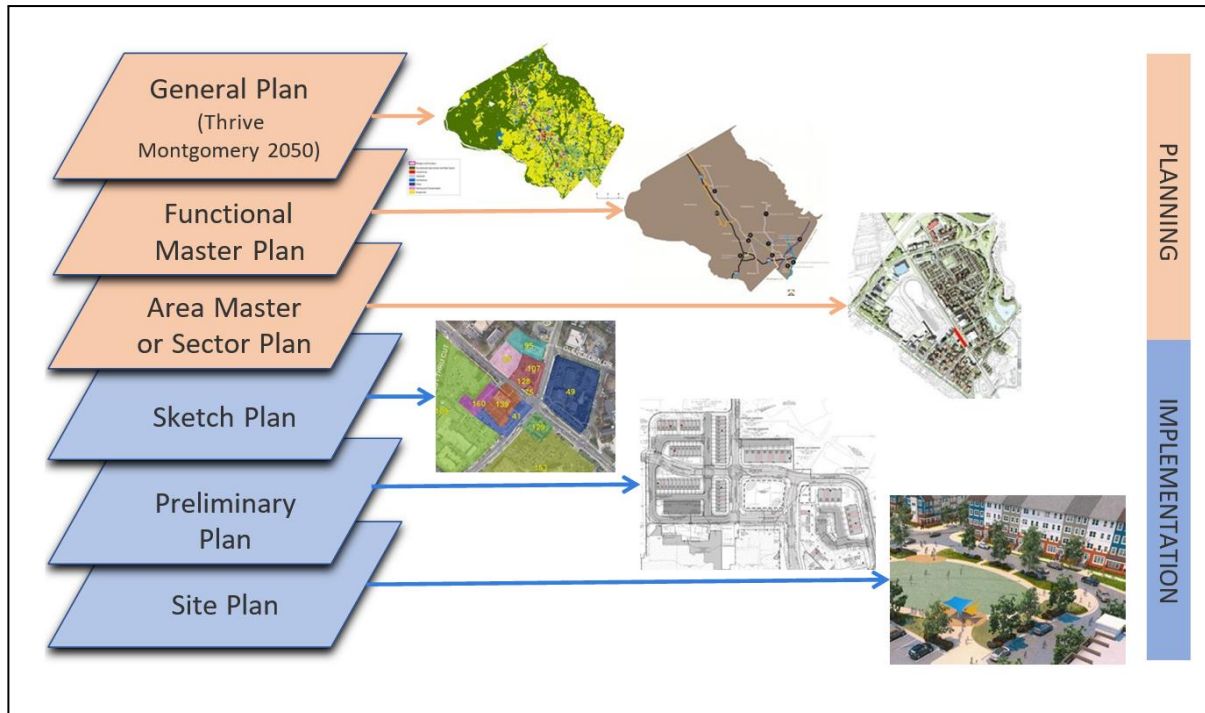
While these economic, social, and environmental changes will not be easy to navigate, Montgomery County is well-positioned to make the decisions and investments necessary for success. Our community is in the 99th percentile of all counties in the country in terms of household income and educational attainment, with annual economic output of almost \$100 billion and an amazingly diverse population. We can draw on tremendous human and physical resources; our assets would be the envy of almost any local jurisdiction anywhere. With Thrive Montgomery 2050 as a guide, we can plan carefully and act decisively to make the changes needed to help Montgomery County thrive well into the future.

## **How Thrive Montgomery 2050 will be Implemented**

### **Cooperation among public and private sectors in implementation**

Implementation of Thrive Montgomery 2050 will occur over several decades and will require changes in master plans, zoning and building codes, subdivision regulations, the adequate public facilities ordinance and many other county rules and processes – they are not made in the adoption of this General Plan.

The Planning and Parks Departments will lead much of the work, but full implementation of Thrive 2050's recommendations will require collaboration or approval of other government bodies. For example, updating the zoning code will require coordination with Department of Permitting Services, while changes to street design standards require coordination with the Department of Transportation and the State Highway Administration. Agencies such as the Arts and Humanities Council will lead the creation of a new cultural plan, and the Department of Recreation, working with the Parks Department, will help expand opportunities for physical activity. The County Council will be asked to review and approve many of these efforts in both land use and budget decisions.



### The Role of the Public and Private Sectors

Market-driven development will play an important role in implementing Thrive Montgomery 2050. Montgomery County is embarking on an ambitious effort in an age of intense competition and disruption in the private sector and shrinking fiscal capacity of government entities at all levels. To successfully implement these bold ideas, the county will need to align public and private investments to maximize their long-term benefits. Future growth will be focused in a compact footprint through private sector-led real estate projects. Infill and redevelopment along major corridors will create a finer-grained network of streets and add gathering spaces that complement publicly-owned parks. Property owners will retrofit outdated buildings for new uses and enhance environmental performance by redeveloping surface parking lots and incorporating stormwater management. Private investment in diverse housing types and neighborhood serving retail will fill in missing amenities and lead to more Complete Communities. Of course, growth requires improvements and additions to public infrastructure and services. Public infrastructure is provided mainly through the county’s Capital Improvements Program (CIP), but the private sector makes important contributions pursuant to the county’s Adequate Public Facilities Ordinance and impact tax law, which require property developers to build, dedicate, or provide money for parks, roads, schools, and affordable housing. These rules are the mechanism by which new development generates revenue for the public sector to fund infrastructure improvements. New sources of funding and more effective use of county assets, such as public land and right-of-way, also may be needed. The combination of such public and private investments is the most reliable long-term strategy for attracting new residents, businesses, and a skilled workforce to high-quality Complete Communities.

The outcome will be an economically competitive and sustainable county with a strong tax base and broadly shared opportunity.

## **Modifications to other plans, policies, and rules**

Thrive Montgomery 2050 is a broad policy document and does not, in and of itself, change land uses, zoning or transportation. Key to implementing Thrive Montgomery 2050, Montgomery County will need to undertake a variety of future actions. These actions are not specified in detail in this document but will be fleshed out in future work programs for the Planning Department and other agencies.

Some future actions may include, but are not limited to:

- Reviews of existing policies, regulations, and programs;
- Studies and new master, functional, or facility plans to delve more deeply into the topics addressed in the policies, collect and analyze data, and identify detailed strategies for decision making and implementation;
- Development of tools and templates to support master planning, regulatory review and other planning processes; and
- Changes to agency governance and practices that shape how decisions are made.

## **Relationship between Thrive Montgomery 2050 and the Climate Action Plan**

Thrive Montgomery 2050 was developed in coordination with the county's Climate Action Plan (CAP). Thrive Montgomery 2050 addresses where and how land will be conserved or developed for housing, office buildings, parks, agriculture, recreation, transportation, and other types of public and private infrastructure - decisions that have a major influence on greenhouse gas emissions, carbon sequestration, and adaptation to climate change. The CAP, on the other hand, focuses on specific near-term actions to eliminate greenhouse gas emissions by 2035 and mitigate or adapt to the effects of increased heat and flooding, high winds, and drought. Thrive Montgomery 2050's climate change-related recommendations will be implemented in concert with the CAP.

## **Measuring Progress - Indicators**

The County undoubtedly will encounter issues not anticipated by this plan. The indicators listed below are intended, along with the more detailed metrics listed in previous chapters, to guide how these types of issues and potential responses should be evaluated and allow for periodic assessments of progress to inform priorities and set shorter-term goals. These indicators address the three overarching objectives of

the plan and are broader than the more specific measures included in each chapter. The following list should not be considered exhaustive and may be modified or expanded to suit future needs:

- Economic performance and competitiveness
  - Wage and job growth
  - New business formation
  - Economic output per capita
- Physical activity and public health measures
  - Daily and weekly exercise and physical activity
  - Participation in organized and informal sports and fitness activities
  - Adverse health outcomes associated with physical inactivity
- Racial equity and social inclusion
  - Racial and economic diversity of neighborhoods and schools
  - Measures of social capital, civic engagement, and community trust
  - Equitable life outcomes across race, income, age, gender, etc.
- Environmental sustainability and resilience
  - Greenhouse gas emissions
  - Vehicle miles traveled
  - Water and air quality

The indicators, along with the metrics provided in the preceding chapters, will be further refined. The list of actions that will be developed and reviewed after Thrive is adopted should include a section on indicators and metrics, providing detailed information on how the metric or indicator will be measured, the agency responsible for collecting the associated data, and how frequently the metric or indicator will be publicly reviewed and reported.



# APPENDICES

# APPENDIX A

## Compliance with state law requirements

Maryland law requires local jurisdictions and agencies to meet specific standards and requirements for the exercise of planning authority delegated by the state. In Montgomery County, these requirements are usually met through new master plans, which amend the General Plan. In some cases, state planning requirements are met through the adoption of county regulations or guidelines, which are summarized below and are incorporated by reference.

### 12 Visions of the State Planning Act

Maryland’s 2009 Planning Visions law created 12 “visions” to guide sound growth and development policy. The visions address quality of life and sustainability; public participation; growth areas; community design; infrastructure; transportation; housing; economic development; environmental protection; resource conservation and stewardship, and implementation.

Thrive Montgomery 2050’s goals and policies are consistent with and support these visions:

#### 1. Quality of Life and Sustainability

Thrive Montgomery 2050 makes recommendations designed to improve the quality of life of the county’s residents by making

#### 2. Public Participation

The Plan has been developed with broad and deep engagement with neighborhood organizations, businesses, cultural groups, religious institutions and other stakeholders. The role of land use, transportation and park planning in building civic capacity and social capital is among its central themes.

#### 3. Growth Areas

Thrive Montgomery 2050 proposes that almost all new residential and non-residential development should be located in existing and planned population and business centers near existing and planned transit such as the Metro rail stations and the bus rapid transit (BRT) corridors. All of these places are within the county’s Priority Funding Areas.<sup>2</sup>

#### 4. Community Design

The Plan emphasizes the importance of design excellence in creating Complete Communities that are attractive and lovable, foster social engagement, build a stronger sense of community, and create social and economic value.

#### 5. Infrastructure

The Plan concentrates future growth in transit accessible places where infrastructure to support current and planned growth is either

#### 6. Transportation

A safe, efficient, and multimodal transportation system with transit as the predominant mode of travel is key to creating economically resilient, equitable, and sustainable communities. The Plan emphasizes walking, biking, rolling and other non-motorized modes of travel with emphasis on moving people rather than vehicles. The plan’s recommendations for reducing travel by car are critical to meeting the county’s goal of eliminating greenhouse gas emissions by 2035.

#### 7. Housing

The Plan emphasizes the need to produce more housing of all types and sizes, especially near transit, for a range of incomes to deal with the housing affordability crisis. It recommends a range of mechanisms such as rezoning for a wider variety of residential building types and adopting innovative financing and construction techniques to increase housing choices for a diverse and aging population.

#### 8. Economic Development

The Plan is based on the idea that a compact form of development with a mix of uses and forms and high quality parks and public spaces supported by infrastructure designed to make walking, rolling, and riding transit attractive and convenient is the best way to make communities attractive to employers who need highly educated workers and want to take advantage of public and private health care and technology related assets in the county and within the Washington region

includes ambitious recommendations designed to reduce vehicle miles traveled, encourage more energy efficient buildings, and a variety of other steps to cut greenhouse gas emissions, protect water quality, and enhance tree cover and other environmental resources.

#### 10. Resource Conservation

The Plan’s recommendations on Complete Communities; compact development; heavier reliance on walking, rolling, and transit with reductions in vehicular travel; stewardship of parks and land conservation; and other environmental management strategies such as stream restoration will help protect and conserve the county’s waterways, forests, farmland, and other natural resources.

#### 11. Stewardship

Thrive Montgomery 2050 provides policy guidance to be implemented by numerous public and private entities. Successful implementation will require sustained support from government agencies, businesses, community-based organizations and residents.

#### 12. Implementation

Thrive Montgomery 2050 emphasizes the importance of indicators to track progress and evaluate how new ideas and proposals will help achieve the Plan’s objectives. It discusses the roles of public agencies, the private sector and the community in implementing the Plan’s ideas. It provides high level guidance on funding sources that will be tapped to support capital investments as well as the need to identify new funding sources and financing strategies. It also describes the policy and regulatory tools available for implementation.

## Senate Bill 236—Sustainable Growth and Agricultural Preservation Act of 2012 (SB 236)

Senate Bill 236 (SB 236) requires local jurisdictions to map and adopt specified growth tier designations to limit the proliferation of onsite sewage disposal systems and protect and conserve agricultural and other open space land.

The law stipulates the creation of four tiers of land use categories to identify where major and minor residential subdivisions may be located in a jurisdiction and what type of sewerage system will serve them. It includes a four-tier classification for all areas within a jurisdiction:

- Tier I - Areas currently served by sewerage systems.
- Tier II - Growth areas planned to be served by sewerage systems.
- Tier III - Areas not planned to be served by sewerage systems. These are areas where growth on septic systems can occur.
- Tier IV - Areas planned for preservation and conservation.

Montgomery County implemented SB 236 by adopting a Tiers Map through an amendment to the county's subdivision regulations (codified at Chapter 50, §50.4.3 of the County Code). The official map displaying the county's Growth Tier areas is located on the Planning Department's website and is incorporated by reference into Thrive Montgomery 2050.

## The Agricultural Stewardship Act of 2006 - House Bill 2 (HB 2)

House Bill 2 (HB 2) requires counties certified under the Maryland Agricultural Land Preservation Foundation to receive funding for farmland preservation to establish Priority Preservation Areas in their comprehensive plans and manage them according to certain criteria. In Montgomery County, the requirements of HB 2 are met through the Functional Master Plan for the Preservation of Agriculture and Rural Open Space.

## Economic Growth, Resource Protection, and Planning Act of 1992, as amended

### Sensitive Area Element

The 1992 Economic Growth, Resource Protection, and Planning Act required local jurisdictions to adopt a "sensitive areas" element designed to protect sensitive areas from the adverse effects of development.

Sensitive areas include streams and their buffers, 100-year floodplains, habitats of threatened and endangered species, steep slopes, wetlands and other areas in need of special protection.

In Montgomery County, the sensitive areas element was satisfied by the Planning Board's approval of the Guidelines for Environmental Management of Development in Montgomery County (the guidelines). The Guidelines are a compilation of policies and guidelines that affect the protection of sensitive resources during the development review process.

## House Bill 1141 Land Use Planning - Local Government Planning, 2006 (HB 1141)

### Water Resources Element

Local jurisdictions are also required to include a water resources planning element in their comprehensive plans. This element ensures that drinking water and other water resources will be adequate and suitable receiving waters and land areas will be available to meet stormwater management and wastewater treatment and disposal needs of existing and future development. Montgomery County met this requirement through its Water Resources Functional Plan, which was approved by the County Council in July of 2010 and adopted by the full Commission in September 2010.

## Mineral Resources Element

HB 1141 also requires local jurisdictions to include a mineral resources element in their comprehensive plans, if current geological information is available.

There are currently only two remaining mineral extraction operations in the county: The Aggregate Industries Travilah Quarry near Rockville; and the Tri-State Stone quarry on Seven Locks Road near River Road. The Travilah Quarry is zoned Heavy Industrial (IH), covers over 320 acres and is over 400 feet deep in places. It produces much of the aggregate used in construction for the National Capital Region. The Tri-State Stone quarry is



a 21.5-acre operation that produces natural stone (mica-schist quartzite) products for residential construction. Both quarries still have significant reserves and are expected to be in operation for some years to come.

When the quarries are depleted or otherwise closed, the sites will be reclaimed for other uses. In the case of the Travilah Quarry, studies have long been underway by the Interstate Commission on the Potomac River Basin, the Washington Suburban Sanitary Commission, the Metropolitan Washington Council of Governments, DC Water, and the Washington Aqueduct to use the open pit as an emergency water supply reservoir. The Potomac Master Plan recommends that should redevelopment of the area of the quarry that is not needed for the reservoir be proposed prior to another master plan amendment, an advisory group will be formed to provide the opportunity for public review.

The Tri-State Stone quarry is located in a residential development, is zoned R-200, and is a legal non-conforming use as the quarry and building supply operation predate implementation of the zone. Like similar nearby mines that were eventually closed and redeveloped as residential areas, the Tri-State quarry will be also be evaluated for reclamation and redevelopment when it closes.

Given the dwindling of commercially viable mineral deposits throughout the county, the preferred use of land in the Agricultural Reserve for agriculture, and the importance of the two large sole-source aquifers in the county, new operations to extract mineral resources are not currently expected. All existing or new mining operations will continue to be guided by master plans and other applicable law.

# APPENDIX B

## Glossary

**Accessory Dwelling Unit (ADU):** A residential unit on the same lot as an existing single-family dwelling and used as a complete, independent living facility with provisions for cooking, eating, sanitation, and sleeping. It can be within the main structure of the house, an addition to the main structure, or a separate structure on the same lot.

**Active transportation:** Non-motorized forms of transportation, such as walking, biking and rolling via wheelchair, scooter, or other conveyance.

**Affordable housing:** Housing that is either built under a government regulation or a binding agreement that requires the unit to be affordable to households at or below specified income levels or is available at market prices that achieve the same result. The moderately-priced dwelling unit (MPDU) program’s income requirements typically set the price of units at levels affordable to households earning 65 percent of area median income (AMI) for garden apartments, and 70 percent (AMI) for high-rise apartments.

**Agricultural Reserve:** A designated area of Montgomery County planned and zoned primarily for agricultural uses that includes the majority of the county’s remaining working farms and certain other non-farm land uses.

**Attainable housing:** Housing that is both affordable to households at a range of income levels and suitable for needs of these households. Implicit in the concept of attainable housing is the idea that a range of housing options (type, size, tenure, cost) exists in the local market.

**Area median income (AMI):** The midpoint of a region’s income distribution – half of households in a region earn more than the median and half earn less than the median. For housing policy, income thresholds set relative to the area median income—such as 50% of the area median income—identify households eligible to live in income-restricted housing units and the affordability of housing units to low-income households.

**Biophilic design:** The practice of designing the built environment with a focus on connecting people with nature. See more on <https://www.metropolismag.com/architecture/what-is-and-is-not-biophilic-design/>

**Built environment:** Any manmade building, structure, or other intervention that alters the natural landscape for the purpose of serving or accommodating human activity or need. It includes cities, buildings, urban spaces, infrastructure, roads, parks, and any ancillary features that serve these structures.

**Bus rapid transit (BRT):** A fixed-guideway transit system where buses operate in dedicated lanes, either physically or through signing and marking, distinct from general purpose lanes used by automobiles. BRT systems also typically include off-board fare collection systems and advanced transit information systems.

**Capital Improvement Program (CIP):** A six-year comprehensive statement of the objectives with cost estimates and proposed construction schedules for capital projects and programs for all agencies for which the county sets tax rates or approves budgets or programs. Examples include the construction of public schools, street maintenance, and parks improvements.

**Central Business Districts (CBDs):** downtowns or major commercial centers. Montgomery County has four areas officially designated in the County Code as Central Business Districts: Bethesda; Friendship Heights; Silver Spring; and Wheaton.

**Civic capacity:** The capacity of individuals in a democracy to become active citizens and to work together to solve collective problems and of communities to encourage such a participation in their members.

**Climate Action Plan:** In July 2019, Montgomery County launched a planning process to develop prioritized actions and strategies to meet the county’s greenhouse gas emissions reduction goals. The county released a draft Climate Action Plan in 2020.

**Climate change:** A change in global or regional climate patterns, particularly the change apparent from the late 20th century onwards attributable largely to increased levels of atmospheric carbon dioxide produced by the use of fossil fuels.

**Co-housing:** Semi-communal housing consisting of a cluster of private homes and a shared community space (such as for cooking or laundry facilities).

**Co-location:** Locating more than one public facility in one place. For example, locating a library and a park on the same property or next to each other.

**Commercial centers:** A broad grouping of areas of high commercial activity with a concentration of jobs, retail, housing, transit and other ancillary uses and support services. It includes central business districts, downtowns, and town centers.

**Compact form of development:** The practice of consolidating development of the built environment in ways that place buildings and infrastructure close together to reduce walking, biking, or driving distances and to make efficient use of land. According to Growing Cooler, The Evidence on Urban Development and Climate Change, “The term “compact development” does not imply high-rise or even uniformly high density, but rather higher average “blended” densities. Compact development also features a mix of land uses, development of strong population and employment centers, interconnection of streets, and the design of structures and spaces at a human scale.”<sup>3</sup>

**Community land trust:** A homeownership mechanism used to ensure long-

term housing affordability. The trust acquires land and maintains ownership of it permanently. The trust enters a long-term, renewable lease with prospective homeowners instead of a traditional sale. When the property is sold, the homeowner earns only a portion of the increased property value. The remainder is kept by the trust, preserving the affordability for future low- to moderate-income families.

**Concentration of poverty:** Neighborhoods where a high proportion of residents live below the federal poverty threshold.

**Conditional use:** A conditional use, previously known as a “special exception,” is a use that is not permitted as a matter of right in the zone where it is located but may be allowed subject to a review process administered by a hearing examiner.

**Congestion pricing:** Congestion pricing (also called decongestion pricing) is a mechanism to reduce traffic congestion by charging a fee for vehicles entering a certain area, usually a commercial center, during rush hours. In addition to reducing traffic through shifting some of the traffic to non-rush hours, it also helps improve air quality and other modes of travel such as walking and bicycling.

**Connectivity:** The number of ways and variety of options to reach multiple destinations. There are many different ways to define connectivity for land use purposes. For example, subdivisions with dead end streets may have poor connectivity with surrounding land uses. A grid street pattern often provides more options to connect with destinations within or outside a neighborhood or commercial center. Connectivity also implies non-physical means (telephone, internet, social media, etc.) to connect with others.

**Cooperative housing (or co-op housing):** An alternative to the traditional method of homeownership. In cooperative housing, the residents own a part of a corporation that owns and manages the building.

**Corridor:** An uninterrupted area of developed or undeveloped land paralleling a



transportation route (such as a street, highway, or rail) or the land within one-quarter mile of both sides of designated high-volume transportation facilities, such as arterial roads. If the designated transportation facility is a limited access highway, the corridor extends one-quarter mile from the interchanges.

**Cost-burdened household:** A household that spends 30% or more of its income on housing costs.

**Density:** A measure of the amount of development on a property. Density is often expressed as the number of residential units per acre of land (or another unit of measure), or the total amount of residential or commercial square footage on a property. When expressed as the ratio of residential or commercial square footage to square footage of lot area, it is called Floor Area Ratio (FAR).

**Design guidelines:** A set of guidelines intended to influence the design of buildings, landscapes and other parts of the built environment to achieve a desired level of quality for the physical environment. They typically include statements of intent and objectives supported by graphic illustrations.

**Disadvantaged People:** Places that are affected most by economic, health and environmental burdens, including low-incomes, poverty, high unemployment, lack of access to jobs and quality education, and increased risk of health problems.

**Downtowns:** Downtowns are Montgomery County's highest density areas including central business districts and urban centers. They are envisioned to have dense, transit-oriented development and a walkable street grid (existing or planned). These areas are envisioned to share several of the following characteristics: identified as central business districts and/or major employment centers; high levels of existing or anticipated pedestrian and bicyclist activity ; high levels of transit service; street grid with high levels of connectivity; continuous building frontage along streets, with minimal curb cuts; and mostly below ground or structured parking.

**Duplex:** A residential structure that typically resembles a single housing unit but contains two dwelling units. It can be arranged as two units next to each other sharing a common wall, or one unit above the other.

**Employment centers:** Areas with a high concentration of jobs.

**Equity:** just and fair inclusion into a society where all can participate and prosper. The goal of equity is to create conditions that allow all to reach their full potential. Equity and equality are often confused, but equality only achieves fairness if everyone starts from the same place and needs the same help. Equality may be defined as treating every individual in the same manner irrespective of needs and requirements.

**Equity Focus Areas:** Equity Focus Areas are parts of Montgomery County that may experience the highest inequities in access to community amenities and other resources to support a good quality of life.

**Functional master plan:** A master plan addressing either a county-wide system, such as circulation or green infrastructure, or a policy, such as agricultural preservation or housing. A functional master plan amends the General Plan but does not make land use or zoning recommendations.

**Green infrastructure:** The interconnected network of natural areas (forests, 100-year floodplains, wetlands, meadows, and streams and their buffers) and conservation parks that comprise natural ecosystems and provide environmental services.

**Greenfield development:** Development on undeveloped land or land previously used for agriculture or left to evolve naturally.

**Greenhouse gas (GHG) emissions:** Gases that trap heat in the atmosphere, such as carbon dioxide, methane, nitrous oxide, and fluorinated gases.

**Growth Policy:** A set of rules and guidelines governing the obligations of private developers to contribute toward the cost and construction of public facilities such as roads and schools needed to accommodate new growth.

**High-Quality Transit:** Includes rail and bus rapid transit service that is reliable, frequent, fast and comfortable. Generally, the transit service should be so frequent that passengers do not need to consult a schedule.

**Housing First Initiative:** Housing First is a homeless assistance approach that prioritizes providing permanent housing to people experiencing homelessness, thus ending their homelessness and serving as a platform from which they can pursue personal goals and improve their quality of life. This approach is guided by the belief that people need basic necessities like food and a place to live before attending to anything less critical, such as getting a job, budgeting properly, or attending to substance use issues. Additionally, Housing First is based on the theory that client choice is valuable in housing selection and supportive service participation, and that exercising that choice is likely to make a client more successful in remaining housed and improving their life.

**Housing Initiative Fund (HIF):** Administered by the County's Department of Housing and Community Affairs, funding is used to provide loans to support production of new affordable housing, acquisition and preservation of existing affordable housing, and subsidies to make housing affordable to very low-, low-, and moderate-income tenants. Funding is also used to support homeownership programs. The fund receives revenue from a variety of sources including taxes, proceeds from bonds, and loan repayments.

**Impervious surfaces:** Any surface that prevents or significantly impedes the infiltration of water into the underlying soil, including any structure, building, patio, road, sidewalk, driveway, parking surface, compacted gravel, pavement, asphalt, concrete, stone, brick, tile, swimming pool, or artificial turf.

**Infrastructure:** The built facilities, generally publicly funded, required to serve a

community's development and operational needs. Infrastructure includes roads, water supply and sewer systems, schools, health care facilities, libraries, parks and recreation, and other services.

**Land use:** The use of any pieces of land through buildings or open land for activities including housing; retail; commerce; manufacturing; roads; parking; parks and recreation; and institutional uses such as schools, healthcare and all other human activities.

**Land use plan:** The land use element of an approved and adopted general, master, sector, or functional plan.

**Land value capture (LVC) or Value Capture:** A method of funding infrastructure improvements based on recovering all or some of the increase in property value generated by public infrastructure investment. LVC can help mitigate the challenges cities face in obtaining public funding, while also providing benefits to private sector partners.

**Mandatory Referral:** The Maryland State law and review process that requires all county, state and federal agencies and public utilities to refer any land use changes/improvements and infrastructure projects in Montgomery and Prince George's counties to the M-NCPPC for advisory review and approval.

**Master plans:** Master plans (or area master plans, or sector plans) are long-term planning documents that provide detailed and specific land use and zoning recommendations for a specific place or geography of the county. They also address transportation, the natural environment, urban design, historic resources, public facilities, and implementation techniques. All master plans are amendments to the General Plan.

**Mass timber:** Specialized wood building construction using engineered wood products created through lamination and compression of multiple layers to create solid panels of wood that are used as structural elements to frame a building's walls, floors, and roofs.

**Missing middle housing:** The term missing middle housing encompasses a variety of housing types that range from low- to medium densities such as duplexes; triplexes; quadplexes, live-work units; and clustered housing such as townhouses, courtyard dwellings and smaller apartment buildings.

**Mixed-income housing:** Housing units affordable to a broad range of income levels.

**Mixed-use development:** A development that typically contains residential and commercial uses in the same building or within a small area. For example, a residential building with ground floor retail is a typical mixed-use development.

**Moderately Priced Dwelling Unit (MPDU):** Montgomery County’s inclusionary zoning program that requires a minimum of 12.5-15 percent of new units in a development to be affordable to renter households earning up to 65 percent of area median income for garden-style apartments and up to 70 percent for high-rise apartments and for-sale affordable units for households earning 70 percent or less of area median income.

**Montgomery County Zoning Ordinance:** Chapter 59 of the Montgomery County Code, which contains the zoning controls to regulate the use and development of all private property in the county. It generally defines permitted uses, maximum building floor area or the maximum number of units permissible on each property, and maximum building heights, minimum setbacks, open space and other requirements to shape all buildings and related improvements.

**Multifamily housing:** A building containing three or more dwelling units on a single lot.

**Naturally occurring affordable housing:** Market-rate residential units that are affordable to low and middle-income households without public subsidies. It generally refers to rental housing but can include ownership properties as well.

**Nodes:** Places where people and transportation routes congregate.

**Payment in Lieu of Taxes (PILOT):** PILOTs allow local governments, when authorized by state law, to receive negotiated payments instead of applicable real estate and special district taxes for a certain period of time. The intent is to help lower the cost of development in return for a commitment from a developer to provide a public benefit such as affordable housing to low-income residents. <https://www3.montgomerycountymd.gov/311/Solutions.aspx?SolutionId=1-5JQAZZ>

**Public space:** Open area or building space available for use and enjoyment by the public.

**Public realm:** Any open space or built environment that is open to the public for access and enjoyment. Typically, the public realm includes roads, sidewalks, streetscapes, and public spaces. An expanded definition of public realm includes all that is visible from a public space. For example, building facades of private buildings as they line the streets or surround a public plaza are part of the experience of walking through the street or the plaza. A neon sign on a private building becomes part of the perception of the overall space.

**Public-private partnership:** A cooperative arrangement between at least one public and one private sector entity to carry out a project or initiative.

**Purple Line:** A 16-mile rapid transit line extending from Bethesda, MD, (Montgomery County) to New Carrollton, MD, (Prince George’s County). The Purple Line will connect directly to the Metrorail Red, Green, and Orange Lines.

**Race:** A social construct that artificially divides people into distinct groups based on characteristics such as physical appearance (including color), ancestral heritage, cultural affiliation, cultural history, ethnic classification, and the social, economic and political needs of a society at a given period. This definition is cited directly from Montgomery County Bill 27-19 (lines 49-53).

**Rail or Rail transit:** In Montgomery County rail transit includes Metrorail, the Purple Line, and

Maryland Area Regional Commuter (MARC) train service.

**Redlining:** Redlining in the context of land use refers to discriminatory real estate practices designed to prevent African American or other groups from obtaining mortgage loans in certain neighborhoods. In 1935, the Federal Home Loan Bank Board (FHLBB) asked the Home Owners’ Loan Corporation (HOLC) to look at 239 cities and create “residential security maps” to indicate the level of security for real estate investments in each surveyed city. On the maps, the newest areas—those considered desirable for lending purposes—were outlined in green and known as “Type A.” These were typically affluent suburbs on the outskirts of cities. “Type B” neighborhoods, outlined in blue, were considered “Still Desirable,” whereas older “Type C” were labeled “Declining” and outlined in yellow. “Type D” neighborhoods were outlined in red and were considered the riskiest for mortgage support. These neighborhoods tended to be the older districts in the center of cities; often they were also African American neighborhoods.

**Right-of-way:** The legal right, established by usage or grant, to pass along a specific route through grounds or property belonging to another. In this document, this term generally describes the land available for roads, sidewalks, utility lines, and transit infrastructure.

**Shared housing:** A rental housing unit where two or more people live and share rent, utilities, and other housing related costs.

**Single-family home (or unit):** A single-family home or unit is one primary residence on a recorded piece of land. A single-family detached home is a stand-

alone structure that does not share any walls with another housing unit. A duplex has two side-by-side units with a shared party wall. Duplexes are considered semi-detached single-family units. Townhouses are considered attached single-family homes.

**Single-family neighborhoods:** Neighborhoods that predominately include single-family detached and/or attached homes. These neighborhoods are typically in zones that restrict other types of housing or development.

**Social capital:** the combination of trust, interpersonal relationships, a sense of belonging, shared norms and values, respect and appreciation for diversity, sense of mutual obligation and reciprocity, and other factors that contribute to the willingness and ability of members of a community to cooperate and communicate with each other effectively to achieve shared objectives.

**Social justice:** Equitable access to wealth, opportunity, and privileges. It encompasses the idea that no individual and group should have a disproportionately higher share of political and economic power than all other individuals and groups leading to a just society.

**Sprawl:** A pattern of low-density suburban development that is highly dependent upon the automobile as the main form of travel and is considered the source of today’s traffic congestion, environmental degradation and other issues associated with the growth of suburbs since at least World War II.

**Stormwater management:** The collection, conveyance, storage, treatment, and disposal of stormwater runoff to prevent accelerated channel erosion, increased flood damage, and degradation of water quality.

**Streetscape:** The improvements within and adjoining a street right-of-way that influence our perception of streets. It includes the width of the roadway, street

trees and landscaping, sidewalk/pavement, street lighting, and other street furniture.

**Sustainability:** the practice of meeting the economic, social, and environmental needs of the present without compromising the ability to meet the needs of the future.

**Tax increment financing (TIF):** A tool that subsidizes new development by refunding or diverting a portion of the tax increase resulting from redevelopment of a property to help finance development in an area or (less frequently) on a project site.

**Town centers:** Town centers are similar to downtowns but generally feature less intense development and cover a smaller geographic area. They typically have high- to moderate-intensity residential development, including multi-family buildings and townhouses, and retail (existing or planned). Town centers share the following characteristics: a regional or neighborhood-serving retail node with housing and other uses; medium to high levels of pedestrian and bicyclist activity; medium levels of existing or planned transit service; a street grid that ties into the surrounding streets; continuous building frontage along streets, with some curb cuts; a mix of structured and underground parking as well as surface parking lots.

**Transfer of Development Rights (TDR):** A zoning mechanism that, in Montgomery County, grants property owners in the Agricultural Reserve one development right for each five acres of land. These development rights can be sold (transferred) to landowners or developers who can use them to develop at a higher density in designated areas elsewhere in the county.

**Transit:** In Thrive Montgomery 2050, transit, or public transit, means a public transportation system for moving passengers by rail, buses, and shuttles.

**Transit-oriented Development (TOD):** A mixed-use development within walking

distance (up to one-half mile) of a transit stop. TODs typically have sufficient development density to support frequent transit service and a mix of residential, retail, office, and public uses in a walkable environment, making it convenient for residents and employees to travel by transit, bicycle, or foot.

**Transportation networks:** A set of transportation facilities including highways and roads, rail lines, transit facilities, trails, and bike paths that together form the transportation system of a jurisdiction or a region.

**Tree canopy:** The layer of leaves, branches, and stems of trees that cover the ground when viewed from above and that can be measured as a percentage of a land area shaded by trees.

**Triplex:** A residential structure that contains three units.

**Underutilized properties:** A vacant property or one that is developed at an amount less than permitted by the applicable zoning controls.

**Urbanism:** The best characteristics of cities and centers of human settlements including a compact building form; shorter distances between destinations; a mix of uses such as a mix of living and work places in a variety of buildings types in close proximity to each other; and streets that are safe for walking, biking and other forms of travel without being dominated by vehicles.

**Urban design:** The process of giving form, shape, and character to the arrangement of buildings on specific sites, in whole neighborhoods, or throughout a community. Urban design blends architecture, landscaping, and city planning concepts to make an urban area accessible, attractive, and functional.

**Value Capture:** See land value capture

**Vehicle miles traveled (VMT):** The amount of travel for all vehicles in a geographic region over a given period.

**WalkUPS:** WalkUPS are high-density places, walkable places with multiple modes of transportation and the integration of many different real estate products in once place. A 2019 study by the Center for Real Estate and Urban Analysis, using the Brookings methodology as a guide, defines WalkUPS as urban places with more than 1.4 million square feet of office and/or more than 340,000 square feet of retail in pedestrian friendly walkable environment with a Walk Score® of 70 or greater.

<https://cpb-us-e1.wpmucdn.com/blogs.gwu.edu/dist/a/326/files/2019/06/FTA19.pdf>

**Wedges and Corridors:** The planning framework underlying the 1964 General Plan for Montgomery and Prince George’s counties. The concept was created in 1960 for the entire Washington, DC, region. The corridors were the major interstate highways radiating out of Washington, DC, which was envisioned to be the major employment center of the region. Each corridor was meant to have a string of cities (corridor cities) designed to accommodate most future residential. The wedges were the triangular-shaped pieces of land between the corridors.

**Zone:** A land classification under the Montgomery County Zoning Ordinance intended to regulate the land uses and buildings permitted in each zone. Certain uses are permitted by right and others as conditional uses. Any use not expressly permitted is prohibited. A zone also regulates building height, setback open space and other requirements.

**Zoning:** The practice of classifying different areas and properties in a jurisdiction into zones for the purpose of regulating the use and development of private land. Each zone specifies the permitted uses within each zone, the maximum size and bulk of buildings, the minimum required front, side and back yards, the minimum off-street parking, and other prerequisites to obtaining permission to build on a property.

**Zoning Ordinance:** see Montgomery County Zoning Ordinance.

