FEBRUARY 2020

Thrive Montgomery 2050
ISSUES REPORT

Montgomery Planning
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Executive Summary

Montgomery County has evolved over the past 50 years from a bedroom community to a complex jurisdiction with major employment centers, urban hubs, swaths of single-family neighborhoods, rural landscapes and a diverse population of over a million. The county's 1964 General Plan and subsequent plans and policies have resulted in a high quality of life supported by a strong economy, a public school system ranked among the top in the country, a local and regional transit network, a highly prized network of parks and open spaces, low crime, extensive public services and other amenities.

Today, the county is far more diverse than it was in 1964. It is an extremely varied blend of cities, towns, villages, suburban neighborhoods, farms and open space. The county is no longer defined by its past as a suburban and rural white-majority county but rather its identity is inexorably connected to the diversity of the population, the diversity of living and working experiences and the diversity of natural and built environments found within its borders.

Looking ahead, the county faces economic, demographic, technological, climate change and other challenges. Montgomery Planning has launched the update to the county's General Plan, the county's long-term framework for land use and development. This effort, called Thrive Montgomery 2050, will result in new countywide policies to help Montgomery County thrive by addressing the challenges and opportunities in decades to come. Planning for the next 30 years will require a shift in mindset to prepare for a very different time and place where the pace of change is much faster than in the past. Montgomery County must be nimble and adaptable in order to meet and harness both anticipated and unanticipated challenges to benefit its citizens and to thrive.

In January 2019, the Planning Board approved a Strategic Framework of three main outcomes for the General Plan update: economic health, community equity and environmental resilience. These outcomes were based on input from a group of government and institutional leaders in the county and experts in the fields of planning and development. Taken together, these outcomes embody a long-term vision for the county that Thrive Montgomery 2050 will help to achieve. They are cross-cutting and permeate the issues that will be addressed in Thrive Montgomery 2050. The outcomes, in turn, are impacted by current and future trends, such as demographic shifts, economic forces, technological innovations and climate change.

This Issues Report is part of a series of documents to be produced in the course of preparing Thrive Montgomery 2050. It will serve as the basis for the next step in the General Plan update process - developing a draft of the goals and policies for the Plan.

The issues presented in this report are informed by extensive community outreach and feedback from all stakeholders during the first phase of the project. The input received was about short-term issues and concerns that will be addressed through area master and sector plans as well as about broader, more long-term concerns. Thrive Montgomery 2050 will be focused on these long-term, more global concerns – as is appropriate for a long-term policy document.

The issues have been grouped into eight categories: Complete Communities, Connectedness, Diverse Economies, Safe and Efficient Travel, Affordability, Healthy and Sustainable Environment, Diverse and Adaptable Growth, and Culture and Design. These categories will become the chapters of the final Thrive Montgomery 2050 Plan. The first paragraph in each section (in italics) is the explanation and vision statement for each category.

The next phase of the Thrive Montgomery 2050 Plan development will propose a draft set of goals and policies to address the issues contained in this report. Montgomery Planning will continue to elicit ideas, suggestions and comments from all stakeholders through summer 2020. A draft Thrive Montgomery 2050 Plan will be published in September 2020 for public review and feedback, followed by a Planning Board public hearing on the draft plan in November 2020. Planning Board work sessions to review public testimony and finalize the draft plan will occur through February 2020. In March 2021, staff will transmit the Planning Board Draft to the County Executive and the County Council for their review and approval.

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Introduction

What is Thrive Montgomery 2050?

A General Plan is a policy document that guides, over multiple decades, how a jurisdiction will develop and change over time, maintain its important assets, and respond to future opportunities and challenges. Unlike a sector plan, master plan or functional plan, a General Plan does not provide specific land use guidance to address short-term issues in targeted geographic areas; it does not change zoning; and it addresses multiple topic areas, rather than just one. A General Plan is a long-term vision with broad policies that will guide future, more detailed land use planning, public investments in infrastructure and community amenities, and private development.

The first General Plan for Montgomery County, *On Wedges and Corridors, A General Plan for the Physical Development of the Maryland-Washington Regional District in Montgomery and Prince George's Counties*[1] (the 1964 General Plan or the Wedges and Corridors Plan), was adopted in 1964, updated in 1969, and last refined in 1993. It established the foundation of land use planning for Montgomery County, and has guided all subsequent land use planning and development policies. It has been continually updated with amendments through local master plans, sector plans and countywide functional plans. The goals of the 1964 General Plan and the 1969 Update (efficient land use, preservation of open spaces, opportunities for recreation, protection of environmental resources, connective transportation systems and a variety of living environments) continue to be relevant and essential. But tremendous and rapid technological, social, environmental, demographic and economic changes necessitate a fresh look at the long-range planning framework for Montgomery County.

The Montgomery County Planning Department (Montgomery Planning) has launched an update to the county's General Plan. This effort will result in a new General Plan, called Thrive Montgomery 2050, that will define a broad vision for the next 30 years and create a set of countywide policies to help Montgomery County realize the vision. It will identify the kind of economic, housing, environmental, transportation and other infrastructure improvements and growth policies needed to get there. This guidance will then be implemented through subsequent master plans, zoning, public investments in infrastructure and community amenities, private development and other mechanisms. For example, the county is currently preparing a Climate Action Plan[2] to reduce the county's greenhouse gas (GHG) emissions 80 percent by 2027 and eliminate them by 2035. The Climate Action Plan and Thrive Montgomery 2050 will complement each other as Thrive Montgomery 2050 will provide long-term high-level policy guidance while the Climate Action Plan will be a list of prioritized actions to be implemented after its adoption in December 2020.

The Issues Report

The first step toward developing Thrive Montgomery 2050 is to identify the issues facing Montgomery County over the next 30 years. This Issues Report is that first step. It is one of a series of documents to be shared with the community during the Plan development process. It was developed through extensive community outreach between June 2019 and January 2020. Montgomery Planning staff conducted numerous stakeholder interviews, meetings with individuals and groups, held outreach events, and gathered the community's issues and ideas about how to address them through web questionnaires, marketing and other methods. (See Appendix-Community Outreach, a separate document). Many of the issues staff heard from the community

[1] https://montgomeryplanning.org/planning/master-plan-list/general-plans/wedges-corridors-general-plan-1964/
[2] https://www.montgomerycountymd.gov/green/climate/climate-action-planning.html

either required more immediate actions or were more suitable to be addressed through local area master plans, county or state initiatives, or other mechanisms. Therefore, staff have focused on the issues most relevant to the General Plan.

Montgomery Planning staff conducted several studies in recent years looking at issues such as the office and retail real estate markets, the state of rental housing, and an assessment of the implementation of master plans, among others. Staff also analyzed county, regional and national data, conducted literature reviews, and sought opinions of experts in a variety of fields. Based on this feedback and staff's own professional knowledge and assessment of existing conditions and future challenges, staff published a Memorandum to the Planning Board[3] comprising a preliminary list of major issues and presented it to the Planning Board on December 12, 2019. Staff continued to receive feedback from the community and other stakeholders until January 16, 2020.

In addition to identifying the major issues, this report also raises questions about how we should grow in the future to address the issues identified in the report. These questions are meant to inspire innovative approaches to solving the most pressing issues known to us today and to spark new ways to look at the future challenges.

Next steps

Montgomery Planning staff will continue to collaborate with the community for ideas and suggestions on the next phase of Plan development: drafting a list of goals and policies to address the issues presented in this report.

- In April 2020, Montgomery Planning will share a draft a list of goals and policies with the public.
- Montgomery Planning will continue to engage with the community to receive feedback on the draft goals and policies through June 2020.
- In September 2020, Montgomery Planning will publish the first draft of the Thrive Montgomery 2050 Plan for public review and feedback.
- In November 2020, the Planning Board will hold a public hearing on the draft Plan, followed by Planning Board worksessions through February 2020 to review public testimony and finalize the draft Plan.
- In March 2021, the Planning Board will finalize the draft Plan and transmit it to the County Executive and the County Council for their review and approval.

[3] https://montgomeryplanningboard.org/wp-content/uploads/2019/11/Staff-Memo-for-12-12-PB-issues-briefing-FINAL.pdf

Context and Background

Montgomery County is a great place to live, work, and play. But it didn't happen by accident. Its desirable urban, suburban and rural communities with vibrant parks, recreation centers, quality schools and other amenities, and the Agricultural Reserve, were all shaped by past plans and policies. The most important plan of the past 50 years that set the course for all future planning and development in the county was the 1964 General Plan of Wedges and Corridors.

The 1964 General Plan guided the growth of the county over the ensuing 50 years. When it was written, much of Montgomery County was farmland. The Plan laid out the broad planning principles based on the "Wedges and Corridors" concept. These principles have worked, and the county has grown in an orderly fashion into an economic engine for the state and a desirable home to more than a million people.

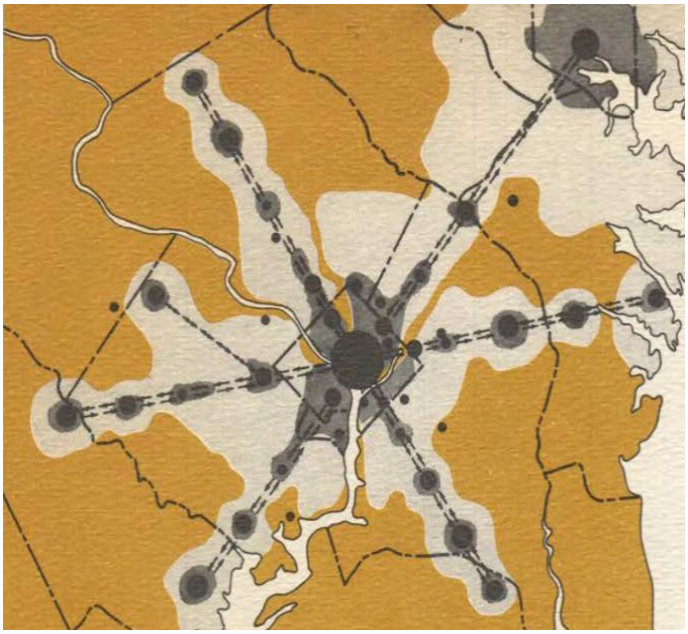

Figure 1: The 1964 "Wedges and Corridors" concept for the development of the Washington DC region

"Corridors" were the major interstate highways radiating out of Washington, D.C., 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 of the residential growth of the future. The "wedges" were the triangular-shaped pieces of land between the corridors.

Key Differences

A unique feature of Montgomery County in the 21st century is diversity, in the broadest sense: diverse types of communities, diverse modes of travel, a diversified economy, racial and ethnic diversity, and ecological diversity.

Increasing racial and ethnic diversity outpaced the county's overall population growth since the 1990s, steadily increasing the percentage of people of color in the total population (see ATTACHMENT 1 and ATTACHMENT 2). In 2018, people of color comprised 57 percent of the total population making Montgomery County more diverse than the nation (39.8 percent), Maryland (49.8 percent), and the Washington, D.C. region (55.1 percent). The proportion of people of color is projected to steadily increase to 73 percent in 2045.[4]

Looking at future growth in Montgomery County, it is important to recognize that the footprint of development in the county is largely in place. Different types of urban, suburban and rural neighborhoods and commercial centers of varying densities are supported by a transportation network of highways, major and local roads, an extensive public transit system including Metro lines

[4] *Source: 1990 US Census, 2016 American Community Survey, 1-year estimate*

and buses, and a green network of local and regional parks and other natural features. Most of the land is already built upon or planned for development, is part of the critical open space including parkland and environmentally sensitive areas, or designated as the Agricultural Reserve.

There are few remaining vacant or greenfield properties (farmland, golf courses, etc.) of the type that accommodated the growth of the post WWII period, especially single-family subdivisions. Today, approximately 85 percent of the county's land area is constrained by environmental and other factors leaving only about 15 percent land available to accommodate future growth. (see ATTACHMENT 3).

The next stage of the county's growth will be defined by infill and redevelopment[5] for a diverse population living in a far-advanced technological era threatened by climate change. It will require a new planning paradigm. Building more roads and highways alone, for example, will not solve the traffic problem if there is no land use solution to fix the basic cause of the traffic congestion: the separation of uses by long distances, especially when most housing and jobs are not located near transit.

Table 1: Percentage of land use by category

LAND USE	PERCENT TOTAL
Single Family	34.9%
Agriculture	23.2%
Parks	19.2%
Vacant/Under Construction	7.2%
Institutional/Community Facility	4.4%
Open Space/Recreation	4.2%
Commercial	2.7%
Multi-Family	1.9%
Utility	1.4%
Industrial	0.8%
Parking and Transportation	0.3%

The highest share of the county's land area, about 35 percent, is used by single-family detached houses and townhouses (including rights-of-way within these single-family areas) (see ATTACHMENT 4)

Regional Context

The Washington Metropolitan Statistical Area, which includes Montgomery County, is one of the largest regional economies in the nation. It ranks fifth among MSAs in gross domestic product (GDP), accounting for 3 percent of the total U.S. metropolitan GDP. Like all major economic regions across the country, the various jurisdictions in the Washington, D.C. region compete for jobs and economic growth. They also share issues such as traffic congestion, housing affordability, and climate change as traffic problems do not stop at administrative boundaries. All benefit from the collective growth and prosperity of the region. And although the county is not officially considered part of the Baltimore MSA, it has strong ties to the Baltimore region as well.

Thrive Montgomery 2050 will consider not only future growth within the boundaries of Montgomery County, but will also need to consider the regional context and Montgomery County's role in the region. The county cannot operate within a metaphorical silo but must reckon with the regional forces influencing growth and change.

[5] Infill means development of the remaining vacant parcel of land generally surrounded by already-developed land. Redevelopment refers to properties with low-intensity developments being redeveloped with higher-intensity uses. One example of redevelopment is the Pike & Rose mixed-use development that replaced a one-story strip shopping center in White Flint.

Figure 2: Wedges and Corridors concept in 1964

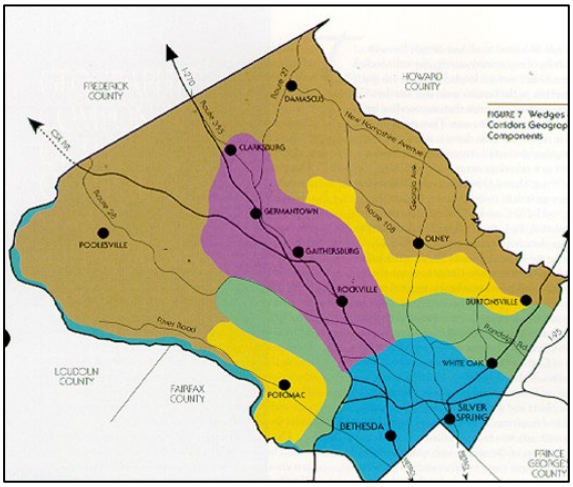

Figure 3: Wedges and Corridors concept in 1993

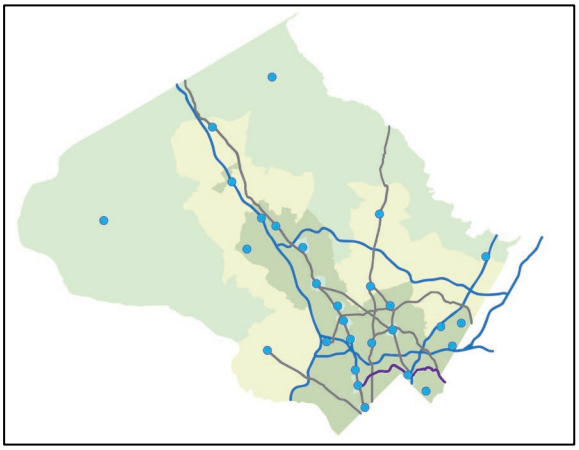

Figure 4: A "web" of corridors with nodes and activity centers in 2019

Figure 2 shows the 1964 regional planning concept of Wedges and Corridors as it applied to Montgomery County. Montgomery County had only one corridor: I-270 with "corridor cities" of Bethesda, Rockville, Gaithersburg, Germantown, and Clarksburg.

Figure 3 shows the 1993 Plan's interpretation of the Wedges and Corridor concept as it evolved over time to respond to demographic, economic, technological and other changes. It shows multiple corridors to support more "activity centers" than just the corridors cities envisioned in the 1964 Plan.

Figure 4 shows a similar graphic representation of the county's land use pattern today. It has a "web" of corridors in the southern half of the county with a variety of small and large employment and activity centers, most of them along Metro or the planned bus rapid transit corridors.

A Strategic Framework for Thrive Montgomery 2050

In January 2019, the Planning Board approved a strategic framework for Thrive Montgomery 2050.[6] It was designed to be an organizing structure and a tool for approaching the Plan update process. The framework consisted of three main themes or outcomes. They permeate all other issues and areas of concern and, in turn, are impacted by all major changes and trends, such as demographic shifts, economic forces, technological innovations, lifestyle preferences and climate change. The three outcomes are:

> Economic Health. Montgomery County will have a forward-looking economy that is strong and competitive, with a variety of stable and well-paying jobs.
>
> Community Equity. Montgomery County will be a place where all residents, regardless of race, age, religion, ethnicity, national origin, income, physical ability or gender, have equal access to affordable housing, healthy food options, parks and open spaces, facilities and services, employment opportunities, a quality education and a variety of mobility options.
>
> Environmental Resilience. Montgomery County will be prepared to address the threats of climate change and uses the best available strategies to protect both built and natural resources to allow them to be enjoyed by future generations.

Figure 5: A Strategic Framework for Thrive Montgomery 2050

The vision for Thrive Montgomery 2050 is to create a pathway for balancing these three outcomes. For example, a healthy and robust economy should equally benefit all segments of the community while preserving and enhancing the health and resilience of the environment. A negative disruption to any one of these three outcomes will require a response by the public and private sectors to eliminate or mitigate the threat, implement innovative solutions and restore the desired level of performance among the three outcomes.

Thrive Montgomery 2050 will build upon the foundation already set by the 1964 General Plan and all subsequent plans and policies. It will not abandon the Wedges and Corridors concept, but rather will modernize and refine it for the next 30 years to be relevant for tomorrow's challenges. The Plan will provide a framework for how to accommodate new growth in a highly built-out county and harness technological innovations in order to thrive in the future.

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[6] https://montgomeryplanning.org/wp-content/uploads/2019/06/2019-0619-Revised-Framework-Report.pdf

Major Issues

The overriding question for Thrive Montgomery 2050 is how to plan for a county with an anticipated growth of more than 200,000 people within the next 25-30 years so that the county will be a thriving place with a strong economy, community equity, and environmental resiliency. How can we grow in a way that retains and enhances what we have and cherish today while addressing challenges such as housing affordability, environmental degradation, traffic congestion, and social injustice?

The issues presented in this report relate to the three primary outcomes for the Plan: Economic Health; Community Equity; and Environmental Resilience. Most of these issues are not isolated, standalone issues, they impact each other in several ways. For example, traffic congestion is made worse by a land-use pattern where jobs require commutes over long distances with no transit connections. The lack of affordable housing near jobs in transit locations forces people to live farther out in places with no or minimal transit causing increased vehicular travel, which leads to increased GHG emissions. Similarly, lack of adequate transit is a mobility issue but has serious social equity implications with profound effect on the ability of low-income communities to access jobs and other opportunities.

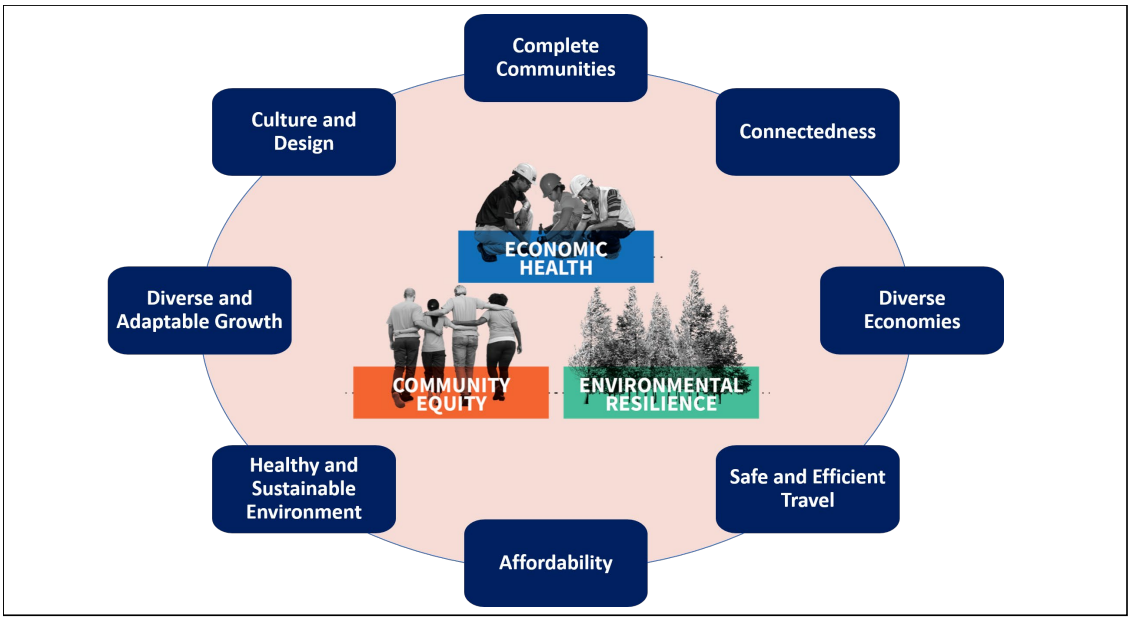

Figure 6: Issue categories and the Strategic Framework

Because of the overlapping nature of the issues, they are grouped into categories that reflect the common theme(s) and the complex interaction among the issues. For example, the lack of easy and convenient walkable and bikeable connections, and the lack of diverse housing types to encourage and accommodate residents of various ages, incomes, and ethnic backgrounds indicate that our neighborhoods are lacking certain desirable characteristics. Therefore, these types of issues have been grouped into the Complete Communities category. Similarly, Connectedness includes multiple issues that point to a need for strong social connections among the residents of a neighborhood.

The categories are: Complete Communities, Connectedness, Diverse Economies, Safe and Efficient Travel, Affordability, Healthy and Sustainable Environment, and Diverse and Adaptable Growth, and Culture and Design. These will become the chapters of the final Plan. The beginning of each category contains a description and vision for the category.

1. Complete Communities

Complete communities are places that have diversity of population by ethnicity, age, income, physical ability and household type. They offer a variety of housing choices (size, unit type) within walking distance of essential amenities and services, and provide a strong sense of place for all residents. Amenities - such as parks, recreation centers, libraries, schools, stores, health care facilities transit stops or other destinations - serve as local places of interaction and are available to everyone without having to drive. The idea of walkability is essential to the concept of complete communities and is woven into each community's fabric at a micro level. Complete communities can have different characteristics based on their urban, suburban and rural context in different parts of the county.

Lack of Walkable/bikeable Nodes and Connections

The county's current development pattern is the result of reliance on the automobile as the primary mode of travel—it forces people to drive everywhere. It has resulted in disconnected neighborhoods that lack or discourage non-motorized means of travel such as walking and biking. Without destinations within walking distance, these neighborhoods lack places to foster neighborly interaction and cohesion. Even when such attractions are nearby—parks, libraries, schools, recreation centers, retail nodes—safe and convenient sidewalks and paths are not available to connect them with the surrounding homes. The lack of such fine-grained connectivity has environmental, health, and social impacts. Retrofitting our existing car-oriented neighborhoods will require us to recalibrate many rules and regulations to allow these places to evolve into complete communities.

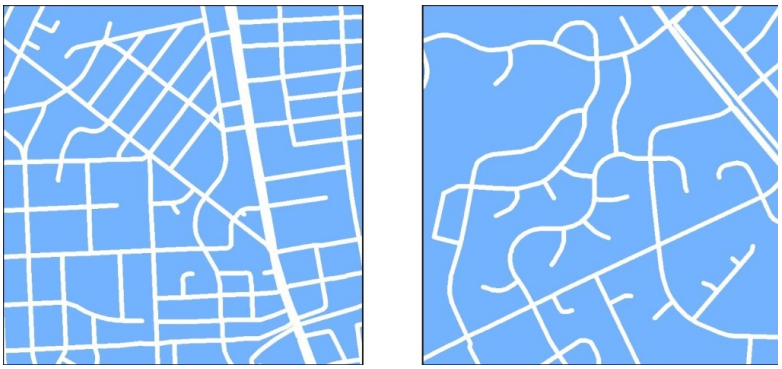

Figure 7: Street pattern and the level of neighborhood connectivity
Connectivity is higher in downtown Bethesda (left), which has a traditional and compact grid of streets more conducive to walking and biking. Olney (right), has a typical suburban street pattern with fewer connections, which discourages non-motorized travel.

Neighborhoods that Separate Rather than Connect

The overall racial and ethnic diversity of the county is not reflected at the neighborhood level in many parts of the county. While neighborhoods and schools are legally integrated, the legacy of redlining and restrictive covenant policies common before 1960, restricting where certain groups of people could live, continues to perpetuate a development pattern of separation. This has resulted in neighborhoods defined by income, race and housing types with higher concentrations of people of

color in certain parts of the county. It keeps people of different ethnic/racial and economic backgrounds from interacting with each other as neighbors on a daily basis outside of work. This lack of income and racial diversity at the neighborhood level has far-reaching implications for people of color at the lower-income levels. Research shows that location is the biggest indicator of a person's upward mobility in life[7]. It affects access to better education, better job opportunities, and chances for wealth-building. In Montgomery County, there is a geographic concentration of communities of color with a strong correlation to income, as shown in Figures 5 and 6.

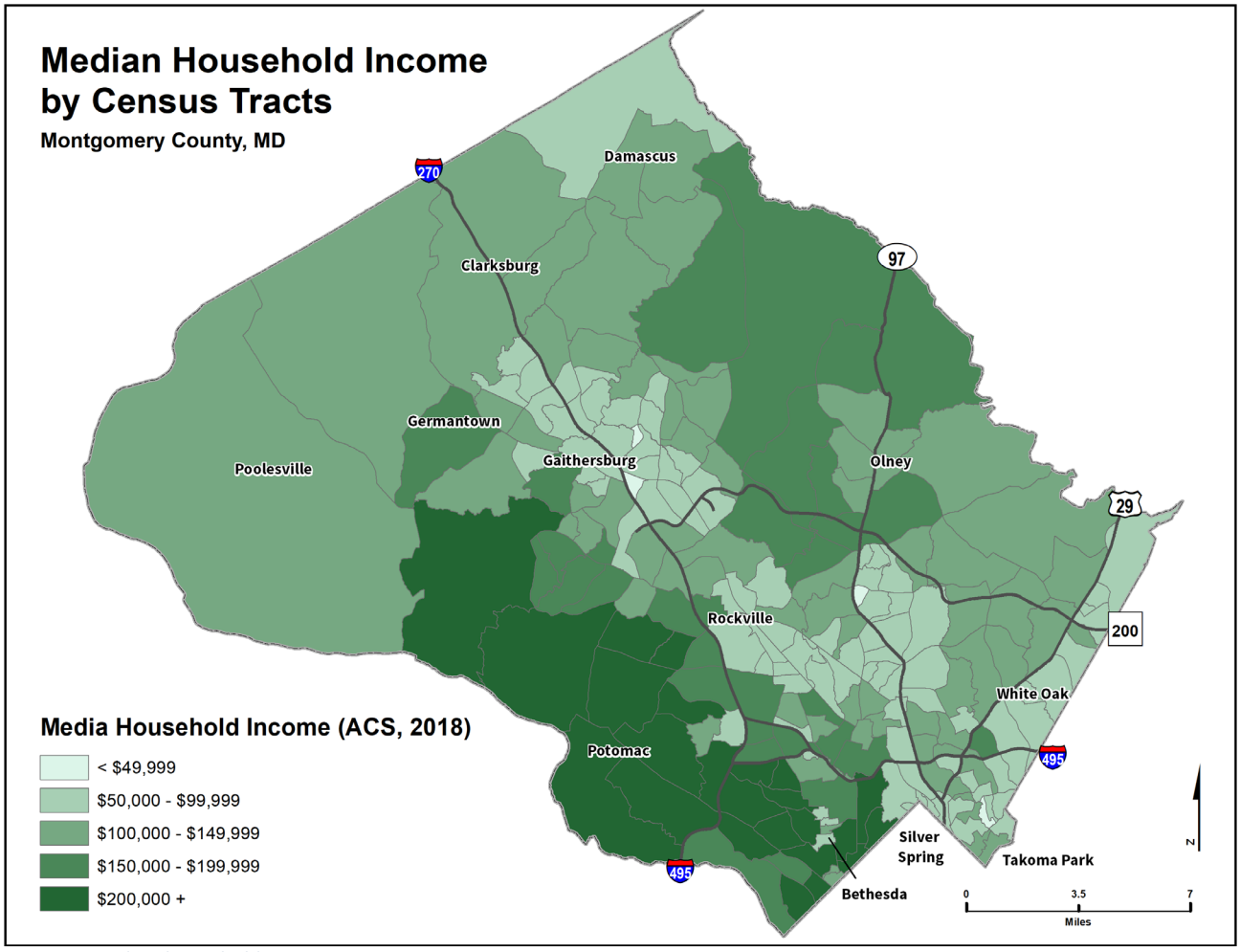

Figure 8: Median household income 2018

[7] https://opportunityinsights.org/neighborhoods/

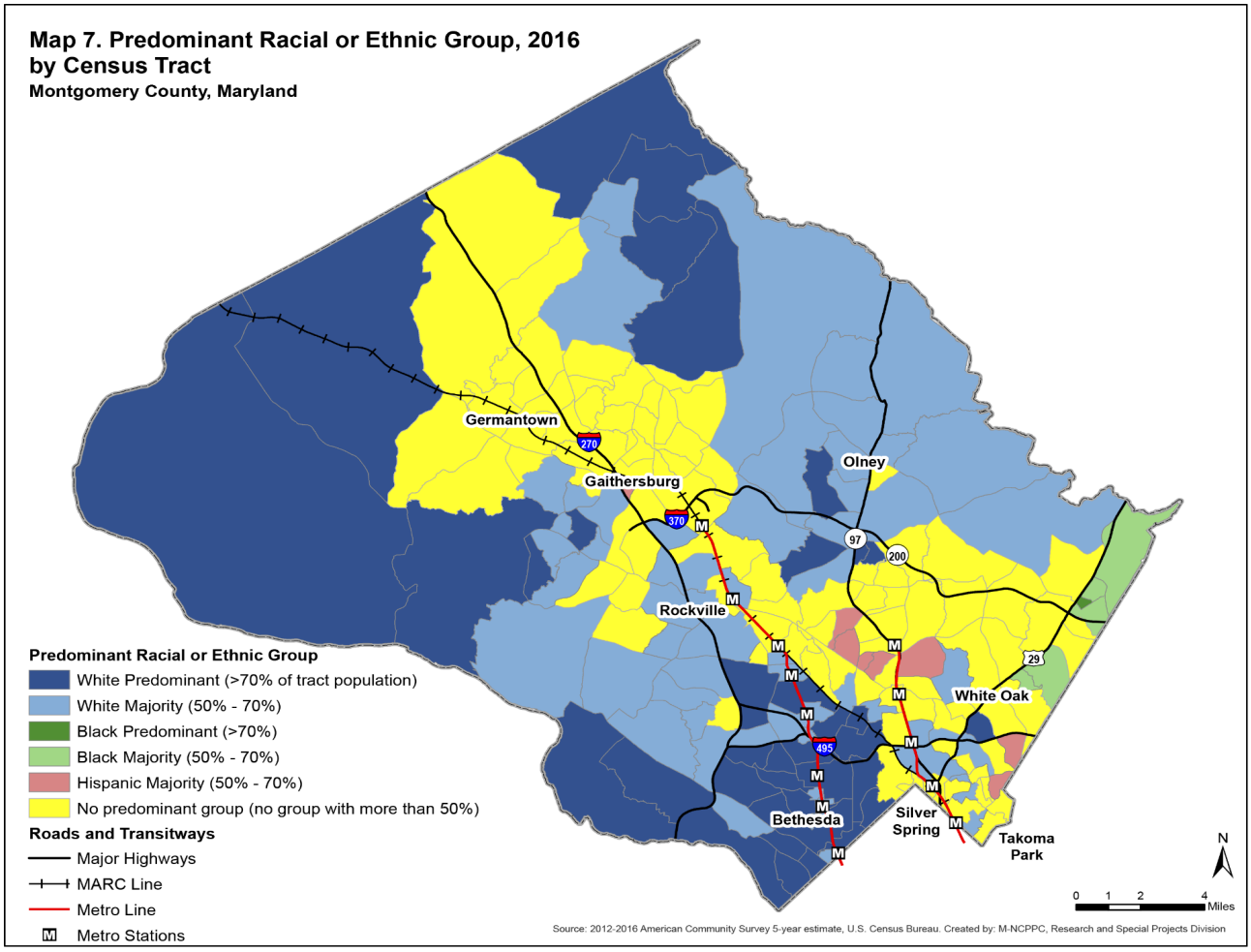

Figure 9: Predominant racial or ethnic group, 2016

Safe and Lifecycle Communities

The county's 65-plus population is expected to increase from 10 percent of the total population in 1990 to 19 percent in 2030 when all baby boomers will be over the age of 65. Most people would prefer to continue to live where they raised their families, albeit in a smaller space. However, the current development pattern lacks diversity of housing unit types at the neighborhood level. Most neighborhoods have generally one kind of housing based on zoning, which means all the houses are in the same price range and of similar size (large single-family detached, small single-family detached, town houses, etc.). Those who want to downsize don't have many viable options. The 2017 Older Adult Housing Study found that in Montgomery County, there were potentially more than 18,000 "over-housed" senior adult households – defined as householders that live free and clear in homes with more than two excess bedrooms. [8]

This lack of diversity of demographics and income levels in neighborhoods has other implications

[8] Meeting the Housing Needs of Older Adults in Montgomery County
https://montgomeryplanning.org/wp-content/uploads/2018/05/Meeting-the-Housing-Needs-of-Older-Adults-in-Montgomery-County-Final_5-18-18.pdf

related to perceptions of personal safety and wellbeing. According to the Safe Communities Foundation New Zealand,[9] "Perceptions of community safety, whether they are real or perceived, impact on the way people feel and interact in their community. Community safety is not just about injury prevention and crime prevention; it is about increasing well-being and building strong, cohesive, vibrant, participatory communities." Communities with a mix of populations of different ages, household types (families or single parents with young children, empty nesters and retirees, singles, etc.) and cultures (extended family living) can not only have opportunities for diverse social interaction, but also increase the sense of safety by having more people out and about at different times of the day and night. Montgomery County is generally considered a safe place, but personal safety must always be a high priority to maintain a high quality of life for all communities.

Questions

1. "How do we develop, implement, and evaluate more walkable communities, where it is not necessary to drive everywhere due to sprawl and other poor design decisions? How do we create and assess incentives to encourage necessary changes at both the community and individual level?"[10]
2. How can we incorporate parks and green features into community design to make walking, biking, playing and social interaction comfortable and pleasant, encouraging these activities even during hot summer months?
3. How can we transform our existing neighborhoods generally dominated by only one type of housing to have a diversity of housing types for a variety of family types and sizes?
4. How can each neighborhood have a node of activity (commercial space, school, park, other community facilities) where people can interact?

2. Connectedness

Social connectedness is "the degree to which a person has and perceives a sufficient number and diversity of relationships that allow her or him to give and receive information, emotional support, and material aid; create a sense of belonging and value; and foster growth."[11] Greater social connectedness is one of the characteristics of a complete community with a high degree of social capital where residents have a feeling of safety and well-being supported by ample opportunities for social interactions. "Social capital refers to the institutions *and mechanisms whereby residents relate to and interact with each other to solve problems for the common good."*[12]

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[9] https://www.safecommunities.org.nz/

[10] Fighting Obesity Through the Built Environment. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1247493/

[11] Five Domains of Wellbeing: Social Connectedness. *https://fullframeinitiative.org/wp-content/uploads/2011/05/SocialConnectedness_Factsheet.pdf*

[12] Social Capital Formation in Rural, Suburban, and Urban Communities https://ageconsearch.umn.edu/bitstream/159102/2/s474%20Social%20Capital%20Debertin%20complete.pdf

Social Isolation and Declining Social Capital

The design of our communities can influence the degree of connectedness and the social capital of a neighborhood. According to *Design for Health* by the University of Minnesota, "Studies show that different measures of social capital (e.g. increased levels of trust, political participation, knowing one's neighborhoods, participating in a protest, voting in elections, etc.) are supported by different built environments (Williamson 2004) [13]. One study found that "persons living in walkable, mixed-use neighborhoods have higher levels of social capital compared with those living in car-oriented suburbs. Respondents living in walkable neighborhoods were more likely to know their neighbors, participate politically, trust others, and be socially engaged."[14] Parks and open spaces can play an important role in the social life of a community. According to the National Recreation and Parks Association, "Where parks and open space are plentiful and recreation services strong, residents enjoy the closest attachment and engagement within their communities."[15]

Our land use pattern has not evolved to replace the loss of traditional gathering places such as local hardware stores and bookstores, local churches, and other places of social interaction. Even when there are destinations nearby, they are not easily accessible except by driving. Places like Montgomery College in Germantown and the Universities at Shady Grove have the potential to be more walkable and integrated into the communities around them. According to a Brookings Institution article, sociologist Ray Oldenburg "has blamed unfunctional zoning that bans commercial establishments in residential areas, leading to suburban Americans having to use their cars for everything they need, and malls and box stores crowding out small businesses and hang-out places."[16] The article further states that for young Americans, virtual interaction has taken over the "third places", (a term coined by Oldenburg for traditional gathering places after home and work). But "the most effective ones for building real community seem to be physical places where people can easily and routinely connect with each other: churches, parks, recreation centers, hairdressers, gyms and even fast-food restaurants."[17]

One of the factors contributing to reduced opportunity for interaction is the trend towards consolidation of public facilities such as recreation centers, libraries and other public amenities into larger facilities in fewer locations to achieve cost savings. This reinforces an already dispersed development pattern, lowering the number of people who can access such facilities easily on a regular basis. This can have a significantly greater impact on lower-income populations who rely on these amenities for after-school activities, and the elderly who don't own a car or are unable to drive anymore.

Unequal Access to Opportunities

Montgomery County is among the most diverse counties nationwide and considered among the best places to live and work. However, access to opportunities is not equally available in every part

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[13] Design for Health, Building Social Capital with Comprehensive Planning and Ordinances, University of Minnesota, 2008. http://designforhealth.net/wp-content/uploads/2012/12/BCBS_SocCap_0408.pdf

[14] Social capital and the built environment: the importance of walkable neighborhoods. *https://www.ncbi.nlm.nih.gov/pubmed/12948978*

[15] *https://www.nrpa.org/our-work/Three-Pillars/social-equity-and-parks-and-recreation/*

[16] Third Places as Community Builders, https://www.brookings.edu/blog/up-front/2016/09/14/third-places-as-community-builders/

[17] Third Places as Community Builders, https://www.brookings.edu/blog/up-front/2016/09/14/third-places-as-community-builders/

of the county. Many lower-income neighborhoods face disadvantages in accessing jobs, quality retail, high-performing schools, parks and other resources as these amenities are more widely available in higher income neighborhoods and transit-rich locations. The high cost of living in these higher-income neighborhoods, especially housing cost, is an insurmountable barrier for low-income families limiting their access to opportunities.

Montgomery County's population is very well educated (see ATTACHMENT 5). The level of educational attainment, however, varies dramatically and shows a strong correlation to geographic distribution of communities along the lines of race/ethnicity and income (see ATTACHMENT 6). According to a Montgomery County Office of Legislative Oversight (OLO) report 2018-18, *Racial Equity in Government Decision-Making: Lessons from the Field*[18], "despite high school completion rates of 70-98 percent and 73-78 percent employment rate among all groups, Blacks and Latinos were more than twice as likely as Whites to be unemployed and have household incomes below poverty level. Blacks and Latinos were also 33-41 percent less likely to own their homes and Black and Latino children were 6-7 times more likely to live in poverty."

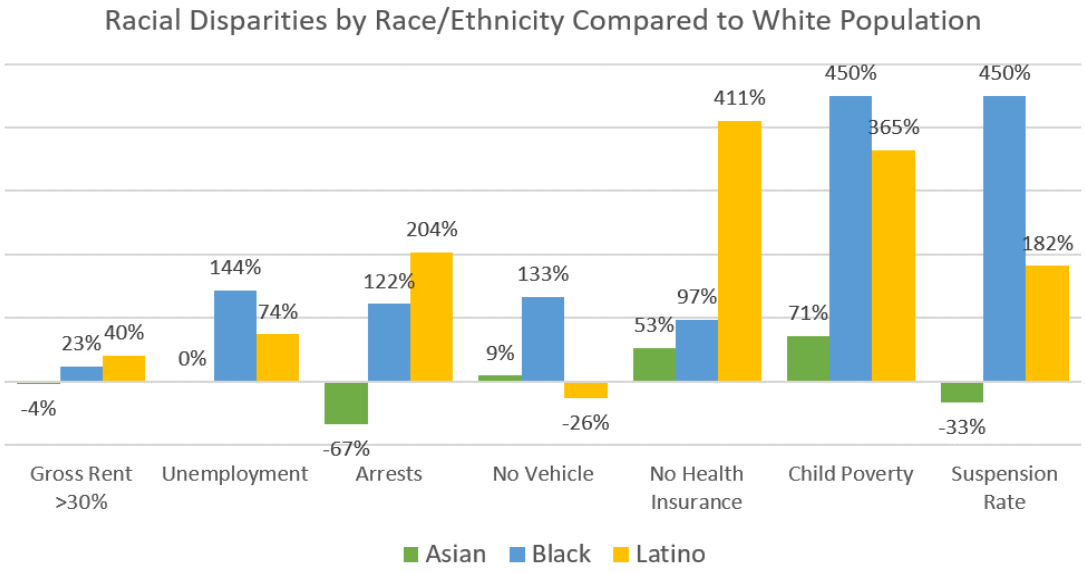

Figure 10: Racial disparities by race/ethnicity compared to white population
Source: OLO Report 2019-07: Racial equity Profile Montgomery County
https://www.montgomerycountymd.gov/OLO/Resources/Files/2019%20Reports/RevisedOLO2019-7.pdf

A more recent OLO Report 2019-14, *MCPS Performance and Opportunity Gaps*[19], states that "among MCPS' elementary schools in FY19, three-quarters of Black, Latinx, and English learning students and more than 80 percent of all low income students were enrolled in high-poverty focus schools,[20] [see ATTACHMENT 7] while more than two-thirds of all White, Asian, and multi-racial

[18] https://www.montgomerycountymd.gov/OLO/Resources/Files/2018%20Reports/OLOReport2018_8.pdf
[19] https://www.montgomerycountymd.gov/OLO/Resources/Files/2019%20Reports/OLOReport2019-14.pdf
[20] A school is considered a focus school when its student population does not meet the level of poverty that would qualify for Title I designation, but does have a higher level of poverty than a majority of the schools in MCPS. https://www.montgomeryschoolsmd.org/departments/budget/FY2009/questionPDFs/question34.pdf

students were enrolled in low-poverty non-focus schools. The consensus among researchers is that higher-poverty schools tend to yield lower levels of academic performance, especially among students of color and low-income students."[21]

The impacts on human health resulting from the inequitable distribution and accessibility of job opportunities, public transportation, parks and recreation facilities, and healthy food choices are discussed in the "Healthy and Sustainable Environment" section of this report.

Technological Dependence

Access to computers and the ability to access and afford internet services varies geographically in the county. A lack of internet service is a critical issue for some parts of the rural community. Even in places where adequate internet service is available, the high cost of broadband services can be a financial burden for low-income families putting them at a disadvantage for jobs, kids' schoolwork and other uses.

Despite its many benefits, the proliferation of digital devices and social media can be isolating. According to a 2017 study conducted at the University of Pittsburgh School of Medicine, young adults with high social media use seem to feel more socially isolated than their counterparts with lower social media use."[22] However, more recent research has shown that new technology is not the cause of social isolation as commonly perceived.[23] While this field of study is still evolving, every community can benefit from a built environment that supports opportunities for in-person interaction so people have options outside of technology for social interaction.

Community Engagement on Planning and Development

Lower-income communities are generally not part of the decision-making process for planning and development. The inherently complex development process has historically favored those with power and influence. For example, locally unwanted land uses (LULUs) such as bus depots and landfills are disproportionately located in low-income areas. The causes of this disparity are many including the design of the community engagement processes, language barriers, lack of time and access to transportation to attend meetings, distrust of government institutions, and lack of provision for residents with disabilities. As we plan for a more diverse county, we need to reexamine our community engagement process and determine how to involve low-income communities and people of all races, sexes, genders, abilities and ages to create a truly all-inclusive decision-making process.

Questions

1. What is the role of the public realm and "third places," to help combat social isolation?
2. If conventional retail is shrinking and may not be feasible everywhere, could other types of private or public uses, such as restaurants, libraries, parks, recreation centers, etc. become the local places of gathering and social interaction?
3. How should our planning process evolve to plan for a diverse population with a grassroots approach where all residents are empowered to have a bigger share in decision making?

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[21] https://www.montgomerycountymd.gov/OLO/Resources/Files/2019%20Reports/OLOReport2019-14.pdf

[22] https://www.ajpmonline.org/article/S0749-3797(17)30016-8/abstract

[23] https://www.pewresearch.org/internet/2009/11/04/social-isolation-and-new-technology/

3. Diverse Economies

Like natural ecosystems, diverse economies comprise small, medium and large businesses of all types across a range of industries. Diverse economies are more resilient as they can adapt to economic fluctuations, technological innovations, and competitive pressure. Business diversity in the county is also better able to offset economic gains and losses to specific sectors of the work force. Small businesses are better connected to the local community than national chains.

Competitiveness

Chief among the challenges facing the county is economic competitiveness. While assets like the federal sector and a strong life sciences industry have helped the county build a solid economic foundation, the county has lacked economic vibrancy in the last decade. The number of jobs in the county has been increasing since 2010, but in 2016 was still just shy of the 2006 pre-recession peak. A January 4, 2020, Washington Post article reported that, "In the first 10 months of 2019, Northern Virginia gained an average of 19,500 jobs from a year earlier, compared to 5,700 jobs in the District and just 200 in suburban Maryland, according to preliminary data from the federal Bureau of Labor Statistics."[24]

Historically, the presence of the federal government drove much of the economic growth through the 1980s and 1990s and helped insulate the county economy from recessions. The federal government is a major presence in the county with 48,000 direct jobs and thousands more contractor jobs in the private sector. However, those dynamics are changing as federal spending has slowed since the 2010 spending sequester.

With 65,000 county-based jobs, the Professional, Scientific and Technological Services (PSTS) sector has grown by 35 percent since 1990 and has achieved higher wage increases (2 percent annually between 1990 and 2016). This sector includes many government contracting jobs as well as other high-skill and high-wage jobs. However, Montgomery County hasn't escaped the wage stagnation that has affected the national economy. The county's median household income peaked at $111,492 (inflation-adjusted 2018 dollars) in 2007, and has not fully recovered from the Great Recession. In 2018, it was $108,188.

Slowing growth in employment and changes in the way firms use space has had a downward impact on the commercial real estate market in the county, resulting in historic office vacancy rates. The preference for more dense, walkable and amenity-rich locations has resulted in higher rents and lower vacancy in the office submarkets favoring downtown and Metro-accessible locations over suburban office parks that supported the county's earlier growth periods. The trend of firms using spaces differently will likely continue due to changes in technology and the way people work. Similarly, there is a "flight to quality" in recent years in which firms prefer newer buildings with amenities and floor plates that can accommodate open plans. However, economic growth has not been strong enough to backfill older spaces, resulting in higher vacancies in older, car-dependent suburban office locations. There have been some cases of conversions to residential or other uses

[24] https://www.washingtonpost.com/local/maryland-news/northern-virginias-economic-growth-risks-leaving-maryland-suburbs-behind/2020/01/04/9c6e7126-1cf5-11ea-b4c1-fd0d91b60d9e_story.html

(including examples of educational uses in Virginia).

Education and Economic Competitiveness

Former Federal Reserve Chair Ben Bernanke once stated that, "as an investment, education provides excellent returns, both for individuals and for society."[25] A good public school system and higher education and research institutions are key drivers of economic growth. This is evident today as Montgomery County residents are among the most highly educated in the country with 59 percent of adults age 25 and older having at least a bachelor's degree in 2016 and nearly one-third of adults having a master's degree or higher. Montgomery County has highly regarded K-12 public schools and two public post-secondary institutions: Montgomery College and the Universities at Shady Grove. Further, the University of Maryland's flagship campus is nearby in Prince George's County and will be connected via transit upon completion of the Purple Line.

Going forward, education will continue to be an important driver of economic development. There are concerns about differences in the quality of education across K-12 public schools and the achievement gaps among different racial groups. The growth of online learning is also changing post-secondary education, creating more opportunities for people to access courses and reducing opportunities for formal and informal interactions on campuses.

Education, research, and entrepreneurship are linked. After years of facing inward, universities in other jurisdictions have started to face outward, developing innovation districts to help catalyze growth in entrepreneurship based on academic research. There are concerns that the lack of a major research university in Montgomery County has put the county at a disadvantage in spurring economic development. The county also does not fully benefit from the presence of major federal laboratories, such as the National Institutes of Health (NIH). Federal regulations on these labs' ability to partner with the private sector are more restrictive than on labs in other places. The county could strengthen partnerships with institutions of higher education to increase its homegrown-talent pipeline and encourage more innovation and entrepreneurship in the county.

Technology and Automation

Emerging trends in digital technology and artificial intelligence could further impact the current economic and employment picture in significant ways. E-commerce is helping people to start and run businesses from home, and workers in some sectors are loosening ties to traditional offices. According to the U.S. Census Bureau, the percentage of workers working from home in Montgomery County increased from four percent in 1990 to seven percent in 2018.

Emerging technologies may present barriers to workers who lack the skills or training to thrive in digital workplaces. Some of this impact is already evident in the reduced share of steady jobs with mid-level wages. Although the digital revolution will create more jobs, there is growing concern among economists that, many of them will be low-paying. [26]

Small Businesses and Entrepreneurship

Small, independent businesses are important for the economy because they create a path to the middle class. One of the major challenges for small-scale production businesses, local stores and restaurants is that they can face difficulties competing with the economies of scale available to

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[25] Education and Economic Competitiveness, Ben S. Bernanke, September 2007 *https://www.federalreserve.gov/newsevents/speech/bernanke20070924a.htm*

[26] https://www.wsj.com/articles/technology-vs-the-middle-class-1485107698

national chains. New developments in Metro stations and other high-density centers not only have higher rents, they also tend to have bigger retail spaces; generally too large and too expensive for many small stores and restaurants. Montgomery County is also considered a difficult zoning and regulatory environment for small businesses.

Small-Scale production businesses:

This refers to all types of small businesses producing tangible goods. This includes businesses producing goods in textile. hardware. wood. metal. electronics. and 3D printing. This also includes consumer product design and prototyping. film production. breweries. distilleries. & food production.

Source: *Benefits of Small-Scale Manufacturing, Montgomery County, MD*, February 2018 https://www.montgomerycountymd.gov/council/Resources/Files/agenda/cm/2019/20190204/20190204_PHED2.pdf

During April and June 2019, County Executive Marc Elrich and Council Vice President Sidney Katz conducted listening sessions as part of the county's *4Business – Benchmarking to Be the Best for Business* initiative to hear from the local business community. "A very strong sentiment, especially in survey and website comments, [was] that the county is either hostile or unfriendly towards business; some referring to perception, but many giving specific examples, citing mainly overregulations, fees and taxes."[27]

Need for Employment and Housing

Montgomery County's recent sluggish job growth has been disappointing. A continuation of this trend could pose a greater fiscal burden for the county to continue to provide its high level of services. Adequate supplies of jobs and housing are essential for a thriving economy where available housing choices are supported by the earning potential of available jobs. On a regional level, too many jobs concentrated in one part of the region means workers from adjacent jurisdictions will be traveling into the area. "A recent analysis by the TPB [Transportation Planning Board] determined that additional housing in the [Washington, D.C.] region would significantly improve transportation system performance, particularly if those units were strategically located in activity centers and near high-capacity transit stations."[28] While a lack of adequate jobs could result in less revenue to support needed public services, a lack of affordable housing for a younger generation of skilled workers in the county can make it harder to attract high-paying jobs to the county.

Questions

1. How do we make the county's economy sufficiently diverse to soften the impact of inevitable

[27] https://www.montgomerycountymd.gov/DPS/Resources/Files/4Business/Bus%20Supp-Ecoon%20Dev%20Disc%20Sheet%20final.pdf

[28] Regional Housing memo to Council of Governments Board, September 2, 2018. https://www.mwcog.org/documents/2018/09/12/regional-housing-memo-to-cog-board-cog-board-affordable-housing-housing/

economic downturns and competition with other places for jobs?

2. How should our zoning code and development processes evolve to adapt to changes and emerging trends in business and commerce, including home businesses?
3. How can the county help recruit and retain talent by creating housing that workers want—and can afford— through all stages of their careers?
4. How can we create places that facilitate interactions between Montgomery County's various public and private innovators to boost entrepreneurship and spin-off activity?
5. How can we strengthen partnerships with the county's educational institutions to cultivate and expand a homegrown-talent pipeline?
6. How can we build on Montgomery County's assets and location in the Baltimore-Washington metropolitan area to attract more high-quality jobs?

4. Safe and Efficient Travel

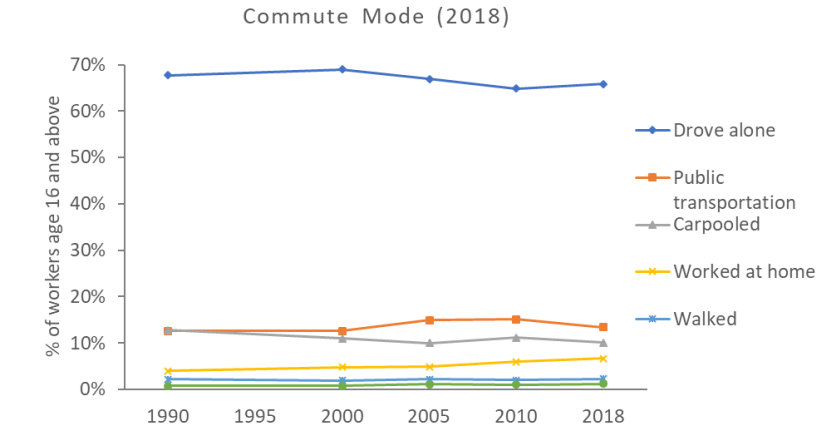
A high-quality transportation system is about moving people, goods, and services from one point to another in the most efficient, safe, and equitable way possible (walk, bike, drive, rail, fly, water). Traditionally, a transportation system is judged by the number of vehicles moving quickly through its main roads and the speed of travel. However, we cannot solve traffic congestion by building wider roads. We must change our focus from moving more vehicles with faster speeds (generally referred to as mobility in transportation terms) to moving a greater number of people between destinations quicker, and increase the number of places accessible by different modes of travel (generally referred to as accessibility).

A Legacy of Car-Oriented Land Use

Traffic congestion is heavily influenced by the underlying land-use pattern. The main structure of the county's and the region's transportation network was created in the early 20th century primarily for commuting by car, with all major roads leading to Washington, D.C. as the main employment center. As the land-use pattern has evolved in response to market forces and through planning initiatives, most major employment centers in all surrounding jurisdictions, including Montgomery County, are inaccessible by transit. The transportation network dominated by roads and highways served the county and the region well for a time but, like any other physical system, it has a built-in capacity limit.

One of the results of the mismatch between land use and the transportation network compounded by a non-grid layout of the streets is a lack of redundancies (the availability of an alternate route if a street is blocked for accidents or other reasons) in the major road network, especially the east-west connections. The Purple Line and the recently approved Bus Rapid Transit Plan network will improve some of the east-west connections, but without built-in redundancy, the county's road network is vulnerable to traffic incidents on the major roads.

The car-oriented land use and reliance on car travel has made traffic congestion in the Washington metro area one of the worst in the country. According to a report by the Texas A&M Transportation Institute,[29] Washington metro area drivers spend 102 hours each year in traffic delays, the third-highest amount in the nation. In Montgomery County, peak period congestion decreased between 2011 and 2013 but rebounded in 2015. In 2016, 65 percent of employed county residents (down from 68 percent in 1990) commuted by driving alone, followed by public transportation at 16 percent. The average commute time has been steadily increasing and currently stands at 35 minutes (2016). Although the vehicle miles travelled (VMT) per capita have declined slightly, the overall VMT are on the rise again (the overall VMT declined between 2005 and 2012). The number of commuters using public transit has increased from 13 to 16 percent since 1990, but it is still a small share of the overall commuting pattern in the county.



Source: 1990 U.S. Census, 2000-2018 American Community Survey, 1-year estimates, U.S. Census Bureau.

Figure 11: All commute modes, 1990-2016

Challenges for Transit Network

Montgomery County was a pioneer in transit-oriented development. It started concentrating new development around Metrorail stations through the implementation of Central Business District zones in the early 1970s and later through mixed-use centers in the 1990s. It has made significant investment in improving transit, bikeways, and other non-automobile modes of travel, which has prevented the worst-case scenarios of traffic congestion while creating highly desirable walkable, mixed-use places. These improvements have protected existing communities from the adverse effects of excessive highway building and associated impacts of noise and environmental degradation. However, the basic underlying land-use pattern of low-density sprawl has created a challenging environment for public transit. Low-density development makes it financially infeasible to run an efficient bus network.

Only 40% of federal government jobs are within ½ mile of a MARC or Metro station.

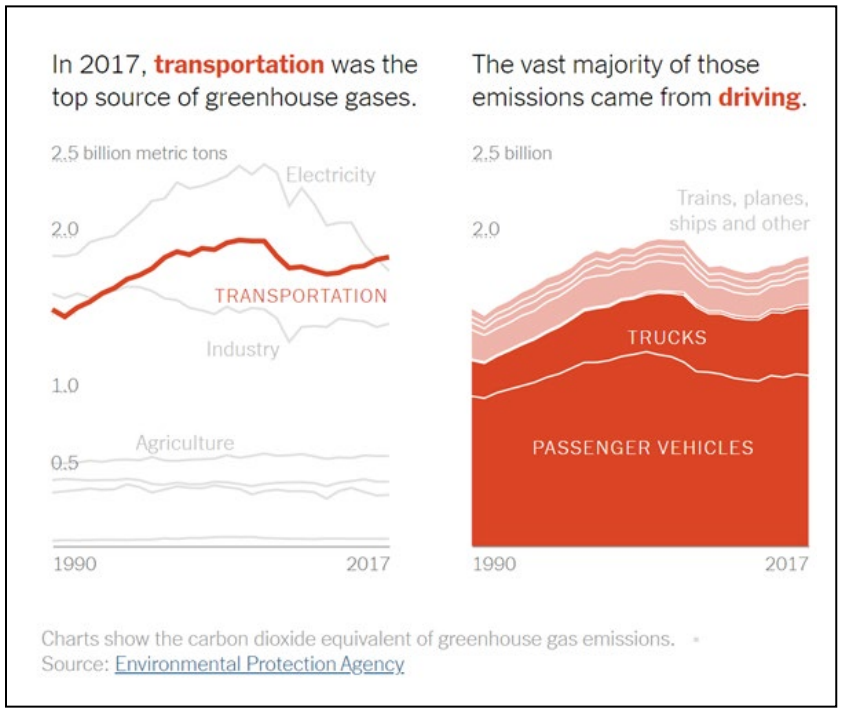
Only 30% of the jobs at private employers are within ½ mile of a MARC or Metro station.

Source: US Bureau of Labor Statistics, Quarterly Census of Employment and Wages, Q2 2018.

[29] https://www.washingtonpost.com/local/trafficandcommuting/its-a-waste-of-time-washington-is-no-3-in-traffic-congestion-study-says/2019/08/22/e6602e0e-c4d6-11e9-b72f-b31dfaa77212_story.html

Environment and Transportation

According to a *New York Times* report, "Even as the United States has reduced carbon dioxide emissions from its electric grid, largely by switching from coal power to less-polluting natural gas, emissions from transportation have remained stubbornly high."[30] According to the Environmental Protection Agency, transportation accounted for the largest portion (29%) of total U.S. GHG emissions in 2017[31]. In Montgomery County in 2015, transportation accounted for 41% of GHG emissions, after residential and commercial buildings combined at 51%.[32] The increase in VMT has a huge impact on Montgomery County's efforts to reduce GHG emissions to zero by 2035[33].



According to The New York Times, between 1990 and 2017, per capita emissions in the Washington metro area decreased by 6 percent, but the total emissions for the same period increased by 39 percent.

Equity and transportation

Over the past few decades, Montgomery County has improved roadway, public transit, and other modes of travel. However, people in low-income areas who can't afford to own cars have fewer transit options, which amplifies all other inequities by limiting their access to opportunities and better resources. Employment has historically followed major transportation infrastructure investments. Employment centers are concentrated mostly inside the beltway and on the west side of the county, which has the Metro, the MARC train, and I-270. Housing in these areas is generally too expensive for low-income families, forcing them to live farther from job centers. Although the county's transit network ranks among the best in the country, significant challenges remain in meeting the needs of the low-income communities, young adults and people with disabilities who don't own cars for access to regular and late-night jobs, education, health care, food, and entertainment. Excessive and inefficient commuting is an economic and social drag for all. Time and money spent commuting

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[30] https://www.nytimes.com/interactive/2019/10/10/climate/driving-emissions-map.html
[31] https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions
[32] Montgomery County Department of Environmental Protection https://www.montgomerycountymd.gov/green/climate/ghg-inventory.html
[33] https://apps.montgomerycountymd.gov/ccllims/ResolutionDetailsPage?RecordId=8727&fullTextSearch=climate%20AND%20emergency

robs residents of the time that could be spent with families or performing other productive work. In addition, low-income neighborhoods are more likely to be located around or near highways and major roads with inadequate and unsafe sidewalks and crossings, and higher air and noise pollution.

Emerging Technologies

It is too early to confidently predict what impact short-distance modes of travel generally classified as micromobility (such as electric bikes, shared bikes, electric scooters, electric skateboards, Segway, etc.) as well as autonomous vehicles (AVs) and ridesharing services will have on our transportation network. For example, AVs will likely improve the safety of automobile travel but could encourage sprawl. Micromobility options could solve the "first-mile/last-mile"[34] problem and thereby help increase transit ridership, but ridesharing services could hurt transit ridership as suggested by recent data in large cities.[35]

Micromobility options offer alternatives to travel by car within a limited geography. Their limited range and speed, and the higher densities needed for their financial viability may make them infeasible in more spread out suburban and rural areas unless our neighborhoods evolve to become complete communities with more local destinations.

Both AVs and ridesharing services may bring significant shifts in the interaction between private travel, public transit and the use of the public rights-of-way, which has much wider implications beyond traffic congestion. The public sector must create new mechanisms and a regulatory framework to deal with the emerging questions about the intangible impacts of innovations in mobility as private companies assume a bigger share of mobility options through ridesharing. For example, who would control the information generated and collected by private companies using public rights-of-way? If AVs run on electricity, and ridesharing eliminates the need for owning cars, how do we replace the revenue currently generated by driver's license fees and gas tax? How do we address the need for high-volume drop-off areas instead of parking garages in office buildings?

These innovations could raise equity issues. For example, if micromobility options are feasible only in high-density areas and places with adequate infrastructure, their benefits may not be shared by residents in all parts of the county. If ridesharing takes ridership away from public transit it could lead to higher transit fares further burdening low-income transit users.[36]

Major Corridors Act as Barriers

One legacy of the road network designed primarily for cars, and expanded through lane widening and other changes to increase its capacity, is that the major roadways in the down-county areas (University Boulevard, Randolph Road, Georgia Avenue, Rockville Pike, Connecticut Avenue, Veirs Mill Road, New Hampshire Avenue, etc.) have become barriers. Their size and speeds divide adjacent neighborhoods. They are generally unsafe for walking, biking and for people with disabilities. Even when sidewalks are present on these roads, they are typically narrow, occasionally obstructed by signs or utility poles, and lack green panels and trees along the curb. Safe crossings of these roads are infrequent. Low-income people living along these corridors rely

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[34] Traveling by public transit, typically done by rail or bus, starts and ends with walking, biking or getting a ride to the transit station. Lack of easy options to cover this first and last part of the overall trip can discourage people from taking transit. In transportation terms this is referred to as the first-mile/last-mile problem.

[35] *https://prospect.org/infrastructure/ridesharing-versus-public-transit/*

[36] *https://prospect.org/infrastructure/ridesharing-versus-public-transit/*

heavily on transit access and are disproportionately impacted by these unsafe conditions. In winter, snow plowed on the sidewalks makes them unusable. In certain stretches of these roads, sidewalks are the only way to get to Metro stations and bus stops. Although the county's Vison Zero initiative will improve safety for pedestrians and bicyclists, other steps are needed to transform these corridors from barriers between neighborhoods into connected and desirable places of living and commerce.

Questions

1. How can we transform the major roadways from unsafe arteries of traffic into livable, walkable places with a strong sense of place and gateways into surrounding neighborhoods?
2. If AVs are available on-call and people do not need to own cars, what are the best uses for land now used for parking and storage, including driveways and garages in single-family detached houses?
3. How will the travel data, generated and collected by private companies, be shared with the public sector who will need this information to design and manage the transportation network?
4. Is the proposed bus rapid transit network ambitious enough? Will we need more dedicated transit lanes to support a more connected and accessible transit network?
5. How can our transportation network connect the county's residents and workers to jobs, education, and other opportunities located outside the county in the Baltimore-Washington metropolitan area?

5. Affordability

Affordability means being able to purchase essential goods and services without harming one's ability to pay for other goods and services. It is the ability to support and sustain a reasonable quality of life commensurate with one's income for now and in the future. Affordability refers to the overall cost of living in general, but more specifically it is concerned about the cost of housing and doing business in the county.

Economically successful areas will always face some affordability challenges as job opportunities draw people to an area. Recent economic trends have created affordability issues because wages have essentially stayed flat while costs of living in general, and housing costs in particular, have increased.

The Washington, D.C. region is an expensive place to live. Montgomery County fares better than some of the adjacent jurisdictions as shown in the table below by "Best Places to Live". [37] In 2019, Montgomery County had overall and housing indices lower than Fairfax County and Washington, D.C., but higher than Prince George's County. For transportation, however, the county's index is

[37] https://www.bestplaces.net/cost_of_living/county/maryland/montgomery

higher than Fairfax County and Washington, D.C., but lower than Prince George's County (see ATTACHMENT 9 for the full table).

Table 2: Cost of Living Index (National index=100)

COST OF LIVING	Montgomery	Fairfax	Washington	Prince George's
Overall	139.4	152	152.1	121.3
Housing	195	238.4	240.8	128.9
Transportation	138.7	127.6	135.3	144.4

The affordability crisis hits minority populations the hardest due to a wide disparity of incomes by race and ethnicity (see ATTACHMENT 10). One in five households in Montgomery County has an income below 50 percent of the area median income.

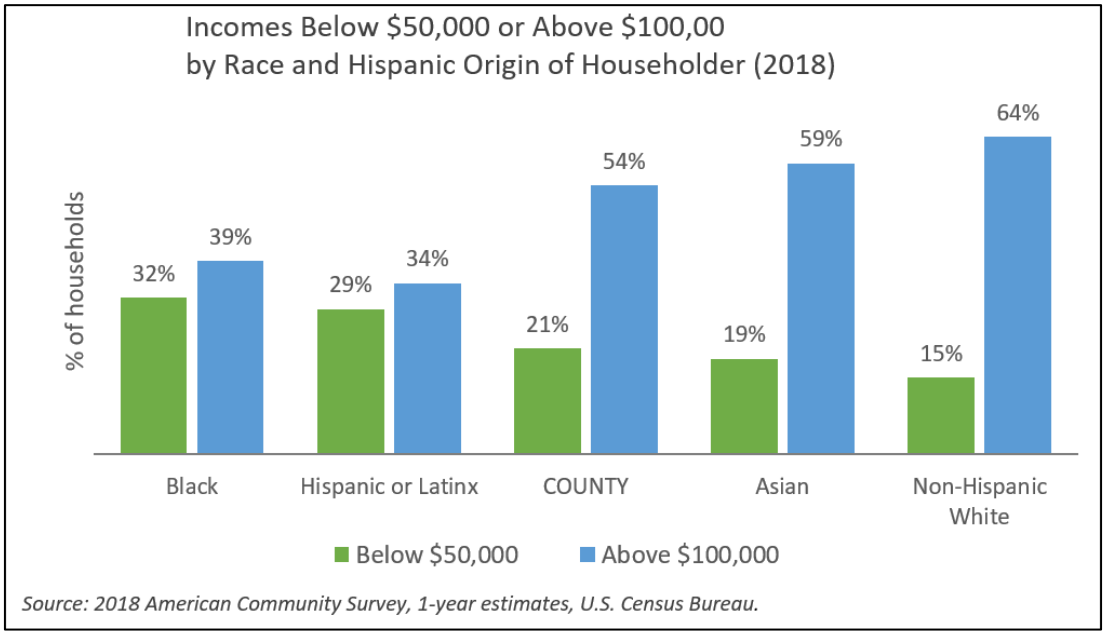


Figure 12: Incomes below $50,000 or above $100,000 by race and ethnicity

Housing Affordability

Housing affordability remains one of the biggest issues facing Montgomery County. Median household income, stagnant since 2010, has not recovered from the 2007 to 2009 Great Recession, and remains below its inflation-adjusted 1999 median at $108,188. Annual growth in construction costs increased in the range of 3 to 4% per year over the past five years. This combination of low wage increases and high cost of housing has impacted homeownership rates, which have declined for all age groups since 1990, except for those over age 65. A dramatic drop in homeownership occurred among the youngest households under 35 (from 46% in 1990 to 28.4% in 2016).

Even with the homeownership rate falling and flattened growth in the number of homeowner households in recent years, home prices have still increased dramatically since 1990. The average

sale price of a detached home in Montgomery County increased by approximately $264,900 from $410,707 in 1997 to $675,594 in 2017 after adjusting for inflation. The average sale value of an attached home (townhouse) increased by approximately $133,700 from $205,662 in 1997 to $339,331 in 2017, after adjustments for inflation.[38]

The popularity of walkable, transit-accessible, amenity-rich places in the down-county locations, combined with high land prices and high construction costs, has created a challenging environment for providing an adequate supply of affordable housing for residents looking in the mid- to low-price range in desirable locations. Lower-income households could reap the most benefits from living in transit-rich neighborhoods, but those neighborhoods are also some of the most expensive places to live.

Three major factors primarily drive the county's housing affordability:

1. Stagnant incomes since 1990 with rising development costs (see Figure 13).

2. New housing supply that has not kept pace with demand. Montgomery County's 2017 production (1,637 units) is half of its 2012 production (3,981) (see Figure 14). Its housing production decline in the five-year period (2012-2017) is the largest among its peers. For the same period, Fairfax County increased its number of building permits by 90 percent and Prince George's County by 93 percent, while Montgomery County's permits declined by 53 percent.

3. Lack of a variety of housing types in new housing production (see Figure 15). Currently, single-family detached homes are the predominant housing type in the county at 48 percent, a slight decline from 51 percent in 2000. In addition, the average gross floor area of a new single-family detached home in Montgomery County has grown from 1,500 square feet in the 1950s, to 3,700 square feet in 2010.

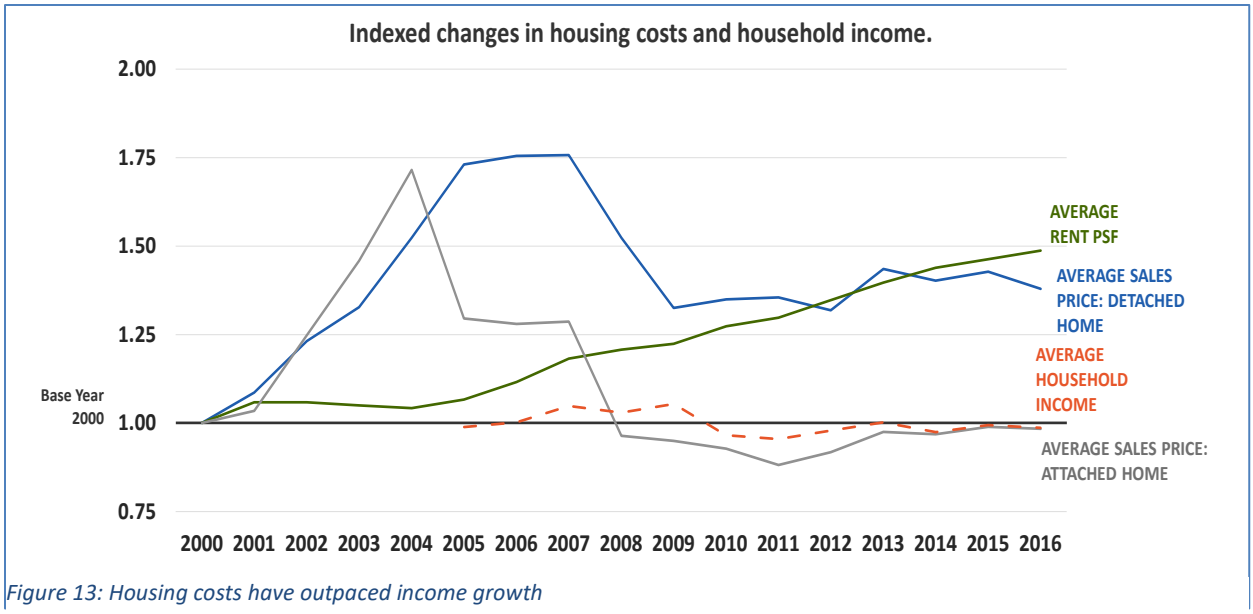
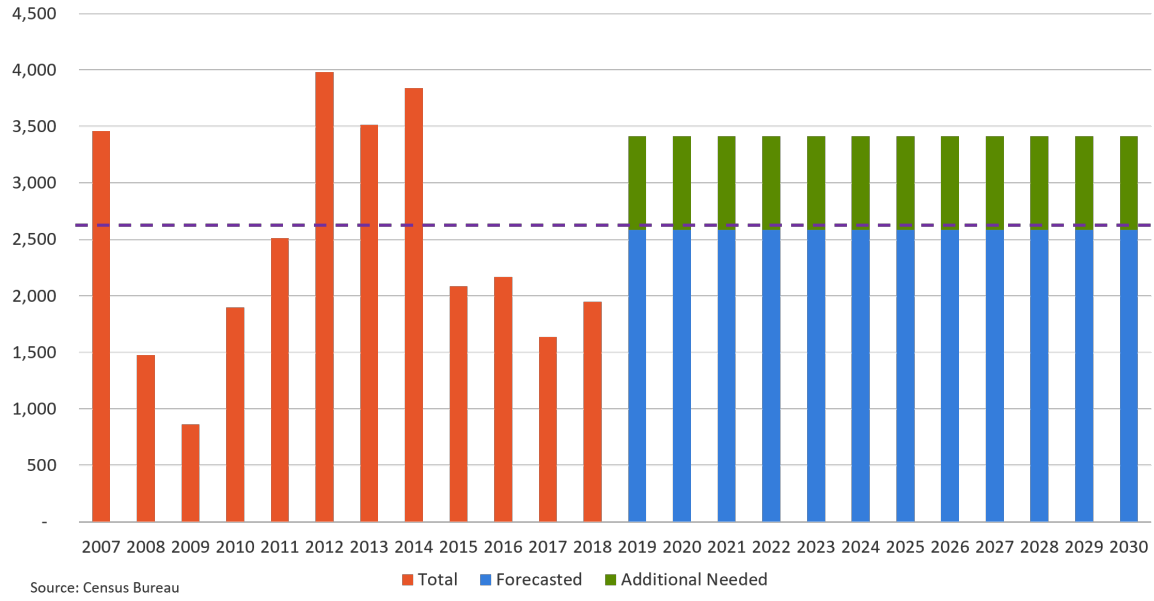


Figure 13: Housing costs have outpaced income growth

[38] Montgomery County Trends- A Look at People, Housing and Jobs Since 1990
https://montgomeryplanning.org/wp-content/uploads/2019/01/MP_TrendsReport_final.pdf



Blue bars indicate the average housing production needed to meet the normal demand. The green bars show the additional production needed to make up for the low production of the past few years.

Figure 14: Lower than average housing production

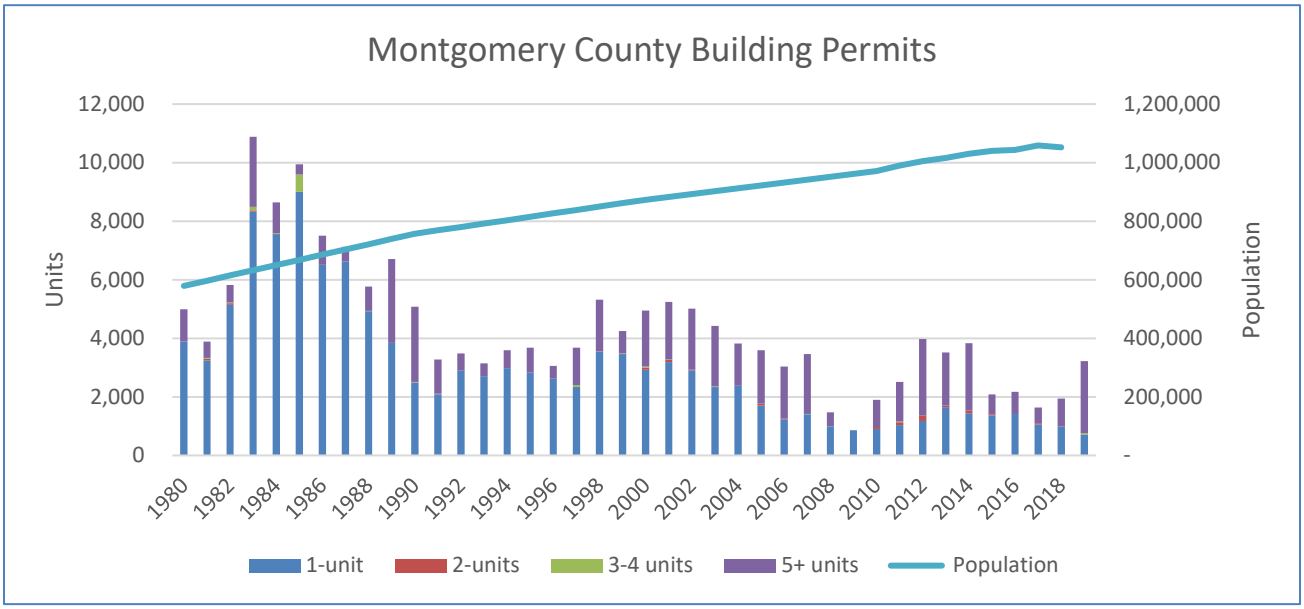


Figure 15: Housing production by unit type

Despite its pioneering inclusionary housing programs, and like many other prosperous jurisdictions across the country, Montgomery County has not been able to avoid housing affordability issues for low- and middle-income families. Homeownership rates have been falling across the board, but more dramatically, by race: just 53 percent for householders of color, compared to 75 percent for white-alone, non-Hispanic households (see ATTACHMENT 11).

In 2016, the county had approximately 390,000 housing units, an increase of 95,000 units (32 percent) over the 1990 total of 295,723. This figure is lower than the 50 percent increase in housing supply in the Washington, D.C. region over the same period

The housing burden has disproportionately affected renters, whose numbers have been increasing as homeownership in the county has declined since the Great Recession. Asking rents per square foot have increased nearly 50 percent since 2000, even after adjusting for inflation. Forty-one percent of all renters in the county are cost-burdened, spending more than 35 percent of their income on housing expenses. According to the OLO Report, *Racial Equity Profile Montgomery County*, in 2017, the percentage of households that paid more than 30 percent of their household income in rent was 44.7 percent whites, 42.7 percent Asian, 54.5 percent black, and 62.6 percent Latino. (Latinos are an ethnicity rather than a race. Therefore, Latinos are included in multiple racial groups.) Regionally, Montgomery County is tied for the largest number of cost-burdened renters with Prince George's County.

With fewer large chunks of vacant land for single-family detached houses, the county has steadily increased its supply of multifamily rental and condominium housing units, currently 133,600 units, most of them located in Metro station areas. This total of multifamily units is still smaller than the 182,330 single-family detached and 73,800 townhouses. Regionally, only the District of Columbia and Arlington County have more multi-family units.

Affordability for Small Businesses and the Creative Sector

The affordability crisis is not limited to housing; small businesses, tech and other entrepreneurs, art spaces, cultural institutions, and nonprofits are affected by the high cost of land, buildings, labor, taxes, insurance, and regulatory costs within the county. A 2018 study of small- scale manufacturing in Montgomery County found that "Land use or lease costs is a major factor for where a small-scale manufacturing business can operate."[39] While there is a lack of quantitative data on the business experience comparable to data for household income and rents, staff heard numerous anecdotes through public outreach for Thrive 2050 and other recent studies.

For example, a fall 2019 study by University of Maryland students found that in Long Branch most small retailers do not own their buildings, which leaves them exposed to expected rent increases following the completion of the Purple Line. And many of these small business owners often lack experience with complex commercial leases and understanding additional charges for common areas landlords can add to base rent[40]. (see more about the high cost of doing business in the county in the "Small Businesses and Entrepreneurship" section under Diverse Economies in this report).

[39] https://www.montgomerycountymd.gov/council/Resources/Files/agenda/cm/2019/20190204/20190204_PHED2.pdf
[40] https://montgomeryplanning.org/wp-content/uploads/2020/02/UMD-PALS-Retail-Project-Final-Report-4-5-20.pdf

Questions

1. How can the county reduce its high cost of living to make sure it remains a desirable place to live and work for increasingly diverse current and future generations?
2. How can the county encourage new housing production with a variety of housing types and sizes in transit locations and affordable to the residents who are most affected by the high cost of living in the county?
3. How do we make sure that small businesses, entrepreneurs, and arts and cultural institutions can afford to locate, grow and thrive in the county?

6. Healthy and Sustainable Environment

A healthy and sustainable environment is a network of natural and built habitats that supports the mental and physical health of residents, supports healthy and diverse animal and plant communities, provides clean air and water, and continues to sustain these benefits as the earth and climate change. The built environment influences human health by influencing behaviors, physical activity, social connections and access to resources and the quality of the environment.

The last several decades have seen great changes in our knowledge and understanding of the environment, including its vital importance to human society, health, the economy, and our ability to protect and enhance it. These changes include new sources of environmental data and the ability to track trends, new scientific understanding, new global and regional climatic trends, new technologies and strategies for improving the environment, and new regulatory frameworks.

Human Health

Montgomery County ranks as Maryland's healthiest county, according to a study by the Robert Wood Johnson Foundation[41]. This overall ranking masks health disparities among county residents. For example, the county's infant mortality rates are significantly higher for African Americans. Concentrations of higher infant mortality rates exist in specific U.S. Census tracts of the county, uncorrelated with income and race. Overall, diabetes-related emergency room visits are significantly lower in Montgomery County than Maryland's average, yet the rate for African American residents in Montgomery County is higher than the State average.[42]

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[41] 2019 County Health Rankings by Robert Wood Johnson Foundation https://www.countyhealthrankings.org/

[42] "Health Equity in Montgomery County, MD Healthy Montgomery Core Indicators 2008-2017" - https://www.montgomerycountymd.gov/healthymontgomery/Resources/Files/Topics/Demographic%2C%20Social%20Determinants%2C%20and%20Health%20Care%20Access.pdf

Economic factors and the physical environment greatly contribute to length and quality of life. Opportunities to eat well and be active are constrained by the quality of neighborhoods and the availability of services and opportunities. The inequitable distribution and accessibility of job opportunities, public transportation, parks and recreation facilities, and healthy food choices lead to inequitable health outcomes.[43] The quality of neighborhoods and housing is generally related to income levels. Low-income residents are less likely to have health insurance, less likely to have access to primary and secondary care, have lower access to fresh food, more likely to live near higher density of fast-food restaurants, and have less access to preventive health care, and parks and recreation facilities/programs. Income–based health issues disproportionately impact the county's African American and Hispanic residents. Differences in income are directly reflected in differences of life expectancy: low-income Americans can on average expect to have 10 or 15 fewer years of life than higher-income Americans in the United States."[44]

While there are many determinants for the significant increase over the last 10 years in mental health emergency room visits, drug-induced mortality rates, and increases in diabetes and other chronic diseases, the socio-economic conditions and the quality of neighborhoods can impact these rates. The level of tree cover, integration of green space, and safety and quantity of the sidewalks directly impact the physical and mental health of residents through the mitigation of the adverse effects of the built environment. According to University of Washington, Urban Forestry/Urban Greening Research, nearly 40 years of research shows that the experience of nature--parks, gardens, trees, small landscapes, and natural areas-- is profoundly important to human functioning, health, and well-being (http://depts.washington.edu/hhwb/). Housing type and quality, neighborhood quality, noise, crowding, indoor air quality, and light have all been linked to personal mental health.[45] For example, the likelihood of obesity apparently declines with increases in mixed land use but rises with increases in time spent in a car per day.[46] Walkability and mixed-use neighborhoods have also been linked to an enhanced sense of community and social capital.[47].

Providing support services for the county's growing elderly population will be challenged by the desire for a variety of living arrangements, especially among minority residents. For example, the Asian-American community has expressed a desire for multi-generational living arrangements.

Public health issues are intertwined with the quality of the environment and will be exacerbated by climate change. Higher temperatures have health implications that are already evident in cities. Climate change will drive changes in infectious diseases. And it may impact our housing and infrastructure as well as restrict access to care.[48]

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[43] "The active city? Disparities in provision of urban recreation resources." https://www.sciencedirect.com/science/article/abs/pii/S135382920900135X?via%3Dihub

[44] "New study shows rich, poor have huge mortality gap in US" -https://phys.org/news/2016-04-rich-poor-huge-mortality-gap.html

[45] "Residential green space in childhood is associated with lower risk of psychiatric disorders from adolescence into adulthood" – https://www.pnas.org/content/116/11/5188

[46] "Fighting obesity through the built environment" https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1247493/

[47] "Physical activity in relation to urban environments in 14 cities worldwide: a cross-sectional study" - https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(15)01284-2/fulltext

[48] "Health impacts of climate change" - https://www.apha.org/-/media/files/pdf/topics/climate/guide_section4.ashx?la=en&hash=118F4FD2E4719EF51A76C0B0865BAEF57BEB7EDB

Environmental Health

The ability to provide healthy air to breathe and a clean, reliable water supply depends on a healthy and sustainable environment. Montgomery County has been a leader in protecting and enhancing the natural environment through a broad range of planning initiatives and policies and a rigorous regulatory framework to protect sensitive environmental resources. But many indicators such as stream water quality, forest loss, loss of plant and animal species, and increased imperviousness point to a downward trend. As the population expands and the region continues to develop, pressures on our natural systems will increase. In May 2019, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services issued its Global Assessment Report, which noted that up to one million species of plants and animals may face extinction in the foreseeable future[49]. And, in September 2019, research published in the journal *Science* estimated that, over the past 50 years, North America has lost more than one-fourth of its bird population[50]. These losses represent a significant threat to the stability of our ecosystems, and to major economic sectors, especially agricultural production.

All the county's water bodies fail to meet one or more of the state's water quality standards for their designated uses, and many are under review for additional water quality impairments. Since the start of the state's Total Maximum Daily Load[51] program implementing water quality standards, the number of water bodies that require TMDLs has been steadily increasing. The downward trend in water quality and increases in listed impairments are due to several factors such as decreases in forested and other natural lands, increases in development footprint and impervious cover, and climate change trends towards more frequent, intense, and erosive storms and associated runoff.

Although there are a variety of factors that affect stream condition in the county, the loss of natural areas and the degree of imperviousness are the two most significant. Higher impervious cover leads to more stormwater runoff and urban pollutants that tend to erode and degrade stream channels and habitat and the biologic communities they support, leading to degraded stream condition scores and narrative rankings. Down-county areas consistently show lower quality streams over the years. Those streams contend with higher levels of impervious cover, disturbed and compacted soils, older and less effective stormwater management, and fewer natural areas and undisturbed soils that can filter and infiltrate rainfall to groundwater effectively. The Agricultural Reserve and other up-county areas have much lower imperviousness, uncompacted soils, and greater natural and other undisturbed vegetated areas, and generally have higher quality streams.

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[49] https://ipbes.net/sites/default/files/ipbes_7_10_add.1_en_1.pdf

[50] https://www.npr.org/2019/09/19/762090471/north-america-has-lost-3-billion-birds-scientists-say

[51] A TMDL is the calculation of the maximum amount of a pollutant allowed to enter a waterbody so that the waterbody will meet and continue to meet water quality standards for that particular pollutant. A TMDL determines a pollutant reduction target and allocates load reductions necessary to the source(s) of the pollutant. https://www.epa.gov/tmdl/overview-total-maximum-daily-loads-tmdls

Climate Change

In addition to chronic environmental sustainability issues, climate change caused by Greenhouse Gas emissions has emerged as a major issue in the last few decades. It threatens human health and environmental health. Impacts of climate change imperil food systems, property and infrastructure, with ripple effects hampering commerce and imposing extra costs on businesses and residents. Disadvantaged communities and vulnerable populations are disproportionately harmed by these impacts.

Figure 16: Clara Barton Parkway after an intense storm in 2018

As mentioned, in Montgomery County, streams in the up-county have generally maintained better water quality than the down-county streams. Recent decline of stream water quality in the up-county areas is partially attributed to the more intense and erosive storms related to climate change.

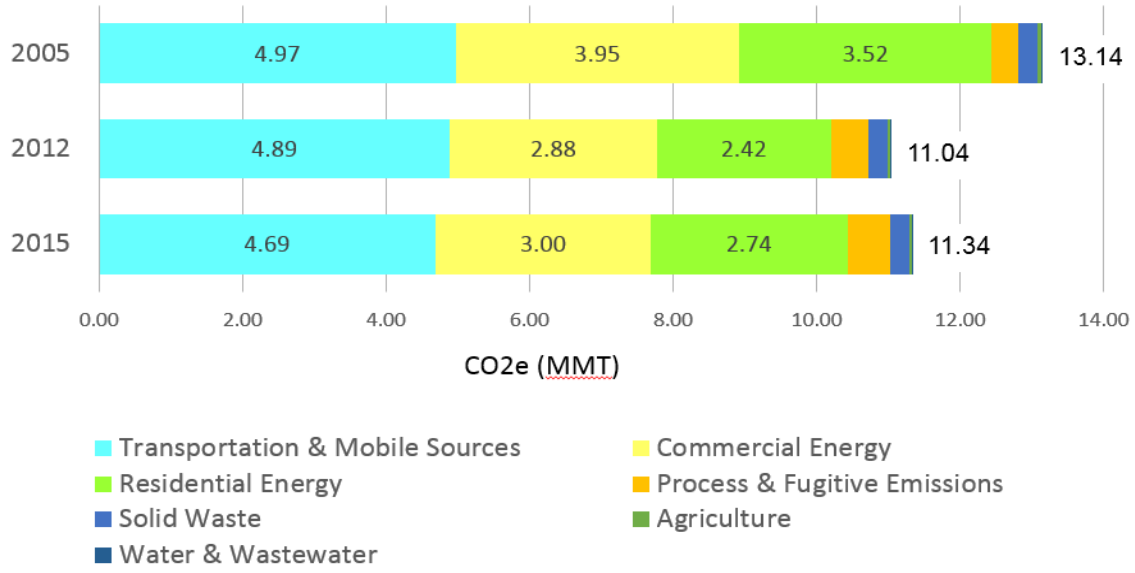
Between 2005 and 2015, the county's GHG emissions decreased by nearly 14 percent, even as the population grew by 11 percent. However, emissions between 2012 and 2015 increased by nearly three percent, largely resulting from increased residential and commercial energy use during this period. In 2015, residential and commercial energy consumption accounted for 51 percent of emissions and transportation-related emissions accounted for 41 percent for the county.[52]

In December 2017, Montgomery County Council adopted Resolution 18-974[53], which declared a climate emergency and committed to reducing the county's GHG emissions by 80 percent by 2027 and by 100 percent by 2035. Currently, the county is preparing a Climate Action Plan[54] to develop prioritized actions and strategies to meet the County's GHG emissions reduction goals.

[52] Montgomery County Department of Environmental Protection https://www.montgomerycountymd.gov/green/climate/ghg-inventory.html

[53] https://apps.montgomerycountymd.gov/ccllims/ResolutionDetailsPage?RecordId=8727&fullTextSearch=climate%20AND%20emergency

[54] https://www.montgomerycountymd.gov/green/climate/climate-action-planning.html



Source: Metropolitan Washington Council of Governments 2018 inventory, utilizing ICLEI U.S. Community Protocol and ClearPath inventory software

Figure 17: Montgomery County GHG emission trends

Our infrastructure is not designed to withstand the shocks of extreme weather events and will require significant redesign and adaptation to deal with extreme heat, flooding and other threats. Impacts will be direct and indirect and will require local initiatives as well as regional cooperation. For example, the Blue Plains Wastewater Treatment Plant, the largest advanced wastewater treatment plant in the world, treats much of the sewage from the county. Blue Plains is located in Southwest Washington, D.C. in a flood zone threatened by sea level rise.

Meeting the challenges of climate change will require a strong commitment to reducing GHG emission, conserving and enhancing natural areas, reducing our carbon footprint, converting to 100 percent renewable energy production, and limiting our development footprint.

Water and Sewer Capacity

The Washington Suburban Sanitary Commission provides water and sewer service within the Washington Suburban Sanitary District, which includes most of Montgomery and Prince George's Counties except for most of the City of Rockville and the Town of Poolesville. Most of Montgomery County's water comes from the Potomac River, the rest from the Patuxent River.

The Interstate Commission on the Potomac River Basin coordinates all the area water suppliers as one unit through what is known as CO-OP, which includes WSSC, the Washington Aqueduct, and Fairfax Water. Every five years, the CO-OP members review and evaluate the adequacy of the current water supply systems to meet the 20-year projected water demands under the conditions of the worst drought of record, which occurred in 1932.

The latest water supply projections were done in 2015 and incorporated the results of more than 100 climate change models recognized from leading institutions. These projections indicated that, even though the CO-OP members have collectively 17 billion gallons of water supply available for

release to the Potomac River during times of drought, there would be water storage deficiencies if no additional measures are taken. According to the ICPRB, the preliminary results of the official Water Demand Forecast to be released this spring show that variability in river flows may increase as the Potomac River Basin gets wetter and hotter on average due to climate change, making both droughts and flooding more severe. The ICPRB has identified the need for additional off-river storage (such as converting old quarries to water storage) in the area.

Questions

1. How can we improve residents' health by providing better access to parks and other recreational opportunities that encourage and support an active lifestyle?
2. How can we plan for future growth and retrofit our existing developments in a way that makes the county more resilient to withstand the impacts of climate change and continue to protect the county's natural resources?
3. How do we upgrade our physical infrastructure—transportation, water, sewer, waste management, power, communication, buildings, and parks and natural systems—to be climate resilient and sustainable?
4. How do we ensure the long-term viability of well (groundwater aquifer) and septic systems serving rural communities and businesses outside the WSSC water/sewer envelope?

7. Diverse and Adaptable Growth

Diversity in land use means a variety of living and working environments, especially the variety of housing types, to meet the needs of a diverse population (race, culture, household type and size, age, physical ability, income) that form the backbone of equitable and desirable places. Change has always been a constant in land use, but today change is occurring at a faster pace than at any time in the past. Adaptability is the ability to respond quickly and change/adjust to the changing needs and circumstances.

Corridors in the 21st Century

In 1964, the Wedges and Corridors concept imagined Washington, D.C. as the center of all activity and the major employment center for the region, with interstate highway corridors featuring a string of corridor cities along each corridor. It envisioned each corridor city to have about 100,000 residents, local employment and services, and parks and open spaces surrounding the community. Over the years, this simple framework has evolved into a multi-centric region with several employment centers and urban and suburban residential communities.

In Montgomery County, the corridor cities were Rockville, Gaithersburg, Germantown, and Clarksburg along I-270, and Fairland in eastern Montgomery County (as part of the I-95 corridor in Prince George's County). The land use pattern of the county is now more complex and varied. In addition to the I-270 corridor, it has numerous other corridors, employment centers, major retail nodes and significant residential development. In the southern half of the county, these corridors are Rockville Pike, Georgia Avenue, Colesville Road, University Boulevard, Veirs Mill Road, Connecticut Avenue, Randolph Road and New Hampshire Avenue. The implementation of the 2013 *Countywide Transit Corridors Functional Master Plan* will potentially change the nature of many of

these corridors by eventually providing bus rapid transit along Georgia Avenue, Colesville Road/Route 29, Veirs Mill Road, Randolph Road, Rockville Pike/Route 355, and parts of New Hampshire Avenue. The Maryland Department of Transportation's Purple Line project will create its own transit corridor.

The evolution of these corridors, each with unique characteristics, has created a different development pattern than was envisioned in the 1964 Plan. Incremental widening over the years converted many of these corridors into carriers of heavy traffic. They divide adjacent communities and are unsafe for pedestrians and bicyclists. As the county is built out and has started its next phase of incremental infill and redevelopment, some of these corridors present opportunities for reimagining their roles in the evolving land use picture.

The Agricultural Reserve

The Preservation of Agriculture & Rural Open Space Functional Master Plan[55] (1980) established the Agricultural Reserve through the mechanism of Transfer of Development Rights[56]. It was a pioneering and bold initiative that made the county a leader in preserving land for farming and open space. Subsequent controls and policies such as Building Lot Termination[57] and associated preservation easements further strengthened preservation goals against development pressures.

The Agricultural Reserve covers about 114,000 acres or about 35 percent of the county. Second to parkland, the Agricultural Reserve contains most of the forested land in the county—38,000 acres or about 40 percent of all forest in the County.

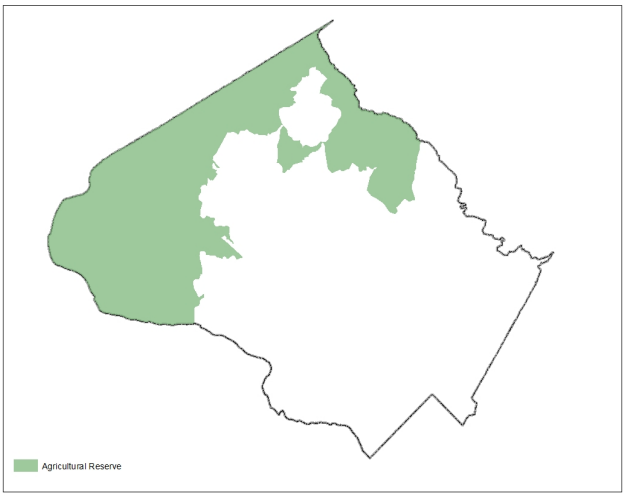


Figure 18: Montgomery County Agricultural Reserve

According to the 2017 Census of Agriculture[58], there are 558 farms occupying 65,537 acres of land. Although big farms (50 acres or more) are decreasing, the number of farms smaller than 49 acres is increasing. Traditional agricultural activities, including grain farming and livestock operations, have been sustained, while tabletop food production as well as the horticulture and equestrian industries have

[55] https://montgomeryplanning.org/wp-content/uploads/2016/09/PreservationAgricultureRuralOpenSpaceFunctionalMasterPlan1980ocr300.pdf

[56] The TDR program grants property owners one development right for each five acres of land owned within the Agricultural Reserve. TDRs can be sold to landowners or developers who can use these rights to develop at a higher density elsewhere in the county. http://www.montgomeryplanning.org/research/documents/TDRstatusreport-finaldraft.pdf

[57] Established by law in 2008, the Building Lot Termination (BLT) Program is a farmland preservation tool. A BLT easement restricts residential, commercial, industrial and other non-agricultural uses on a given property. The primary purpose of a BLT easement is to preserve agricultural land by reducing the fragmentation of farmland resulting from residential development. https://montgomeryplanning.org/planning/agricultural-reserve/building-lot-termination/

[58] Taken every five years, the Census of Agriculture is a complete count of U.S. farms and ranches and the people who operate them. Even small plots of land - whether rural or urban - growing fruit, vegetables or some food animals count if $1,000 or more of such products were raised and sold, or normally would have been sold, during the Census year. https://www.nass.usda.gov/AgCensus/

increased. In addition, interest in agricultural and cultural education and tourism experiences is on the rise.

Many of the county's streams begin in the Agricultural Reserve and other up-county areas. Protecting downstream water quality and stream condition depends on protecting the upstream portions. Without the existing protection afforded by the up-county areas, particularly the Agricultural Reserve, the stream condition of many of the down-county streams would be even more impaired. The benefits of the Agricultural Reserve to the environment in general, and to stream condition in the rest of the county in particular, are invaluable.

The Agricultural Reserve is protecting agricultural land, the farming industry, and rural open space, and providing important environmental and economic benefits. It is also a great resource in connecting people to nature and educating the young about food production. At the same time, competing demands for land for other purposes, such as solar energy production, put pressure on the Agricultural Reserve. It is facing local and global challenges including a loss of contiguous farmland, lack of funding to purchase preservation easements, extreme weather events associated with climate change, technological advancements and global trade disputes. New strategies are needed to ensure the Agricultural Reserve remains protected and economically viable for the next 30 years.

Growth Management

The county adopted the Adequate Public Facilities Ordinance in 1973, with the goal of synchronizing development with the availability of public facilities needed to support that development. In 1986, responding to concerns that too much development was being approved during the building boom of the 1980s, the county council enacted legislation requiring adoption of an Annual Growth Policy (AGP) for the county. Since then the council has used AGP, later called the Subdivision Staging Policy, to direct the Planning Board's administration of the APFO. The county uses several mechanisms including development impact fees and taxes, special taxing districts, school facility payments, residential development moratoria and public/private partnerships to meet the infrastructure needs of current and planned growth.

Currently, the SSP is primarily focused on aligning school and transportation infrastructure investment with new development. This approach has served the county well in the past but occasionally has led to moratoria on new development in transit-rich job centers where new development was appropriate and needed. Today, technological innovations such as wayfinding apps can give us real time information expanding our ability to manage traffic in a whole different way. Even a small increase in the number of people working remotely could change the traffic conditions in a significant way. As the county transitions from greenfield to infill and redevelopment, a new mechanism is necessary to evaluate and provide the needed public facilities and infrastructure improvements.

Questions

1. With the recently approved Bus Rapid Transit network along major down-county corridors, could these corridors be reimagined to accommodate some of the projected growth while also evolving into real places?
2. What kind of growth management tools will make the county nimbler and more adaptable with a focus on the broader outcomes of economic health, community equity, and environmental resilience?
3. How can the Agricultural Reserve be supported and enhanced in a changing agricultural context and economy?

4. How can all existing and new development adapt to the changing climate and remain resilient as impacts increase?

8. Culture and Design

Culture refers to a combination of history, art, literature, traditions, ideas, beliefs, religions, customs and aspirations of the county's diverse population and the places and institutions that support all the myriad ways this diversity is expressed.

Good design is critical for the quality of life of the community. It is not just about architecture; it affects all aspects and scales of the built environment—from individual buildings, parks and open spaces, and universal accessibility for the disabled to the layout of streets and communities, infrastructure and ultimately the overall land use pattern of the county. For example, as discussed in other parts of this report, many of the ills of the current development pattern of separation of uses can be traced back to the vehicle-dependent design of the built environment. This led to sprawl and its associated impacts of traffic congestion and environmental degradation.

Culture/Art

Montgomery County has a wealth of cultural and historic resources. Its cultural landscape continues to evolve as the county becomes more diverse. Not only do arts and cultural organizations and individuals enrich the lives of county residents, they are also a significant part of the county's economy.

The Arts and Humanities Council of Montgomery County estimated that in 2016 there were 500 arts and humanities organizations in the county and 2,000 individual artists and scholars. Together, this "creative economy" of nonprofit and for-profit arts and cultural organizations/businesses generated $7.1 million in local government revenue in 2015. According to the 2019 OLO report, *Strathmore and the Arts in Montgomery County*, "In Montgomery County, the arts sector contributes more than $181 million a year to the county's economy and supports more than 3,860 jobs.[59] Taken as a whole, the arts industry would be the sixth largest employer in Montgomery County."[60]

The OLO report further states that "a diverse group of artists and cultural leaders can now mine global influences and reach worldwide audiences. At the same time, people are seeking deeper connections to "place" and authentic experiences rooted in the history of the county and the region."

As parts of the county become more dense, these places need a physical identity with a distinct feel that reflects their culture, art and history; places that support upcoming and locally based artists,

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[59] Arts and Humanities Council of Montgomery County. "The Strength of the Creative Economy," Arts and Humanities Council of Montgomery County, April 2019, https://creativemoco.com/LSWD

[60] Maryland Department of Commerce. "Brief Economic Facts, Montgomery County," Maryland Department of Commerce, February 2019, http://commerce.maryland.gov/Documents/ResearchDocument/MontgomeryBef.pdf

and that offer a variety of music and other entertainment venues to attract a younger generation of patrons and visitors. The next phase of infill and redevelopment will also put pressure on the county's historic resources and require a greater emphasis on preserving them for future generations.

Design

The 1964 Plan envisioned a variety of living environments and encouraged "imaginative urban design" to avoid sterile suburban sprawl. From its agricultural roots, the county has evolved into a place with strong urban, suburban and rural communities with unique and interesting places. Montgomery Planning's emphasis on good design in the county's built environment and especially the public realm has heightened awareness of the important role good design plays in enhancing the quality of life.

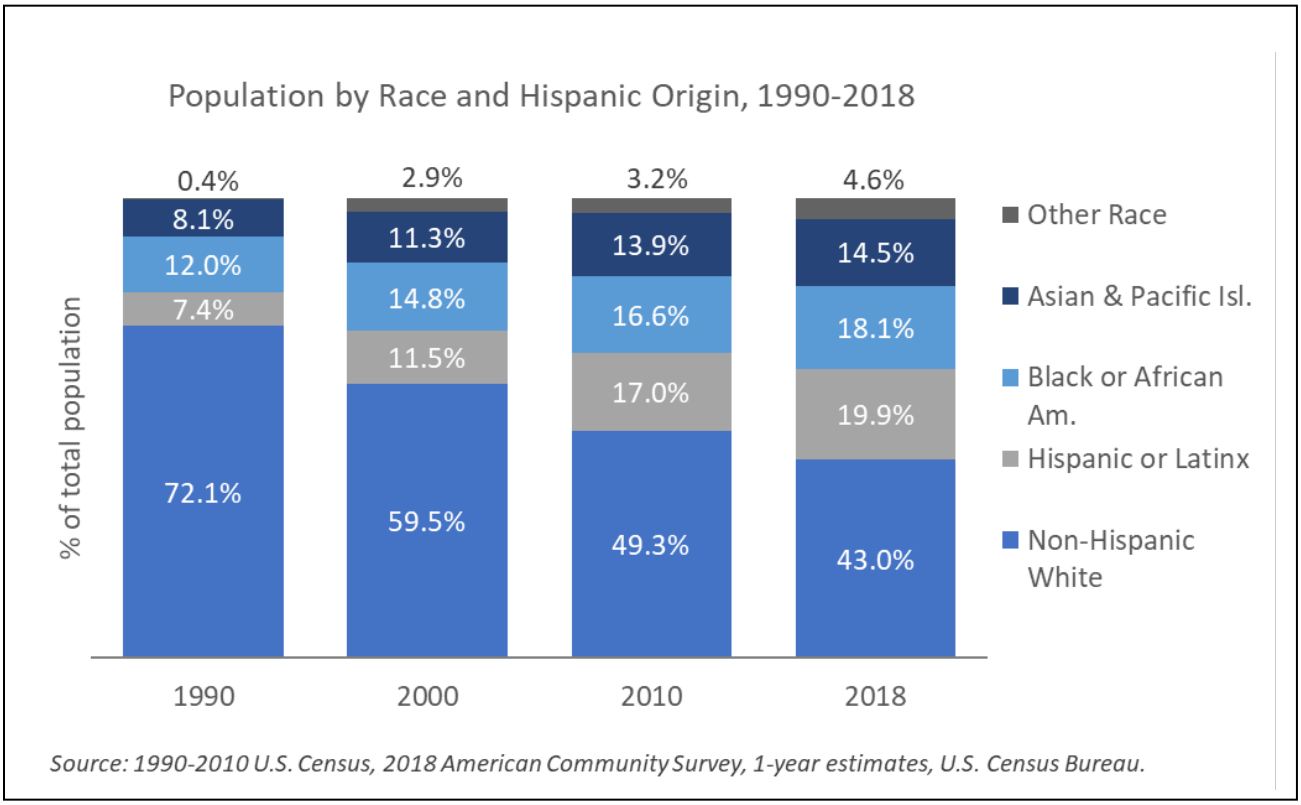
While "wedges" have thrived as low-density residential suburbs with parks and open spaces, many "corridors" within the county have become auto-dominated traffic arteries, devoid of a sense of place. These corridors, and many of the issues discussed in this report, are the result of prioritizing auto travel over community design. As the county strives to create more places with an emphasis on walking, biking, ADA accessibility, and opportunities for social interaction, the design of every part of our built environment—buildings, streets, parks and open spaces, public facilities and infrastructure—will need careful attention.

Questions

1. How can the county use the talent of it its diverse population and support artists and entrepreneurs in such a way that their creative ideas and businesses become an intrinsic part of the county's culture?
2. How can we use good design to reflect the cultural diversity of the county in its built environment, and create great places that address the varied needs of a diverse population and bring people together?

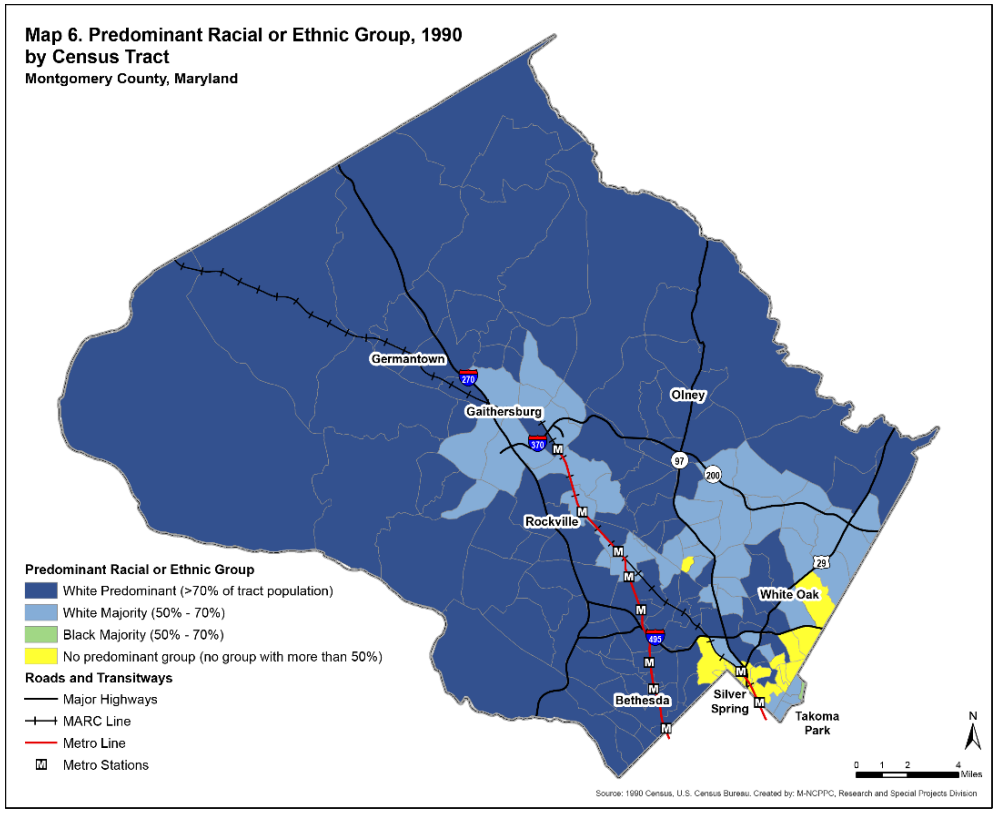
ATTACHMENTS

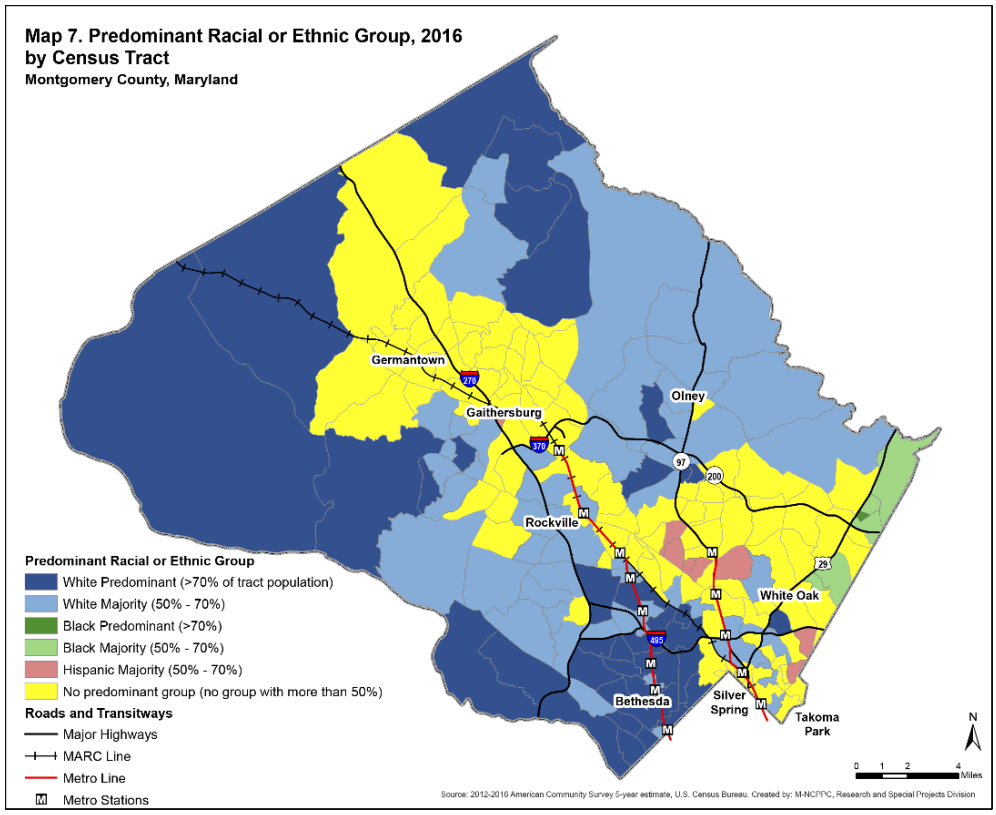
ATTACHMENT 1: Population by Race and Hispanic Origin



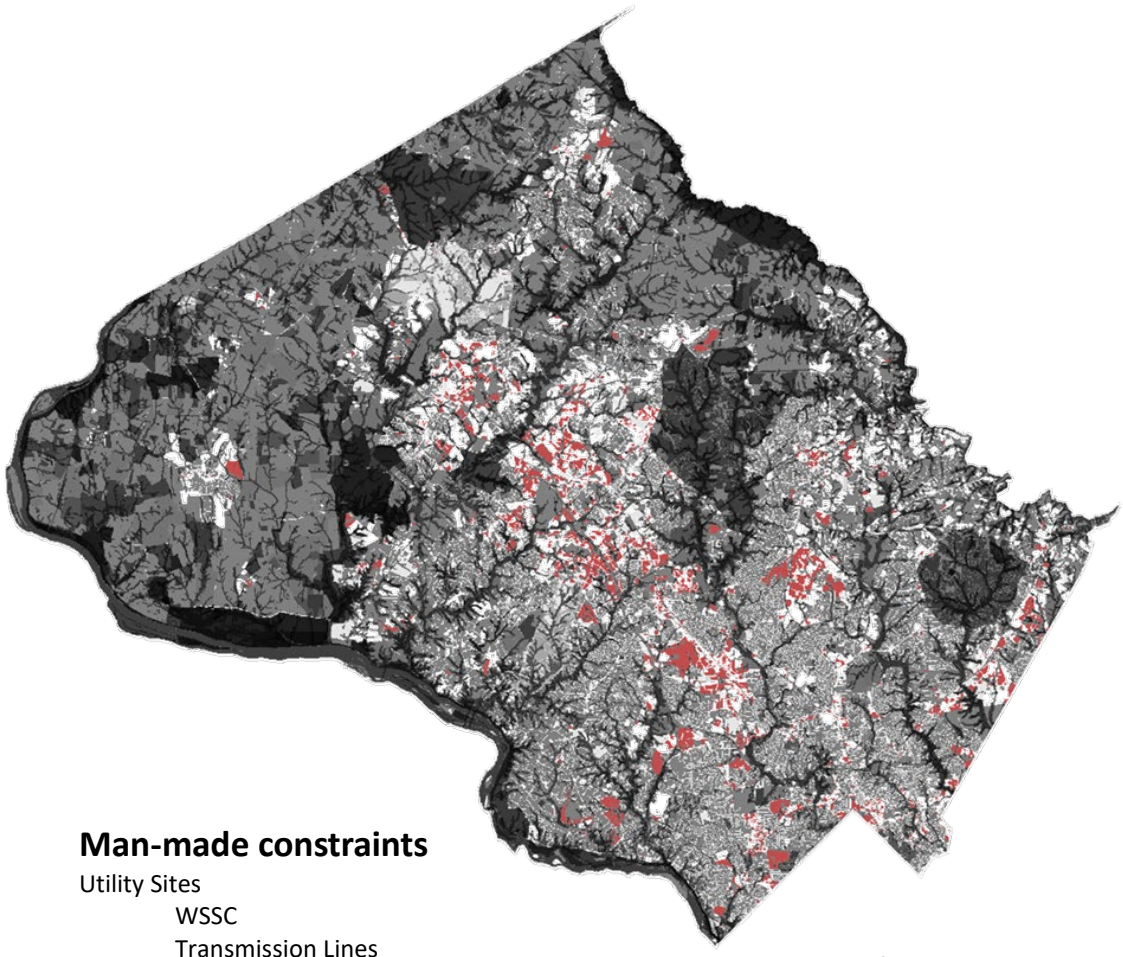
Source: 1990-2010 U.S. Census, 2018 American Community Survey, 1-year estimates, U.S. Census Bureau.

ATTACHMENT 2: Predominant Race or Ethnic Group, 1990-2016





ATTACHMENT 3: The County is Mostly Built-Out



Man-made constraints

Utility Sites
- WSSC
- Transmission Lines

Transportation Infrastructure
- Metro
- Rail
- State Roads
- Federal Highways

Government Ownership
Rustic Roads & Public Education
Historic Preservation
TDR Exhausted
Rockville Quarry
Regulated Affordable Housing,
Private Institutional
HOA Common Ownership
Single Family Dwellings

Environmental constraints

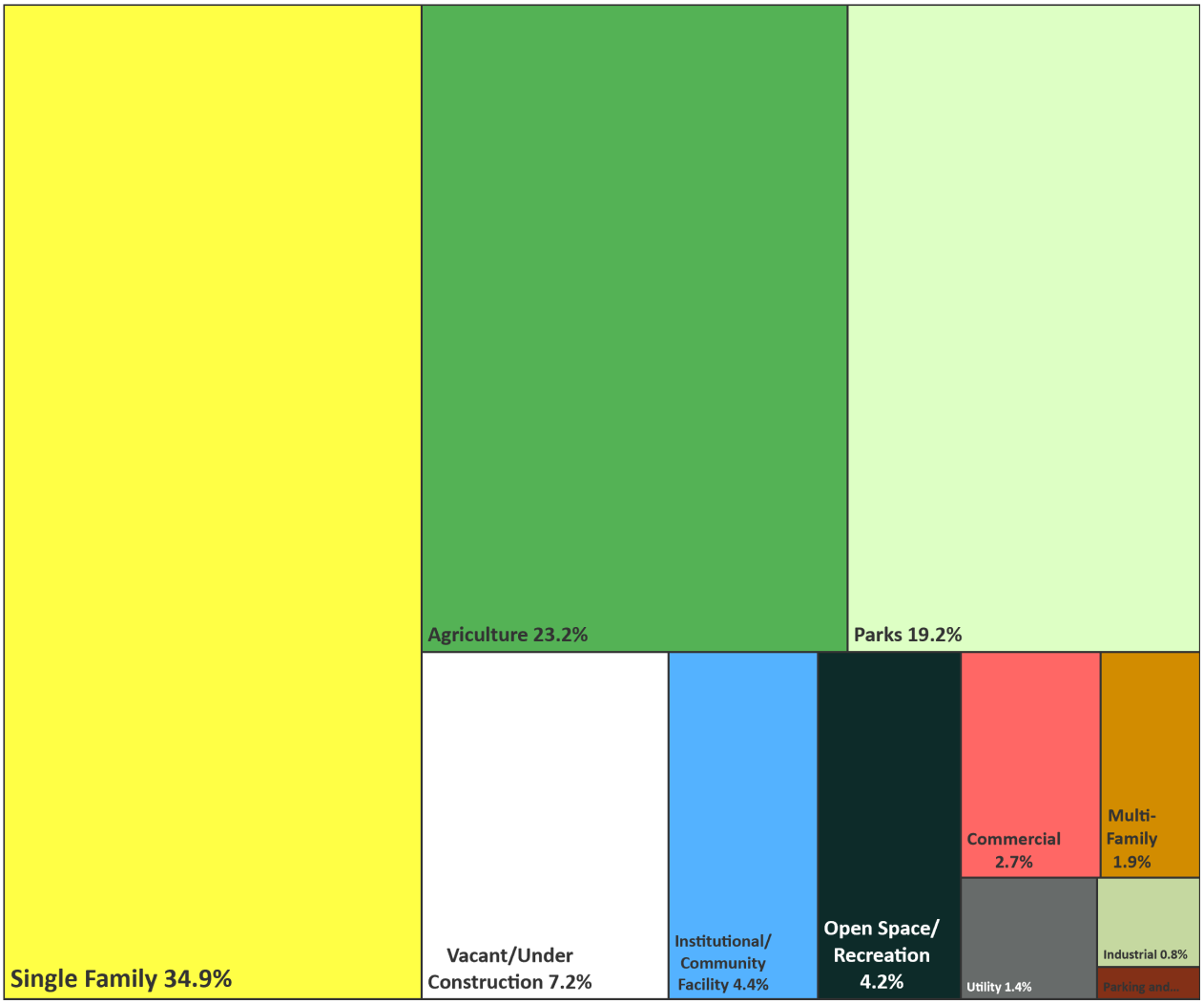
Hydrological
- Streams
- Wetland Buffers

Erodible Soils
Parks & Biodiversity Areas
Agricultural Reserves
Special Protection Areas
Forest Conservation Easements

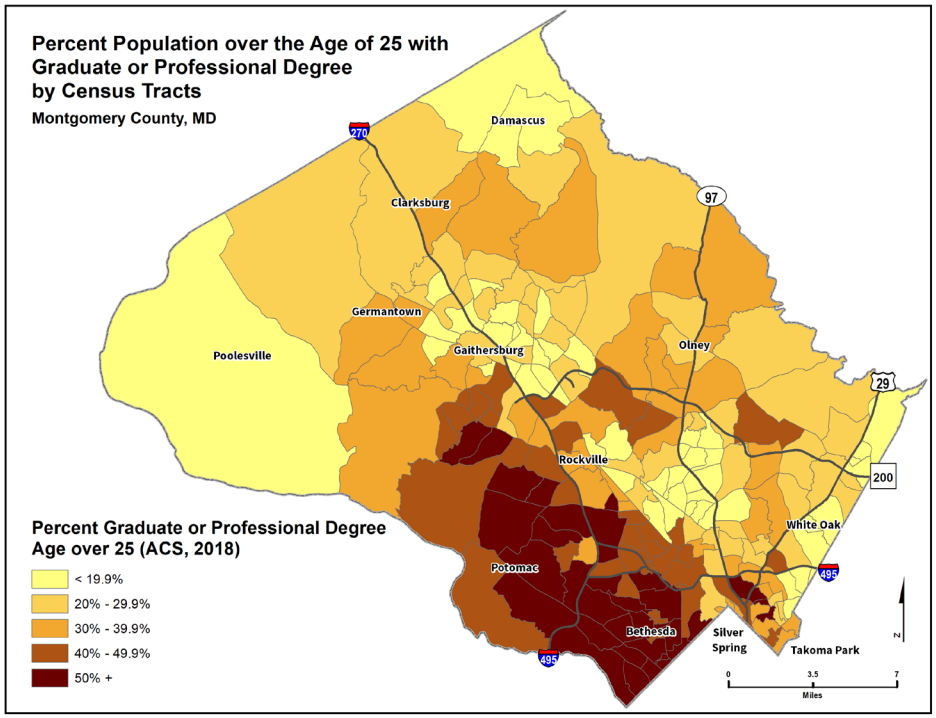
Qualifiers
- Multiple owners
- Improvement Value >2 Land Value
- Office Buildings less than 50 years old
- Retail Buildings less than 15 years old

Constrained area = 276,515 Acres (85%)
Unconstrained area = 47,804 Acres (15%)

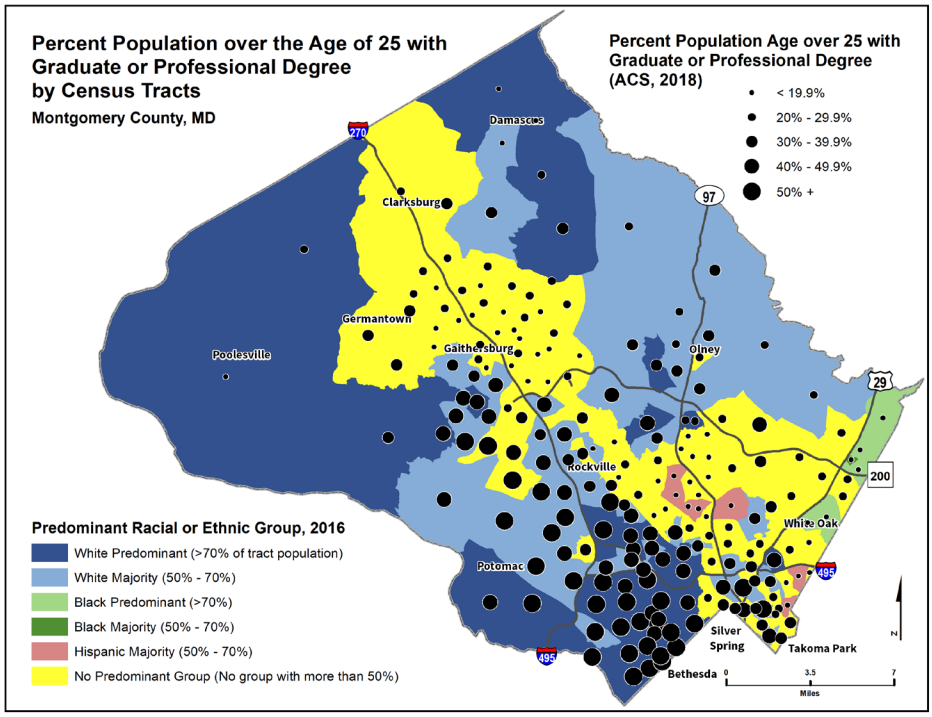
ATTACHMENT 4: How the County's Land is Currently Used



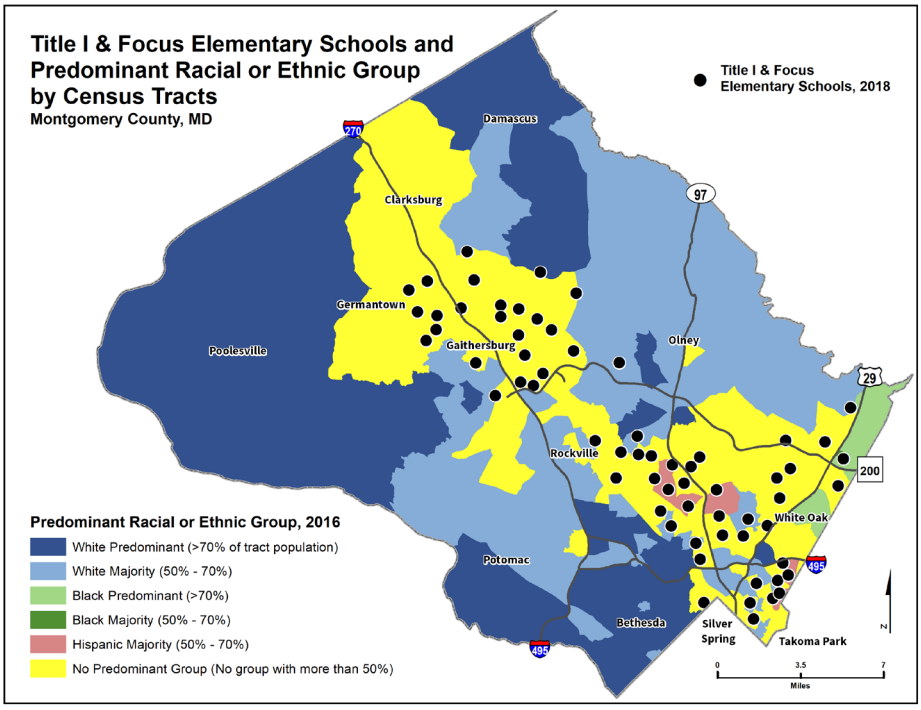
ATTACHMENT 5: Percent Population Older Than 25 with a Graduate or Professional Degree



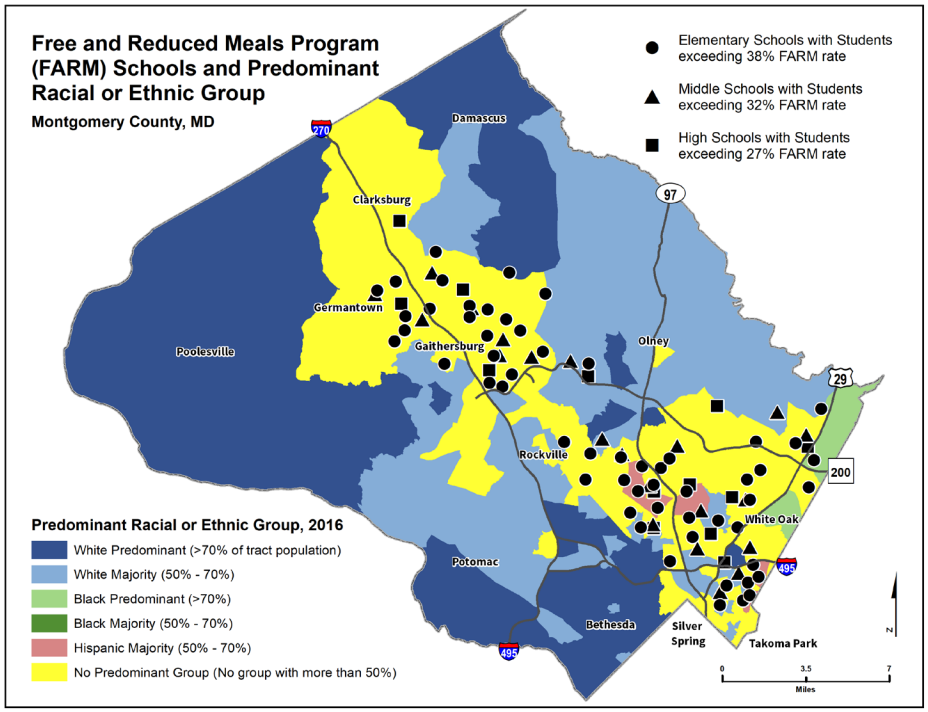
ATTACHMENT 6: Percent Population Older Than 25 with a Graduate or Professional Degree by Areas of Predominant Racial or Ethnic Groups



ATTACHMENT 7: Title I and Focus Elementary Schools by Areas of Predominant Racial or Ethnic Groups



ATTACHMENT 8: Free and Reduced Meals Program Schools by Areas of Predominant Racial or Ethnic Groups

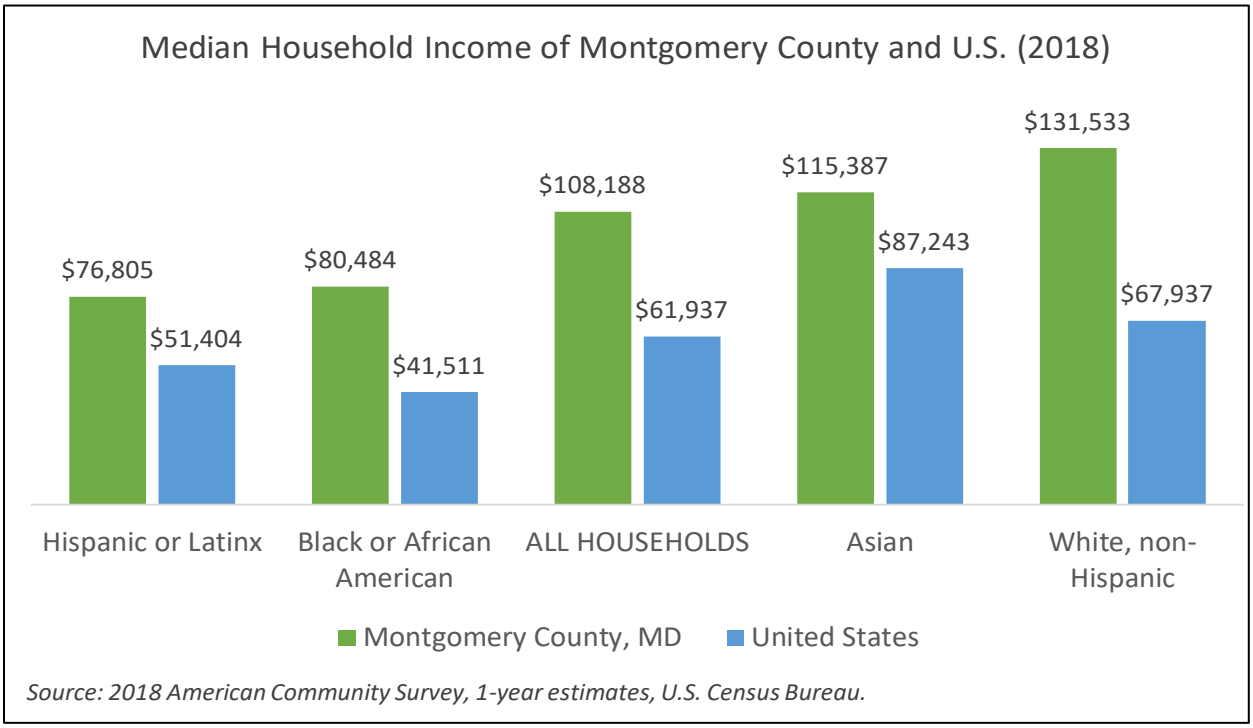


ATTACHMENT 9: Cost of Living in the Washington, D.C. Region (2019)

COST OF LIVING	Montgomery	Fairfax	Washington	Prince George's	Virginia	Maryland	USA
Overall	139.4	152	152.1	121.3	103.7	113	100
Grocery	113	114.1	114.1	107.9	99.6	105.2	100
Health	92.6	99.9	88.6	93	102.4	89.1	100
Housing	195	238.4	240.8	128.9	111.8	127.2	100
Median Home Cost	$450,900	$551,200	$556,700	$298,000	$258,400	$294,100	$231,200
Utilities	104.8	97.4	106	109.1	99.3	105.6	100
Transportation	138.7	127.6	135.3	144.4	99.4	119.3	100
Miscellaneous	108.3	114.2	105.7	113.8	100.5	104.9	100

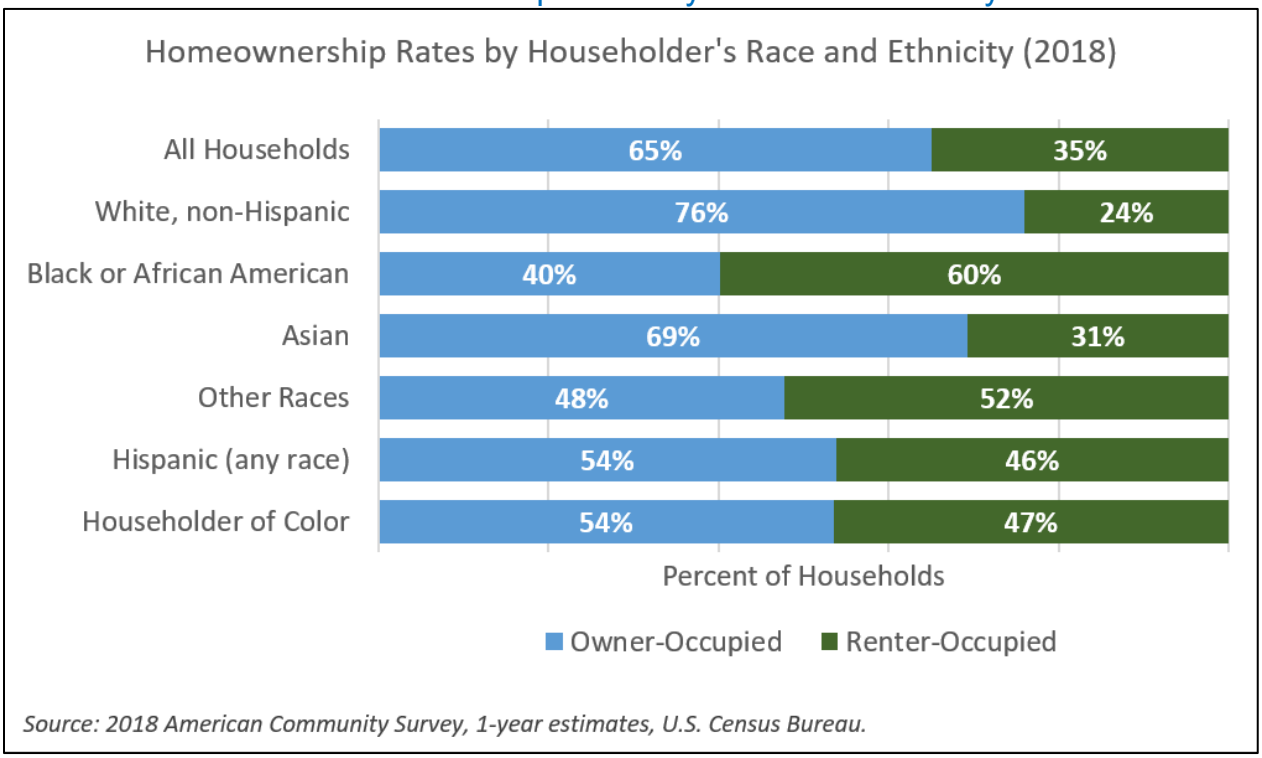
Source: Best Places to Live. *https://www.bestplaces.net/cost_of_living/county/maryland/montgomery*

ATTACHMENT 10: Median Household Income by Race and Ethnicity.



Source: 2018 American Community Survey, 1-year estimates, U.S. Census Bureau.

ATTACHMENT 11: Homeownership Rates by Race and Ethnicity



Source: 2018 American Community Survey, 1-year estimates, U.S. Census Bureau.

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APPENDIX-Community Engagement Update (separate document)