

PHED Committee #1  
October 4, 2021

## MEMORANDUM

September 30, 2021

TO: Planning, Housing, and Economic Development (PHED) Committee

FROM: Pamela Dunn, Senior Legislative Analyst  
Glenn Orlin, Senior Analyst

SUBJECT: Thrive Montgomery 2050

PURPOSE: Worksession to review the Planning Board Draft Thrive Montgomery 2050 Plan

**Councilmembers may wish to bring their copy of the Plan to the meeting.**

This is the Planning, Housing, and Economic Development (PHED) Committee's fifth worksession on the Planning Board's Thrive Montgomery 2050 draft plan. The last worksession covered the first two chapters in the Plan, the chapters on Compact Growth and Complete Communities. This worksession will cover the chapters on Design, Arts and Culture, and Transportation and Communication Networks. The Affordable and Attainable Housing chapter will be the topic of the October 4 worksession, and the chapter on Parks and Recreation will be covered on October 13. On October 18, the Committee will hold a final worksession on any remaining or follow up issues as well as the Conclusion and a revised Introduction.

### Background

The Committee's review of the introductory section of the plan established that this plan is not a whole scale rewrite of the wedges and corridor plan, but a refinement of the ideas introduced by the wedges and corridor concept - to concentrate growth in downtowns, town centers, and rural villages, and to promote growth along major transportation corridors to maximize the efficient use of land. As noted in the introduction, the policies and practices put forth in this general plan are centered on three overarching objectives: economic health, racial equity and social justice, and environmental resilience. The Planning Board Draft weaves these objectives through each chapter.

As mentioned in the prior staff report, it is useful to know that the first three chapters of the Plan lay out the foundation for the county's growth at three different scales: Compact Growth, which

defines growth from a regional & countywide perspective, Complete Communities, which lays out the vision for communities and neighborhoods, and the Design, Arts and Culture chapter which provides guidance at the “ground level” focusing on the design of blocks and buildings. Chapters 4, 5, and 6 in the Plan define how certain infrastructure or land use functions (transportation, housing, parks) should support the pattern of growth defined in the first three chapters.

In addition to understanding the format of the Plan, it is also important to keep in mind the vision for growth which Thrive 2050 is designed to encourage and support. In their briefing to the Committee on July 21, the Planning Department summarized its vision of Montgomery County in 2050 as one which will:

- Maintain a constrained growth area,
- Reintroduce East County growth corridors as key to racial equity and economic competitiveness,
- Place an emphasis on East/West growth corridors with transit,
- Protect the Agricultural Reserve and make it more accessible and relevant to the whole county, and
- Look for new ways of thinking about growth such as Parking Lots to Places, Complete Communities, and 15-Minute Living.

Last, given the volume of correspondence regarding Thrive 2050, the Attainable Housing Study, and the rezoning of single-family detached homes, it is worth noting that the General Plan is a policy document. It does not change the zoning on any property, nor change current regulations related to land use such as, development approvals, transportation infrastructure, or environmental requirements.

### **Chapter 3: Design, Arts, and Culture: Investing and Building Community**

As was the case with respect to Compact Growth and Complete Communities, policies to promote innovative design is not a new idea. As the Plan notes, the Wedges & Corridor Plan envisioned a variety of living environments and encouraged “imaginative urban design”. Where Thrive 2050 differs from prior general plans is its focus on the importance of art and culture in design. The Plan recognizes that design is multidimensional having qualities that are functional, aesthetic, and inclusive, and it emphasizes the value of integrating art and culture in the design of places to better reflect and connect communities.

Like Chapters 1 and 2, a revised version of this chapter is attached on ©1-8. It includes suggested edits made by the Committee and Council staff during the July worksessions. For this chapter, the edits primarily involve the reorganization of text for clarity and readability, and the addition of information/explanations regarding the three overarching objectives<sup>1</sup>.

#### **Policies and Practices**

Thrive recommends the following policies and practices in order to maximize the contributions of design (along with arts and culture) toward creating strong communities with lasting value. Minor

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<sup>1</sup> Section headings for text related to each objective and symbols attached to each policy statement indicating the objective it supports (Economic Health (Ec), Racial Equity and Social Justice (Eq), and Environmental Resilience (Env)) have been added to the draft Plan.

edits to the policies and practices have been made for clarity and are consistent with the Chapter 3 revisions on © 1-8.

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

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

Housing will be taken up separately under a review of Chapter 5; however, as this policy touches on design practices for diverse residential development it’s worth noting again that the role of Thrive is to provide a framework for future land use. This policy and its associated practices set the stage for increasing the diversity of housing offered in the County. They are proposed policies

and practices that will require other specific actions approved by the Council to effect such a change.

**Council staff recommends the Committee support this policy and the associated practices.**

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

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

**Council staff recommends the Committee support this policy and the associated practices.**

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

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

- Partner with agencies to strengthen data collection about investments so as to ensure that arts-and-culture related policies align with Thrive Montgomery 2050’s goals of economic competitiveness, social equity and environmental resilience. (Ec, Eq, Env)

**Council staff recommends the Committee support this policy and the associated practices.**

Economic Health, Racial Equity and Social Justice, and Environmental Resilience

As noted earlier, policies and practices in the Plan are now denoted with a symbol indicating the objective(s) the policy supports. In addition, following the recommended policies and practices, every chapter will have a section on each overarching objective to elaborate on how the policy recommendations further the objective. The Planning Board Draft contains some of this text currently; however, as noted in the beginning, headings have been added to identify the section for each objective. In addition, some of the text has been rearranged for clarity and additional text added.

**Council staff recommends the Committee support the Planning Board Draft sections (as revised).**

Metrics

The final section of each chapter provides a list of proposed metrics designed to assess the success or failure of the policies put forth in the chapter. Below are the metrics for Chapter 3:

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

Council staff suggests enhancing the implementation section of the Plan with specific direction for the evaluation and review of the metrics. The implementation section will be discussed at a later worksession as part of the Conclusion.

Actions

As mentioned in the review of Chapters 1 and 2, the actions proposed to implement the Plan’s policies and practices are in an appendix titled Actions List of Resources (excerpt at © 9-10). The appendix notes that it is not an exhaustive list of all possible actions that will be undertaken implement the Plan, suggesting the listed actions be updated regularly as new tools and resources become available to respond to changing conditions. It also suggests the actions be organized and prioritized based on level of importance and resources available to implement them, noting that some should be short-term actions that need to be completed in the next five years to jump start plan implementation. While other actions will take place over the medium term (roughly 6 to 15 years) or long-term (16+ years), building on the work done through prior actions.

There are 21 actions associated with this chapter. Given the time needed to review the Planning Board Draft Plan, Council staff suggests the Committee set up a plan to review the Action Appendix in detail following the adoption of Thrive 2050.

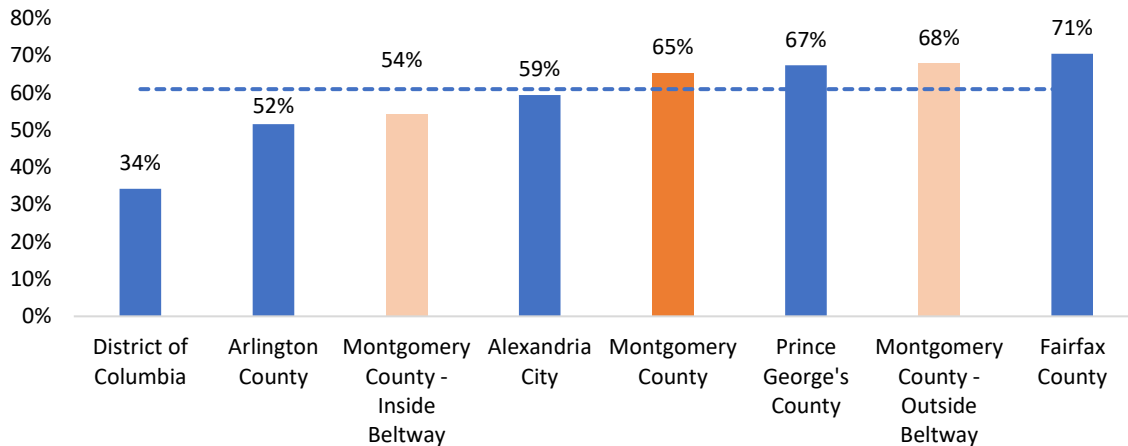
#### **Chapter 4: Transportation and Communication Networks: Connecting People, Places, and Ideas**

Like the earlier chapters, the Planning Board Chair, Planning staff, and Council staff have agreed to support a revised version of Chapter 4, attached on ©11-22. Many of the changes are simply a reordering of some of the text in the chapter; however, the more substantive changes are described below.

On page 77, Thrive states: “Montgomery County has among the lowest percentages of commuters who walk, pedal, roll, or ride transit, and our transportation system is a major contributor to greenhouse gas emissions.” It is followed by a bar chart showing each jurisdiction’s percentage of drive-alone commuters. The chart shows that in 2019 65% of Montgomery County commuters drove alone, compared to 52% in Arlington and 59% in Alexandria. The impression left is that Montgomery County is not doing as well as Arlington and Alexandria.

The comparison does not consider geography. The propensity to choose transit is proportionate to density and where transit accessibility is the greatest. The highest density and best transit accessibility are in the District of Columbia, where all Metrorail lines converge, as well as many local and regional Metrobus routes. The inner suburban jurisdictions—Alexandria and Arlington—are next best. The propensity to choose transit diminishes further away from the region’s core.

Montgomery and Prince George’s Counties are different in that each is partly an “inner” suburb where density and transit accessibility is comparable to Arlington and Alexandria, and partly an “outer” suburb, which is comparable to Fairfax County. Council staff asked Planning staff to prepare a revised bar chart to show the drive-alone percentage inside and outside the Beltway within Montgomery County:



This chart conveys a different story. It shows Montgomery’s inside-the-Beltway drive-alone percentage is nearly the same as Arlington’s and better than Alexandria’s, even though the two Virginia jurisdictions are well within the Beltway; in fact, they are almost entirely within the original 10-mile-square of the District of Columbia. Considering its geography, therefore, Montgomery County is more than holding its own compared to its neighbors.

Also, while motor vehicle traffic is a major contributor to greenhouse gas (GHG) emissions, it will be less of an issue as more electric vehicles (EVs) are manufactured and sold. Ford has announced it will be producing 40% of its products as EVs by 2030, and General Motors aims to produce only EVs by 2035. Many gas-powered vehicles are likely to stay in use beyond then, as the more recent models have more durability and are more fuel efficient. Nevertheless, motor vehicles’ contribution to GHGs will be significantly reduced by 2050.

**Council staff recommends the Committee support the joint recommendation to replace the chart on page 77 with the one above and amend the second sentence on page 77 to read:**

**“Montgomery County communities *outside the Beltway* have low percentages of commuters who walk, pedal, roll, or ride transit, and our transportation system is *currently* a major contributor to greenhouse gas emissions” (*emphasis mine*).**

On page 78, more information was added to beef up the discussion of the environmental impacts of the current transportation network.

**Council staff recommends the Committee support the joint recommendation to add the following paragraph:**

**“Although Montgomery County’s investment in transit has contributed to a slight decline in vehicle miles travelled (VMT) per capital, overall VMT has continued increasing, which has a huge impact on the County’s efforts to reduce its greenhouse gas (GHG) emissions. In 2018, 42 percent of the County’s GHG emissions were generated by the transportation sector (on-road transportation, aviation, and off-road vehicles). Motor vehicles accounted for 36 percent of emissions in 2018. Private cars accounted for approximately 75 percent of all trips taken in the county followed by buses at 10 percent, rail with 5 percent, walking at 2 percent, tax/ride hailing services (such as Uber and Lyft)**

**with 1 percent, and biking at less than 1 percent. Without a significant intervention the current pattern will continue to increase our transportation-related GHG emissions and other forms of pollution.”**

### Policies and Practices

Thrive recommends the following policies and practices in order to enhance the County’s transportation and communication networks.

- 1. Develop a safe, comfortable, and appealing network for walking, biking, and rolling.**
  - Expand the street grid in downtowns, town centers, transit corridors, and suburban centers of activity to create shorter blocks. (Ec, Env)
  - Stop planning or constructing new highways or major road widenings for cars. (Env)
  - Convert existing traffic lanes and on-street parking to create space for walkways, bikeways, and street buffers with landscaping and street trees. (Env)
  - Where consistent with other county policies, convert existing traffic lanes and on-street parking to create space for walkways, bikeways, and street buffers with landscaping and street trees. (Env)
  - Prioritize the provision of safe, comfortable, and attractive sidewalks, bikeways, roadway crossings, and other improvements to support walking, bicycling, and transit usage in capital budgets, development approvals and mandatory referrals. (Env)
  - Transform the road network by incorporating complete streets design principles with the goal of eliminating all transportation-related roadway fatalities and severe injuries and supporting the emergence of more livable communities. (Eq.)

The second practice under this policy (bullet #2), taken literally, would mean scrapping several projects the Council has already budgeted in its Adopted CIP, including Burtonsville Access Road, East Gude Drive Roadway Improvements, and Observation Drive Extended, as well as studies already budgeted in the CIP’s Facility Planning-Transportation program, including Crabbs Branch Way Extended in Shady Grove, Old Columbia Pike/Prosperity Drive widening in White Oak, and Summit Avenue Extended in Kensington.

**Council staff recommends the Committee support the joint recommendation to replace the second practice (bullet) with the following two practices:**

- ~~• Stop planning or constructing new highways or major road widenings for cars. (Env)~~
- **Stop proposing new 4+ lane roads in master plans. (Env)**
- **Give a lower priority to construction of 4+ lane roads, grade-separated interchanges, or major road widenings. (Env)**

The third practice, “Convert existing traffic lanes and on-street parking to create space for walkways, bikeways, and street buffers with landscaping and street trees.”, as written, may conflict with other County policies. There are certainly many locations where a traffic lane can be repurposed without causing intolerable traffic congestion. However, in some cases repurposing cannot happen without violating some other County standard. For example, the recently approved Growth & Infrastructure Policy has a Motor Vehicle Adequacy Test in Orange, Yellow, and Green



policy areas. If a proposed development cannot meet the standard because the County has repurposed lanes, then that development, which otherwise is consistent with its local master or sector plan, may not be approvable.

**Council staff recommends the Committee support the joint recommendation to modify the practice by adding additional text as follows:**

- **Where consistent with other County policies, convert existing traffic lanes and on-street parking to create space for walkways, bikeways, and street buffers with landscaping and street trees.** (Env)
- 2. Build a world-class transit system.**
- Build a network of rail, bus rapid transit, and local bus infrastructure and services that make transit the fastest, most convenient and most reliable way to travel to centers of economic, social and educational activity and opportunity. (Ec, Eq, Env)
  - Convert existing general purpose traffic lanes to dedicated transit lanes. (Ec, Eq, Env)
  - Connect historically disadvantaged people and parts of the county to jobs, amenities, and services by prioritizing investments in increasing access to frequent and reliable all-day transit service. (Eq, Env)
  - Ensure safe and comfortable access to transit stations via walking, rolling, and bicycling. (Eq, Env)

Similar to the third practice under the first policy, the second practice under this policy may be so broad as to conflict with other County policies.

**Council staff recommends the Committee support the joint recommendation to modify the practice by adding additional text as follows:**

- **Where consistent with other County policies, convert existing general-purpose traffic lanes to dedicated transit lanes.** (Ec, Eq, Env)
- 3. Adapt policies to reflect the economic and environmental costs of driving alone.**
- Employ pricing mechanisms, such as congestion pricing or the collection and allocation of tolls to support walking, rolling, bicycling, and transit. (Env)
  - Manage parking efficiently by charging market rates and reducing the supply of public and private parking. (Ec, Env)
  - Encourage the proliferation of non-polluting vehicles by upgrading government fleets and requiring appropriate infrastructure. (Env)

**Council staff recommends the Committee support this policy and the associated practices without change.**

- 4. Develop and extend advanced communications networks**
- Facilitate construction of high-speed fiber optic and wireless infrastructure and other information and communication technology to supplement transportation links with improved virtual connections. (Ec, Eq,)

- Focus investment in communications infrastructure and services to connect people and parts of the county that lack convenient access to jobs and educational opportunities. (Eq)
- Support teleworking by accelerating deployment of information and communications technology and making working from home easier by facilitating Complete Communities. (Ec, Env)

**Council staff recommends the Committee support this policy and the associated practices without change.**

Economic Health, Racial Equity and Social Justice, and Environmental Resilience

Following the recommended policies and practices, the Plan provides a section on each overarching objective explaining how the policies and practices further the objective. The Planning Board Draft contains much of this text currently; however, as noted in the beginning, headings have been added to identify each section and some of the text rearranged for clarity.

Under the text on Economic Health (page 82), additional information noting the importance of promoting new technologies should be added.

**Council staff recommends the Committee support the joint recommendation to add the following paragraph:**

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

Under the section on Racial Equity and Social Justice more explicit language about the need to consider equity in improving the communications network should be added.

**Council staff recommends the Committee support the joint recommendation to add the following paragraph:**

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

Metrics

The final section of each chapter provides a list of proposed metrics designed to assess the success or failure of the policies put forth in the chapter. Below are the metrics for Chapter 4:

- Vehicle Miles Traveled (VMT)
- Non-Auto Driver Mode Share (NADMS)
- Person Trip accessibility for pedestrians and bicyclists
- Number of traffic-related severe injuries and fatalities
- Transportation system’s GHG emissions
- Miles of auto travel lanes per capita

- Teleworking
- Motor vehicle parking per unit of development

**Council staff recommends the Committee support the joint recommendation to add the following metrics:**

- **Accessibility by all modes and especially via transit**
- **Access to a high-speed wireless network**

Council staff suggests enhancing the implementation section of the Plan with specific direction for the evaluation and review of all the metrics in the Plan, included in this should be the following statement: **“Note that many of these metrics have an equity component and should be evaluated for equity populations.”**

### Actions

As mentioned above, the actions proposed to implement the Plan’s policies and practices are in an appendix titled Actions List of Resources (excerpt on ©23-25). There are 31 actions related to Transportation and Communication Networks. Given the time needed to review the Planning Board Draft Plan, Council staff suggests the Committee set up a plan to review the Action Appendix in detail following the adoption of Thrive.

### Executive and Department of Transportation (DOT) Comments

Comments and recommendations were transmitted to the Council from the Executive (excerpt on ©26), and DOT (©27-33). Most of the transportation- and communication-related comments are about the list of Actions which, as noted, should be taken up after Thrive’s adoption. Some are concerns addressed in the joint recommendations, above. Other comments and recommendations are:

1. **M-83** The Executive recommends removing M-83 (the extension of Midcounty Highway from Montgomery Village Avenue to Ride Road in Clarksburg) from the Master Plan of Highways. Singling out a particular master-planned facility would be inappropriate to Thrive, which is about giving general policy guidance to future master and sector plans and not about specific projects. Reviewing M-83’s status in the master plan would be more appropriate as a stand-alone master-plan amendment, which would allow for a corridor specific analysis and input from affected stakeholders before the Council makes a decision. **Council staff does not recommend the Committee support removing M-83 from the master plan as part of Thrive.**
2. **Emerging technologies** DOT notes that Thrive makes no reference to developing technologies that can change the face of transportation in the next 30 years, including, but not limited to, “recent and ongoing developments in Big Data and GIS analysis, ridehail, bikeshare, dockless bikes and scooters, electric vehicles, drone, Connected and Automated Vehicles, and telecommuting.” **Council staff agrees that Thrive should acknowledge these new technologies and developments that could have major effects on motor vehicle and transit travel and recommends that the Committee support adding such information to this chapter.**

3. **Regional relationships** DOT points out that there is little reference to improving transportation connections to neighboring jurisdictions. **Council staff agrees that Thrive should include text citing the importance of creating better connections – particularly transit connections – to Howard and Frederick Counties and to Virginia and recommends that the Committee support adding such information to this chapter.**

#### Racial Equity and Social Justice (RESJ)

The Council’s former RESJ analyst had these comments regarding Chapter 4:

1. This chapter acknowledges that people of color and low-wage workers are more likely to live in areas without adequate infrastructure to meet mobility needs without a car (p. 84). Policies to disincentivize driving alone, such as employing pricing mechanisms (e.g., congestion pricing and tolls) and reducing the supply of public and private parking (p. 80) will have a disproportionate impact on these communities. Does Planning have recommendations for mitigating these unintended consequences? **This deserves discussion by the Committee.**
2. The Plan states that “Expanding transit service also serves as an affordable and attainable housing tool by connecting areas where housing is relatively inexpensive to jobs, schools, and amenities...” (p. 84). While it is true that expanding transit to low-income communities of color can improve access to jobs and other resources in more expensive areas, this is not a substitute for ensuring affordable housing options throughout the County. Should this language be revised to acknowledge this? **Council staff concurs that it should and recommends the Committee support this revision.**
3. Should there be a metric specific to expanding transit to low-income communities of color? **Council staff would point out the joint-recommendation to note (under the implementation section which applies to all metrics) that many measures—including this one—should be evaluated for equity populations.**

#### Coalition for Smarter Growth (CSG)

After the development of these Joint Recommendations, the Council received the following recommendations from CSG:

1. **Mention parking minimums:** Eliminating parking minimums in downtowns, town centers, rail and BRT corridors and adjacent communities is mentioned on page 10 of the draft actions document but should also be mentioned on page 80 of the draft plan. We recommend: “Manage parking efficiently by charging market rates and reducing the supply of public and private parking, including by eliminating parking minimums for new development projects.”
2. **Prioritize frequent, reliable transit in capital budgets, as well as local street connections:** The draft states on page 84 that the addition of local street connections should be a top priority in both capital budgets and development review. If this priority is going to be explicitly mentioned, then funding frequent, reliable transit service in both the capital and operating budget should be mentioned as well. We must also ensure that new local street connections are complete streets and don’t further entrench our reliance on private vehicles.

3. **Plan for electric cars:** There is no discussion of the role of electric vehicles in either the draft plan or draft actions plan. Although shifting to electric vehicles will not change land use or the need to reduce and shorten vehicle trips, we must transition to EVs to eliminate greenhouse gas emissions from transportation, which will require infrastructure upgrades and investments, like charging infrastructure for multi-family housing, that should be incorporated into Thrive.
4. **Refine measures of success:** We recommend adding the following metrics: jobs accessible by transit (up), amenities accessible by transit (up), average commute times (down), average transit commute time (down), average transit trip time (down), and difference between average car commute/trip time and average transit commute/trip time (down).

**Council staff concurs with incorporating these points in Chapter 4 and recommends the Committee support these additions.**

<u>Attachments</u>	<u>© Pages</u>
Chapter 3, revised	1-8
Design, Arts and Culture Actions in Appendix	9-10
Chapter 4, revised	11-22
Transportation and Communication Networks Actions in Appendix	23-25
County Executive’s comments on Thrive	26
Department of Transportation comments on Thrive	27-33

# DESIGN, ARTS & CULTURE--INVESTING AND BUILDING COMMUNITY

## Introduction: Why Design Matters

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

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

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

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

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

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

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

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

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

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

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

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

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

These problems are every bit as evident in the design of public buildings as in private development. Typical parcel size standards for public buildings such as schools are too large to fit most available sites,

limiting the location of new facilities. The shortage of “adequate” sites along with a growing student population leads to a tear-down-and-rebuild approach with larger and larger numbers of students in bigger and bigger buildings. Boundary areas draw students from farther away, leading to the allocation of more space for parking, less walking and bicycling, longer bus rides and drives for parents as well as longer commutes for staff.

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

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

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

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

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

- Consider changes to codes, design guidelines, and regulatory tools as well as broader use of form-based zoning that focuses on the physical forms of buildings, streets, and spaces to ensure development across the county satisfies the following:
  - Ensure that all architecture and landscape designs physically define streets and public spaces as places of shared use that engage the pedestrian and are configured to encourage social interaction. (Eq)
  - Link individual architectural projects seamlessly to their surroundings irrespective of style. Civic buildings and public gathering places must be treated as important sites whose design reinforces community identity and a culture of inclusion and democracy. (Eq)
  - Design buildings, streets, and parking to prioritize the pedestrian scale and encourage walking and bicycling through smaller blocks, narrower streets, buffered bike lanes and sidewalks. Slow vehicle speeds and minimize surface parking while adequately accommodating automobiles. (Eq, Env)
  - Accommodate new development with a context sensitive approach to architecture and landscape design that acknowledges neighboring structures, local climate, and topography. (Env)



- Physically integrate government and private development sites into their surrounding neighborhoods such that they welcome the public and support economic development by facilitating movement and interaction of people and transfer of ideas and innovation. (Ec, Env)
- Preserve, renew, and reuse existing and historic buildings, districts, and landscapes to affirm the continuity and evolution of communities while celebrating local culture and identity. (Eq)
- Support the development of housing by replacing vague and subjective concepts such as “compatibility” with clear standards for form, site layout, setbacks, architecture, and the location of parking.
  - Adopt rules for a wider variety of housing types such as tiny houses, cottages, courtyard clusters, duplexes, multiplexes, small apartment buildings; shared housing, co-housing and accessory dwelling units (ADUs). (Eq, Env)
  - Amend land-use, design, and zoning regulations, including the Zoning Ordinance and Subdivision Regulations, to remove regulatory barriers and facilitate development of range of housing types. (Eq, Env)
- Update the zoning code to include basic form-based elements for all zones. Adopt context-sensitive design guidance for all master planning efforts.

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

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

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

- Promote an inclusive arts-and-culture environment by establishing a refreshed vision that sets goals, criteria, and priorities to support the county’s arts-and-culture sector. (Ec, Eq)
- Promote public art, cultural spaces, and cultural hubs along corridors and in Complete Communities. (Ec, Eq)
- Eliminate regulatory barriers to live-work spaces, home studios, galleries, and other small-scale art-making and creative businesses to improve access for artists and arts groups to affordable living, working, and presentation spaces with a focus on economic, geographic, and cultural equity. (Eq)

- Enable all residents to experience public art daily by incorporating it into the design of buildings, streets, infrastructure, and public spaces. (Eq)
- Use new public facilities to demonstrate principles of architecture as civic art and broader cultural representation. (Eq)
- Encourage property owners, non-profit organizations, and government agencies to maximize use of parks and public spaces for artistic and cultural programming, activation, and placemaking.
- Partner with agencies to strengthen data collection about investments so as to ensure that arts-and-culture related policies align with Thrive Montgomery 2050's goals of economic competitiveness, social equity and environmental resilience. (Ec, Eq, Env)

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

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

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

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

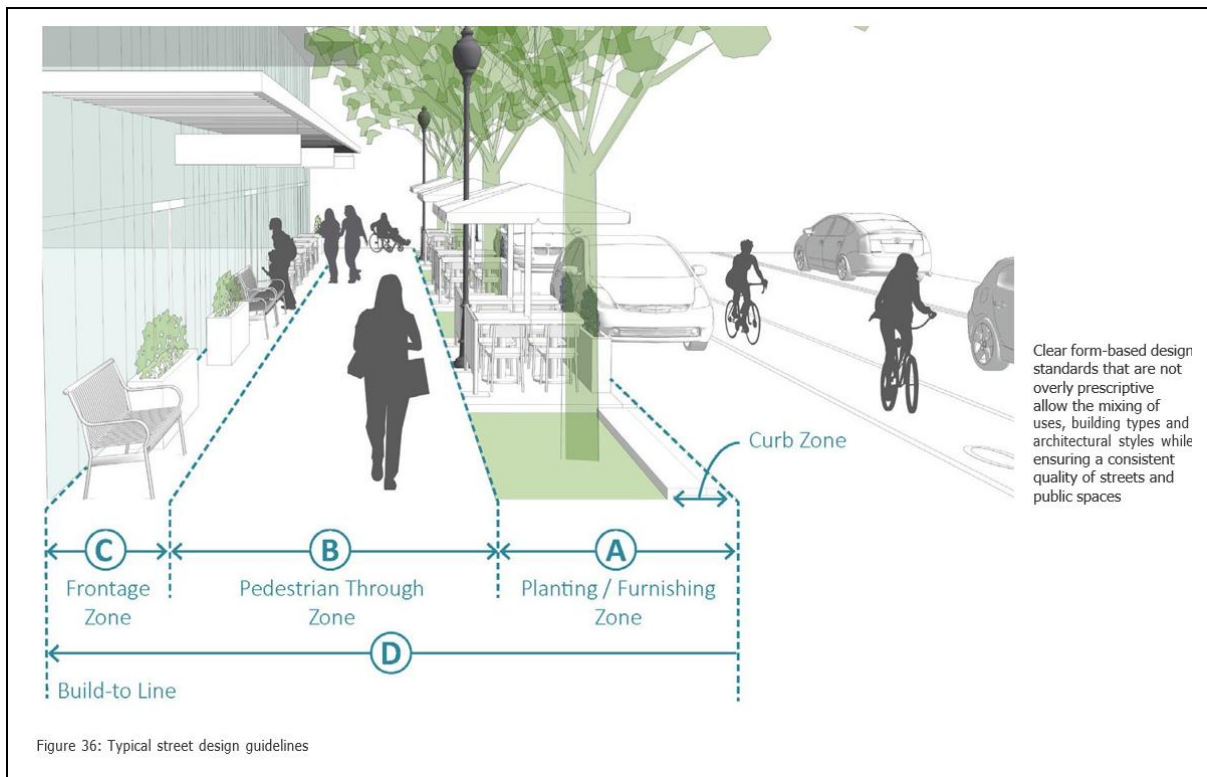
In addition to contributing to the built environment, the entire arts-and-culture sector generates energy and creativity that spur economic growth. Affordable living, administrative, working, and presentation spaces for artists will help to showcase our diversity and attract and retain cultural uses and arts-related businesses. Strategic investments in these kinds of spaces can increase the economic contribution of arts and culture over the long run by reinforcing the role of the sector in building centers for social gathering and cultural events which in turn attract other business and investment.

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

A desire for human interaction cuts across lines of age, race and ethnicity, and class and is critical to the happiness of individuals as well as the collective well-being of a community. Encouraging different kinds of people to interact in public spaces is important to building a sense of community with shared

interests and values. Arts and culture spaces and programming can help us better understand and appreciate each other, strengthening support for diversity and inclusion and building trust.

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





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

**Design Plays a Critical Role in Environmental Performance**

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

Encouraging adaptive reuse of existing buildings and incentivizing cost-effective retrofits of single-use sites into mixed-use projects will reduce energy consumption and greenhouse- gas emissions. Compact site standards and colocation of public facilities along with state-of-the-practice sustainability features will help achieve ambitious climate action goals and make more efficient use of public land.

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

## How will we evaluate progress?

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

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

## **Design, Arts and Culture: Investing and Building Community**

- D-1. Update the zoning code to include basic form-based elements for all zones.
- D-2. Amend land use, design and zoning regulations, including the Zoning Ordinance and Subdivision Regulations, to remove regulatory barriers and facilitate development of “Missing Middle” housing types such as tiny houses, cottages, courtyard clusters, duplexes, multiplexes, and small apartment buildings; shared housing; co-housing and accessory dwelling units (ADUs); and neighborhood-serving retail.
- D-3. Replace vague regulatory concepts such as “compatibility” with clear standards for form, site layout, setbacks, architecture and the location of parking for buildings.
- D-4. Collaborate with county agencies to develop a “Design Excellence Program” for public buildings such that their site layout and architecture demonstrate principles of sustainability and resilience, inclusive cultural representation and architecture as civic art.
- D-5. Create guidelines that promote cost-effective design strategies for projects with high levels of affordable housing.
- D-6. Update the county’s road code standards to align with the Complete Streets Design Guidelines.
- D-7. Update the Historic Preservation Ordinance, the zoning code, and Historic Resources Preservation Tax Credit program to incentivize and facilitate adaptive reuse and/or repurposing of existing buildings.
- D-8. Develop a sprawl repair manual to promote cost-effective design strategies and establish regulatory approaches to accommodate retrofitting of single-use commercial sites such as retail strips, malls and office parks into mixed-use developments that are more energy efficient.
- D-9. Develop guidelines and standards for climate-sensitive design principles and materials for new public and private development projects. Ensure these standards include strategies to maximize greenhouse gas reductions in the built environment, including generating clean renewable energy and reducing heat island effect.
- D-10. Collaborate with Montgomery County Public Schools, Montgomery Parks and other public agencies to update standards for public facilities that align with infill and redevelopment strategies and acknowledge the county’s limited land supply and ambitious climate action goals, utilizing tools such as colocation, in coordination with Montgomery County Growth and Infrastructure Policy.
- D-11. Update the Incentive Density Implementation Guidelines to include incentives for

adaptable design.

D-12. Conduct a study to identify planning policies and regulatory changes required to make aging in place a viable option.

D-13. Support the Arts and Humanities Council in creating inclusive arts and culture plans that establish a refreshed vision, set goals, criteria, and priorities for the county's support of the arts and culture sector and addresses how the county's arts and culture resources are allocated.

D-14. Update the zoning code to eliminate regulatory barriers to live-work spaces, home studios, galleries, and other small-scale art-making and creative businesses and incentivize the provision of affordable space for arts and cultural uses (rehearsal and workshop space; presentation and exhibition space, etc.).

D-15. Update the Incentive Density Implementation Guidelines and Art Review Panel review processes to streamline, expand, and clarify options for the provision of public art benefits.

D-16. Support Montgomery Parks, other county agencies and nonprofits to improve the reach of diverse programming by creating and maintaining an annual consolidated calendar of artistic and cultural programming, activation, and placemaking events varying in scale, time and location.

D-17. Allocate more funding for public art within county construction projects such as buildings, parks, and transportation infrastructure.

D-18. Create an "arts space bank" of underused spaces in commercial and institutional buildings and provide equitable access to arts and culture organizations.

D-19. Partner with local, statewide, and federal cultural heritage organizations to seek grants that promote and preserve historical and cultural sites county wide.

D-20. Partner with Montgomery County Public Schools to introduce students to Thrive Montgomery 2050 and local land use planning as a part of the standard educational curriculum.

D-21. Establish a framework for continued data collection of key metrics as outlined in the chapter titled "Design, Arts & Culture: Investing and building community".

## **TRANSPORTATION AND COMMUNICATION NETWORKS - CONNECTING PEOPLE, PLACES, AND IDEAS**

### **The interdependence of transportation and land use**

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

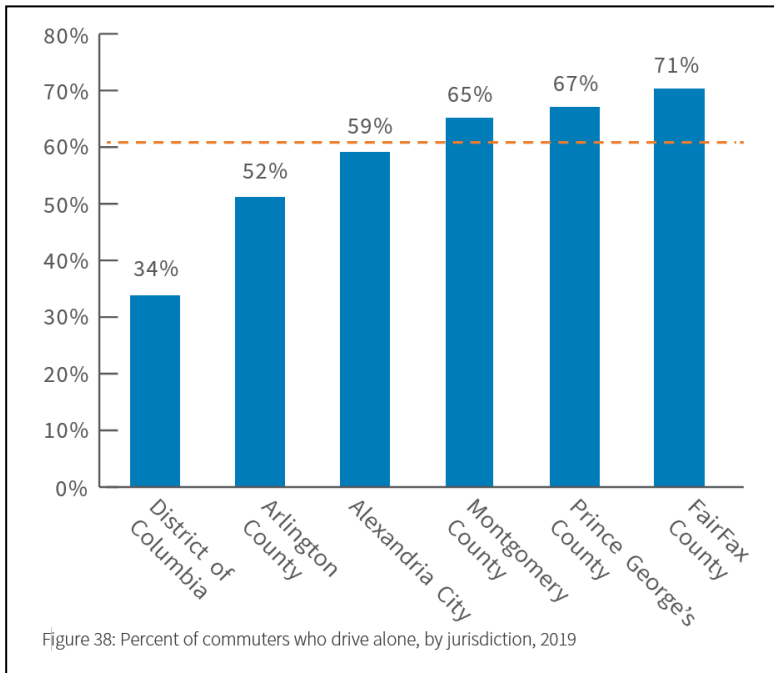
“An efficient system of transportation must include rapid transit designed to meet a major part of the critical rush-hour need. Without rapid transit, highways and parking garages will consume the downtown areas; the advantages of central locations will decrease; the city will

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

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

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

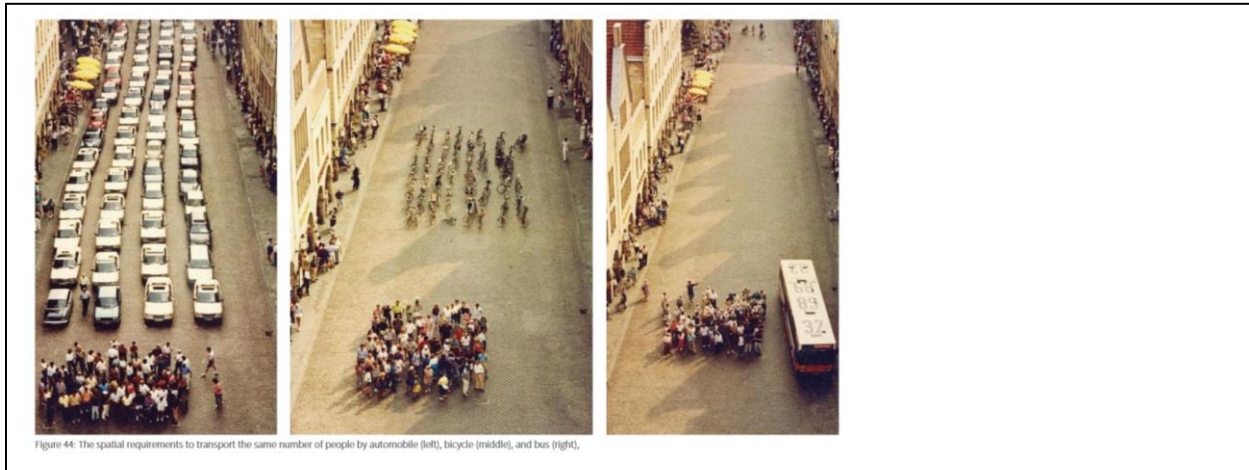




**REPLACE THIS CHART WITH THE CHART THE SPLITS OUT MONTGOMERY COUNTY IN TERMS OF INSIDE THE BELTWAY AND OUTSIDE THE BELTWAY**

Thrive Montgomery’s 2050’s focus on compact growth and infill – along with the limited availability of land for expanding rights-of-way – makes it essential that we decisively reject the impulse to ensure that driving remains as easy and convenient as possible in favor of making walking, rolling, bicycling, and transit the most practical, safe and attractive ways of getting from one place to another. Cars – even cars equipped with autonomous driving technology - require much more space per passenger than buses and trains, and walking, rolling, and bicycling are the most spatially efficient forms of travel of all. Market preferences have shifted dramatically in recent decades to favor locations with transit, bike and pedestrian access over place oriented around automobile travel, and the importance of reduced reliance on driving to meet our greenhouse gas emissions goals is obvious.

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



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

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

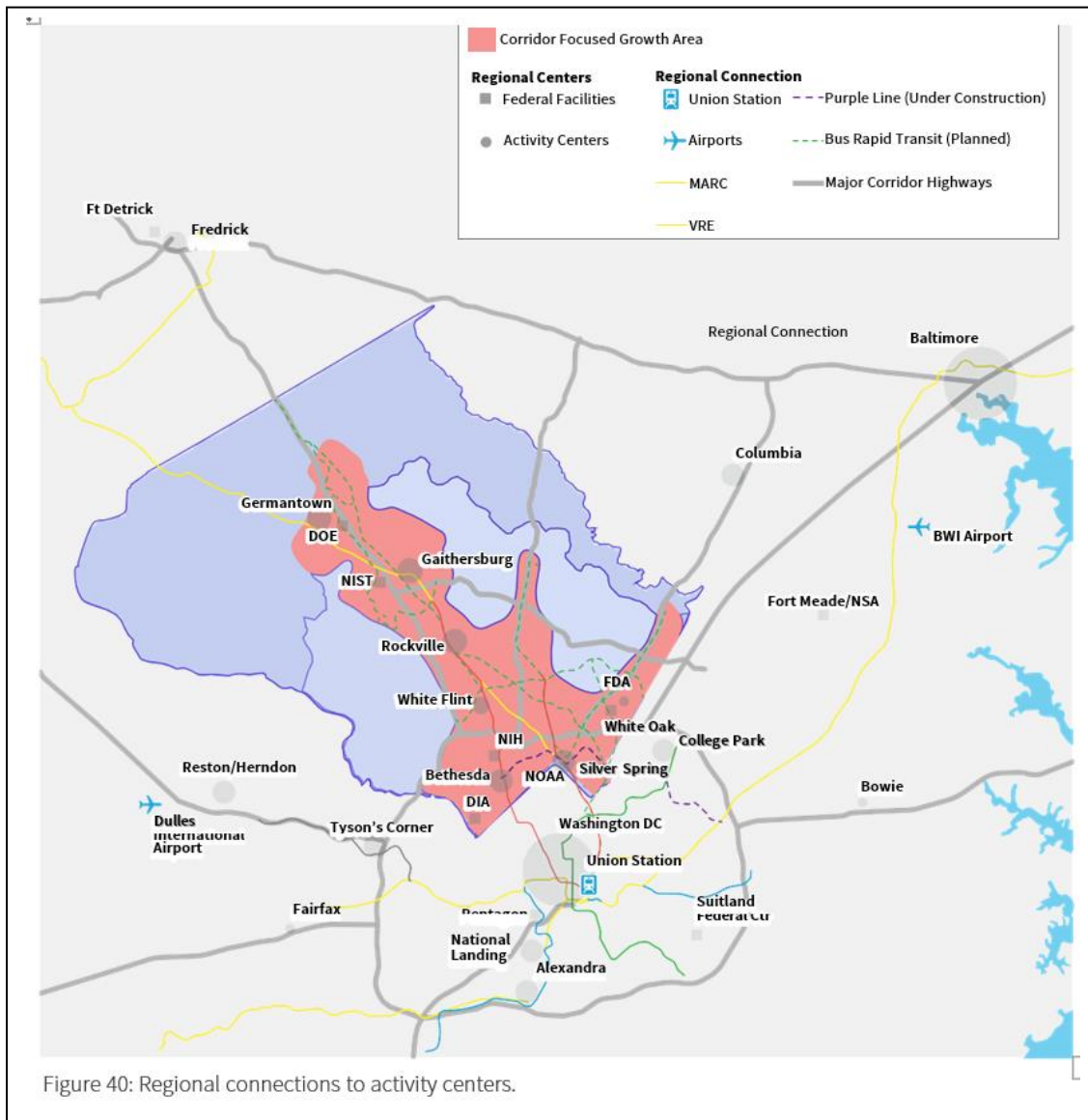
Reinforcing this vicious cycle is the fact that optimizing major arterials for cars has made these corridors unattractive and unsafe, discouraging private investment and compact, transit-oriented development even where high-quality transit infrastructure is already in place (as evidenced by several large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

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

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

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

The radial pattern of automobile-centric corridors, limited infrastructure to support alternatives to driving, and the absence of street grid connections also make our transportation network less adaptable and resilient. The hub-and-spoke model of arterial corridors was a logical way to link suburban enclaves to jobs in and around the District of Columbia, but other important centers of activity have emerged. Our prosperity depends on access to Frederick, Prince George's, Howard, and Baltimore as well as Arlington, Fairfax, and Loudoun. The lack of efficient transit connections to schools, businesses, laboratories, and other important centers of economic, intellectual, and social activity in these jurisdictions leaves us unable to take full advantage of our presence in one of the most dynamic regions in the country, if not the world.



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



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

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

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

Finally, robust investment in the county’s digital infrastructure is needed to connect residents to online job opportunities, encourage continued teleworking to reduce commuting trips, dilute rush-hour traffic,

enhance worker productivity and improve quality of life, increasing the county's overall attraction and competitiveness.

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

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

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

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

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

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

- Employ pricing mechanisms, such as congestion pricing or the collection and allocation of tolls to support walking, rolling, bicycling, and transit. (Env)
- Manage parking efficiently by charging market rates and reducing the supply of public and private parking. (Ec, Env)
- Encourage the proliferation of non-polluting vehicles by upgrading government fleets and requiring appropriate infrastructure. (Env)

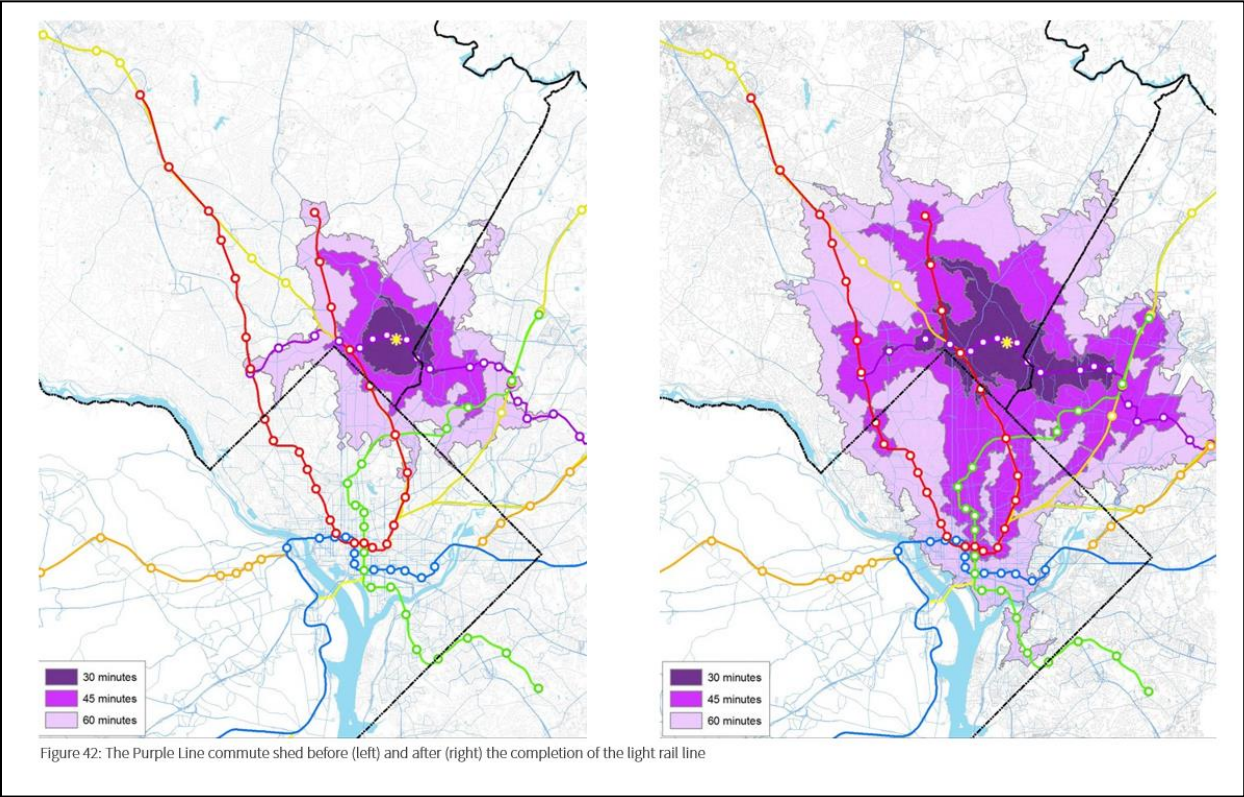
**Develop and extend advanced communications networks**

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

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

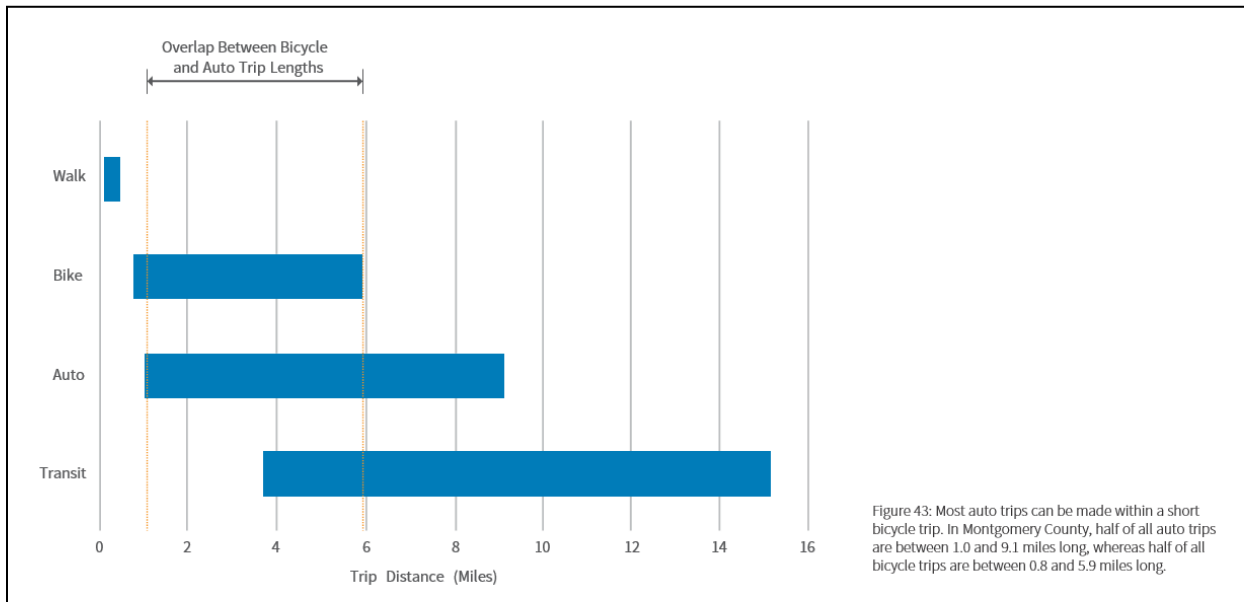
**Walkable, bikeable, transit-connected neighborhoods and commercial districts support economic vitality**

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



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

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



PER CASEY THIS CHART NEEDS MINOR REVISIONS TO BETTER CONVEY ITS MESSAGE.

### Expanding alternatives to driving helps build more equitable communities

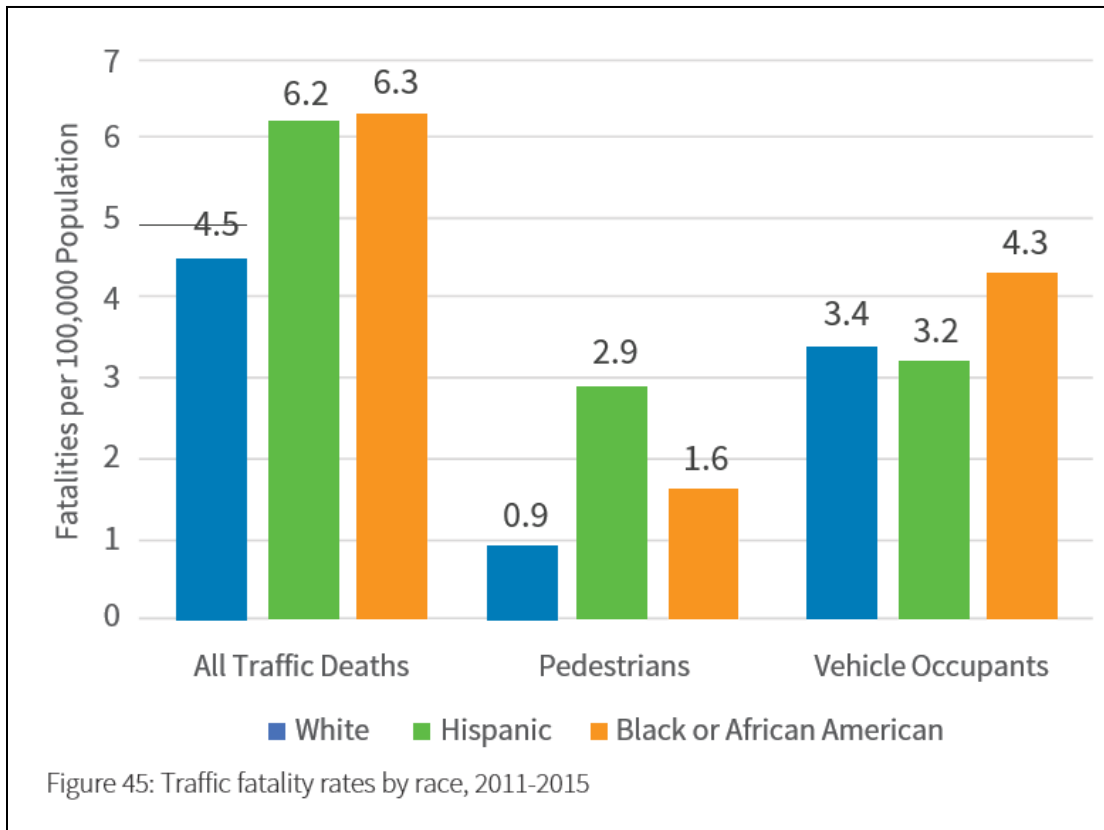
A transit-focused approach that facilitates walking, rolling, and bicycling also promises to serve our residents more equitably. Enhanced access to jobs via transit, walking, rolling and bicycling will help mitigate inequities for people of color and low wage earners who are more likely to live in areas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



jobs, schools, and amenities without subjecting residents to high transportation expenses or impractically long commutes.

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

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



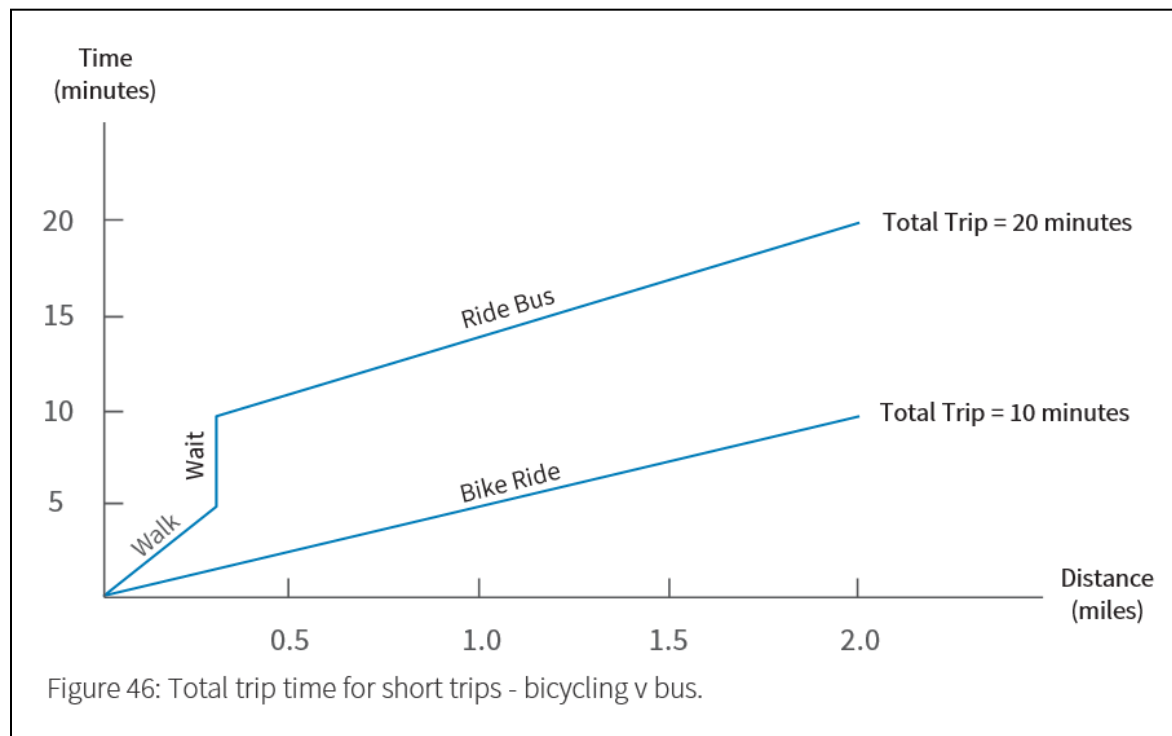
### Land use and transportation strategies that encourage walking, biking and transit use improve environmental performance

The evolution of corridors originally planned for the convenience of drivers into multimodal streets where transportation and land use are harmonized to support focused development of a compact mix of uses and building types will reduce driving and make our transportation system more sustainable and

resilient. In particular, filling in missing connections and breaking up large blocks to create a finer-grained network of streets along our suburban corridors will be challenging, but a more connected street grid is perhaps the single most important step to make our streets safer, more attractive for walking, biking and rolling, and reconnect communities divided by overbuilt highways. An interconnected grid system will increase choice of modes, provide multiple routes for travel, and be better equipped to handle extreme weather and other disruptions. For this reason, the addition of local street connections should be a top priority in both capital budgets and development review.

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

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



Reducing the supply of parking – and the amount of land allocated to parking spaces – over time will increase the amount of space available for economically productive activity, reduce the cost of

development, and relieve pressure on undeveloped land, all of which will enhance the county's economic and environmental performance. Shared parking strategies promote mixed-use development, improve pedestrian-friendly design, and encourage social interaction, while redevelopment of parking lots into higher and better uses improves environmental sustainability by creating opportunities to add tree cover, incorporate infrastructure for stormwater management, and create more landscaped areas that provide habitat for local pollinators, birds, and animals.

## How will we evaluate progress?

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

- Vehicle Miles Traveled (VMT)
- Non-Auto Driver Mode Share (NADMS)
- Person Trip accessibility for pedestrians and bicyclists
- Accessibility by all modes and especially via transit
- Number of traffic-related severe injuries and fatalities
- Transportation system's GHG emissions
- Miles of auto travel lanes per capita
- Teleworking
- Motor vehicle parking per unit of development
- Access to a high-speed wireless network

Note that many of these metrics have an equity component and should be evaluated for equity populations.

## **Transportation and Communication Networks: Connecting People, Places and Ideas**

T-1. Create and maintain a consolidated Transportation Master Plan that: 1) combines and reconciles the Master Plan of Highways and Transitways, Bicycle Master Plan and Pedestrian Master Plan; 2) adds elements for equity, safety, universal design, access management, curbside management, transportation demand management, and climate adaptation and resilience; and 3) establishes a comprehensive list of metrics and targets to monitor the performance of the transportation system and creates and maintains the accompanying data sources.

T-2. Remove master-planned but unbuilt highways and road widenings that are not consistent with this plan, add dedicated transit lanes, upgrade transitways to median running, and repurpose general-purpose lanes and on-street parking for sidewalks, bikeways, transit lanes, street buffers, street trees, and stormwater management.

T-3. Develop an Access Management Plan to reduce access points and conflict points for all modes of transportation by developing guidelines for frequent safe crossings, driveway spacing and frequency, restricted intersection corner clearance and median treatments, and network solutions including completing the street grid network and developing an alley network.

T-4. Develop an Aging Readiness Functional Master Plan to support safe transportation options for the county's aging population and address topics such as transit use, curbside management, and street infrastructure.

T-5. Develop a Curbside Management Plan that includes strategies and regulations to provide reliable access to homes, jobs, retail opportunities, and public facilities and amenities, including a logistics plan to facilitate increasing volumes of e-commerce related deliveries.

T-6. Create guidelines for developing a safety component for master plans focused on eliminating transportation-related fatalities and severe injuries.

T-7. Create guidelines to transition auto-centric corridors to multimodal complete streets for master plans, capital projects and regulatory reviews.

T-8. Create guidelines for prioritizing transportation projects to improve walking, bicycling, and transit in Equity Focus Areas.

T-9. Update the Subdivision Regulations to require a safety finding in regulatory reviews.

T-10. Develop block density targets for downtowns, town centers, transit corridors and suburban communities to guide master plan recommendations and regulatory conditions.

T-11. Implement demonstration programs and projects to encourage innovation and test new ideas before implementing these ideas county-wide.

- T-12. Collaborate with the Montgomery County Department of Transportation and the State Highway Administration to develop a street tree planting program focused on mitigating heat island effect and improving stormwater management within public rights-of-ways.
- T-13. Create strategies to support the travel needs of vulnerable users of the transportation system by improving their access to jobs, food centers, age-restricted housing, health care, and other services.
- T-14. Incorporate universal design principles into the county code, regulations, policies, and guidelines to improve access for seniors and persons with disabilities.
- T-15. Discourage multiple turn lanes in downtowns and town centers.
- T-16. Form a subregional transportation or transit authority, such as the Northern Virginia Transportation Authority, that would include Montgomery County and Prince George's County, among others.
- T-17. Develop short-term and long-term bus transit plans to extend local and regional bus service to underserved communities in Montgomery County, improve reliability, frequency, and span of service and restructure local and regional bus service to integrate with existing and planned rail and Bus Rapid Transit (BRT).
- T-18. Strengthen the Washington Suburban Transit Commission to play a stronger role in coordinating transportation projects and policy in the region.
- T-19. Expand commuter rail capacity on the MARC Brunswick Line to provide additional station locations in Montgomery County and provide frequent bidirectional all-day service, seven days a week.
- T-20. Provide dedicated transit lanes that can accommodate heavy rail as part of the replacement of the American Legion Bridge.
- T-21. Eliminate motor vehicle parking minimums for new development projects in downtowns, town centers, rail and BRT corridors and adjacent communities to encourage travel by walking, bicycling, and transit.
- T-22. Update motor vehicle public parking rates to reflect the market.
- T-23. Apply pricing mechanisms in Montgomery County to foster equity and distribute revenue to promote walking, bicycling, and transit.
- T-24. Develop an implementation plan for transitioning to zero emission fueling in residential and commercial development and public facilities and spaces.
- T-25. Update all county fleets and contracted fleet providers to zero emission vehicles.

T-26. Develop county incentives to accelerate conversion of privately-owned fleets to sustainable, zero emission vehicles.

T-27. Prepare a plan to develop, prioritize, and implement flood mitigation measures for existing flood-prone county transportation facilities based on vulnerability assessments and consideration of extreme precipitation events and sea level rise. \

T-28. Implement new Transportation Demand Management policies, programs and strategies that adapt and evolve with prevailing technologies and best practices.

T-29. Create new Transportation Management Districts (TMDs) in urban and suburban areas, prioritizing higher density activity centers and areas with rail and BRT access.

T-30. Implement FiberNet, the county's high-speed fiber optic communications network, and support further modernization of information and communications technology infrastructure needed to support equitable access to information services and attract businesses.

T-31. Develop and expand strategies to facilitate deployment of advanced wireless telecommunications services throughout the county.

**transitioning from homelessness, those with disabilities, and the elderly.** The draft states the goal of integrating these populations into attainable housing; the goal must be to integrate these populations into suitable housing of any kind, including housing for limited incomes.

- f. **Use SAP—Small Area Planning**—in our mature communities near transit to assure that we minimize the unintended consequences of new development—displacement and gentrification caused by loss of affordable housing.
- g. **Identify suitable tracts of land for development throughout the county**, as was done in the Centers and Boulevards Study, 2006.<sup>25</sup> Identifying larger parcels—3 to 5 acres—would allow excellent planned development with economies of scale.

**IV. Transportation-- The Public Hearing draft's Goal 7.1 recommended that growth be focused on infill development and redevelopment concentrated around rail and BRT, but the Planning Board removed the transit underpinning. The General Plan should return to the Public Hearing draft's recommendation.**

**A. The Planning Board's recommendation to designate communities with limited public transit for urbanization with MMH is a new form of sprawl.**

The Public Hearing draft recommended that Complete Communities with infill development be located around rail and BRT in Goal 7.1. The Planning Board, however, removed the transit element.<sup>26</sup> The current draft recommends MMH and Complete Communities in 32 centers of activity and 11 corridors dispersed throughout the county, including some centers served by only infrequent bus service.<sup>27</sup> By adding remote centers with inadequate transit located in areas not designated for intense growth,<sup>28</sup> the Planning Board encourages more driving with more Vehicle Miles Traveled (VMTs). The General Plan should return to the recommendation for transit in the Public Hearing draft.

**B. The Planning Board draft needs to establish a narrative to explain how the county will transition in the next 30 years from its current level of auto use to biking, rolling, and walking either as independent trips or as a means of getting to transit.**

In these uncertain times, the Transportation chapter envisions that Montgomery County will be able to add infrastructure for biking, rolling, and walking that will encourage the use of transit, thus allowing a reduction of the current number of car lanes and the narrowing of the streets in our centers of activity to increase walkability. I welcome that outcome, but the draft plan simply jumps from the present to the Plan's desired outcome, without explaining interim steps. That needs to be done.

**C. I support the Planning Board draft's recommendation that no more highways be built and would add the recommendation to remove M-83 from the Master Plan of Highways.**

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<sup>25</sup> [http://montgomeryplanning.org/strategic\\_planning/centers/Framework\\_Report\\_Final.pdf](http://montgomeryplanning.org/strategic_planning/centers/Framework_Report_Final.pdf) Executive Staff has not been able to find a copy of the final report, or the list of properties that the report identified.

<sup>26</sup> Comments of Chair Casey Anderson at meeting with Montgomery for All members on March 25, 2021.

Montgomery for All is an organization that supports Thrive, created by Jane Lyons of Coalition for Smarter Growth.

<sup>27</sup> See the list of centers on page 31 of the Planning Board draft.

<sup>28</sup> See the Growth Areas in the schematic map on p. 31 of the Planning Board draft.



Marc Elrich  
County Executive

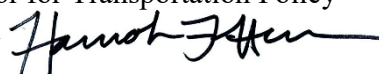
Christopher R. Conklin  
Director

DEPARTMENT OF TRANSPORTATION

**MEMORANDUM**

July 9, 2021

**TO:** Hans Riemer, Chair  
Planning, Housing, and Economic Development Committee  
Montgomery County Council

**FROM:** Hannah Henn, Deputy Director for Transportation Policy  
Department of Transportation 

**SUBJECT:** Thrive Montgomery – Transportation Comments

The Montgomery County Department of Transportation (MCDOT) reviewed the April 2021 Planning Board Draft of the Thrive Montgomery 2050 update to the General Plan and identified numerous opportunities to refine and improve the plan. The most significant points excerpted from our attached detailed comments are included below for consideration by Council. The superscript numbers used throughout this document reference the comment numbers in the detailed comments included as an enclosure. This expands upon the transportation comments in the attached letter from the County Executive dated June 10<sup>th</sup>, 2021.

- 1) **Current Context:**<sup>3</sup> The Plan should more overtly establish the context within which it was developed. It includes some scattered references to the COVID pandemic, Vision Zero, climate change, and social justice topics. These might be highlighted more directly as part of an introductory section so that readers in the future can have an awareness of how these topics were experienced and applied to the plan.

In order to plan for the next 30 years and beyond, the Plan must identify and discuss major technological changes that have recently occurred or that are expected to occur, including recent & ongoing developments in Big Data & GIS analysis, ridehail, bikeshare, dockless bikes & scooters, electric bikes, electric vehicles, drones, Connected & Automated Vehicles, and telecommuting.

Office of the Director

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101 Monroe Street, 10<sup>th</sup> Floor, Rockville, MD 20850 · 240-777-7170 · 240-777-7178 Fax  
[www.montgomerycountymd.gov/mcdot](http://www.montgomerycountymd.gov/mcdot)

 [montgomerycountymd.gov/311](http://montgomerycountymd.gov/311) 301-251-4850 TTY



- 2) **Regional Relationship:**<sup>4</sup> The plan appears very insular. Part of Montgomery County’s strength is its connections to the region as a whole. More specificity should be provided on how these connections should be reinforced or changed, particularly as many households are supported by jobs outside of the County. We rely on the region for goods, services, jobs, education, and travel. How will we stay connected and take advantage of regional changes, and how will we leverage regional anchor institutions?
- 3) **Transportation Vision:** This draft is heavily focused on existing and potential urban areas but does not provide significant focus on the large geographic area of lower-density suburban neighborhoods that are unlikely to significantly redevelop. It is unclear how the transportation needs of these areas are addressed by this plan, nor how these areas will be able to achieve the vision of Thrive.<sup>18</sup>

Throughout the Thrive process we have suggested a transportation vision for different land uses contexts focused on enabling travelers to access high-frequency transit as early in a trip as feasible:<sup>19</sup>

- In high-density areas, this access would entail constructing Parking Lot District garages at the periphery, enabling a more intensive focus on pedestrian, bicycle, and transit infrastructure within urban areas, potentially with some provision for ADA vehicle access.
- Suburban areas would utilize the growth corridors and accompanying high-frequency transit as proposed by Thrive. Thrive does not provide much information for areas between these corridors. We suggest a focus on connecting residents to the high-frequency transit through improved sidewalks, bikeways, Bike & Ride facilities, and micro-transit.
- Thrive’s vision for rural areas focuses on a significantly expanded bus network, which, while well-intentioned, may not be fiscally feasible. The Plan needs to recognize that cars are likely to continue to play a significant role in these rural area, and the Plan needs to explain how the rural areas will more effectively connect to the transit network.<sup>87</sup> MCDOT suggests that these areas consider Park & Ride facilities at regional upstream points or facilities that achieve similar objectives. Transit services might be applied more deliberately as part of updates to area master plans or as part of an Agricultural Functional Plan.

Thrive emphasizes that it is not an anti-car plan but does not articulate the changing role it envisions for private vehicles as part of our transportation system, how the County will transition from its current level of car usage, nor how goods will be transported and services provided in this new transportation vision. Thrive should consider the role of

parking minimums in land development<sup>41</sup> and should also recognize the need for bus depots and transit centers to serve the desired increased ridership.<sup>86</sup>

- 4) **New Highways; Widening:** Thrive proposes to “stop planning or constructing new highways or major road widenings for cars.” It is important for the public and for decision-makers to understand how this recommendation will be applied to ongoing projects such as Montrose Parkway, M-83, highway interchanges, and the many master planned widenings around the County. It should be more explicitly stated if it is intended that Thrive will be the true end to these projects without further analysis.<sup>31</sup>

It is also unclear how the statement quoted above will be applied to facilities that are part of new transitways, as is the case with Observation Drive and the Corridor Cities Transitway.<sup>32</sup> Importantly, there needs to also be clarification about the recommendation’s focus on cars. Taken literally, this recommendation would mean that all new highways and widenings could proceed, as long as they included provisions for public transit or any non-car use.

The Plan needs to articulate the next steps for areas impacted by these projects. Updates to area master plans or and the Master Plan of Highways and Transitways should consider what other infrastructure may be necessary to ensure travelers have alternatives available, such as new transit facilities/services or additional pedestrian/bicycle infrastructure.\* Updated land use plans should pair with these efforts.<sup>73</sup> The Executive supports the removal of M-83 from the Master Plan of Highways and Transitways and would welcome these future efforts.

- 5) **Street Grids:** In concept MCDOT supports Thrive’s proposal for more robust street grids, though the proposal would benefit from improved detail on the intent and implementation. It is unclear where grid and alley networks would be developed, how they would be paid for between developer extractions and public capital investments,<sup>76</sup> or how these new streets would impact parks, streams, and open spaces.<sup>28</sup> At a minimum, the Plan should incorporate recommendations for state of the art storm water management infrastructure.

The draft includes contradictory information on street grids. Thrive proposes to construct new streets that would be accessible to cars, while also proposing to stop constructing streets for cars.<sup>49</sup> Similarly, Thrive proposes a performance metric to reduce lane-miles, which runs counter to expanding the street grid.<sup>46</sup> Thrive also proposes to “reduce access ... for all modes of transportation,” whereas the spirit of the plan is to *increase* access for non-auto modes.<sup>75</sup> These contradictory statements must be addressed.

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\* The suggestion to consider removal of new highways & major widenings was made during the 2018 update to the Master Plan of Highways and Transitways, but the suggestion was not adopted within the scope of the update.

- 6) **Complete Communities:**<sup>68</sup> The Plan acknowledges that 15 minute communities may not apply everywhere, but the information on this topic is now weaker than in earlier Planning drafts. Throughout the Thrive process MCDOT has suggested how the Complete Communities concept might be better-defined and establish measurable performance metrics that could be used in land use and transportation planning. We believe that Complete Communities should establish three core target variables that area master plans would then define locally. These variables include:

- Travel Time (to be defined as either Peak or Off-Peak)
- Travel Mode
- Destinations

Area master plans might define these variables, with Red policy areas perhaps adopting a 15 minute off-peak travel time by ped/bike/transit to high-frequency / lower-centralization destinations such as major transit stops, grocery stores, parks, civic/recreation centers, libraries, and elementary schools. These same Red policy areas might adopt 30 minutes off-peak by ped/bike/transit to lower-frequency / higher-centralization destinations such as hospitals or high schools. Green policy areas might adopt a 30 minute peak travel time by any mode to frequent / low-centralization destinations, and 60 minutes to infrequent / centralized destinations.

- 7) **Implementation:**<sup>13</sup> This draft includes the statement that "implementation [of Complete Communities] will be primarily market driven." It is unclear how transportation actions may be conditioned, especially if new street grids take substantial portions of land parcels or if their needs are disproportionate to the development that is occurring alongside them. Market-driven implementation is not guaranteed with land development, as market dynamics (especially lenders) tend to be fiscally conservative, rarely piloting or testing new concepts. Without stronger clarity or action in this document, it appears likely that Thrive may end up with the status quo more often than envisioned.

Moreover, it should be noted that if “market driven” refers to how Complete Communities will be funded, there is no requirement for developer contributions as part of “by right” development. Currently, all the proposed changes to the single family neighborhoods are “by right”, meaning the county will have to fund the costs of new infrastructure.

- 8) **Median-Running Transitways:**<sup>74</sup> The Actions List includes a task (T-2) to "upgrade transitways to median-running." While MCDOT agrees that median-running transitways are a preference, this is an operational consideration beyond the scope of this plan. We require flexibility in transitway design and placement, especially within constrained rights-of-way or alongside atypical traffic patterns, and median-running transitways are not always the best nor appropriate option.

- 9) **Transit Authority; WSTC:**<sup>83</sup> The Actions List includes two tasks that would form a subregional transportation or transit authority (T-16) and strengthen the Washington Suburban Transit Commission (T-18). The main body of the Thrive plan, however, doesn't include any accompanying narrative that would establish the predicate for and vision of these actions. These Actions should be deleted. The more non-County agencies – not operating under Thrive – are included in these organizations, the more these groups' activities may run counter to the plan's vision and actions.
- 10) **MARC:** MCDOT strongly supports improving MARC service but cautions that the Actions List proposal for additional stations (T-19) must consider impacts either to system travel times due to having more stations and stoppages, or must overtly address low-ridership stations and put the public on alert if Thrive proposes to cease service to those locations. We note that the State's position consistently has been that, for new stations to be considered, existing stations will have to be removed.<sup>88</sup> New stations should also consider technical feasibility.<sup>†</sup>

The Plan should include additional recommendations for MARC, such as stating that the Brunswick Line should be considered for through-running into Virginia, or onto other Maryland lines (such as the Penn and Camden), and for maintaining service into West Virginia.<sup>89</sup>

- 11) **Other Major Transportation Services:** We believe that the Plan should strengthen its language on other major transportation services. Suggested modifications include actions and narrative for both public and private commuter buses / shuttles;<sup>20</sup> how the County might better utilize Amtrak and advocate for improved service and connectivity;<sup>21</sup> what vision the County has for air transport, particularly regarding its public and private airports and the popularity of drones;<sup>22</sup> and how we might address freight movement both regionally and within urban areas.<sup>100</sup>
- 12) **Developing Technology:** This Plan gives little consideration of developing technologies and how the County might position itself to take advantage of these technologies and apply them optimally. While we recognize it can be difficult to predict how these technologies will be realized and what unknown technologies will come to be, as explained above, the Plan must, at a minimum, describe the developing technologies and attempt to establish guiding positions for future scenarios.

Ongoing and upcoming technologies include both ground-based and aerial drones, particularly in the context of parcel delivery,<sup>22</sup> and the impacts of Connected and Automated Vehicles on personal vehicle fleets<sup>23</sup> and transit networks.<sup>37</sup>

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<sup>†</sup> We noted during the recent Shady Grove Minor Master Plan Amendment that the proposed MARC station at Shady Grove may be physically infeasible to construct.

13) **Vision Zero:** Thrive is an opportunity for the County to acknowledge and discuss Vision Zero related topics that may not be fully within the County’s control but are of importance to County goals. Such topics may include ped/bike collision requirements for new vehicles, traffic safety devices, driver retesting, and how to ensure drivers’ education and testing curriculums adequately cover new designs, operations, and technology.<sup>101,102</sup> Thrive also presents an opportunity to address topics related to Connected and Automated Vehicles.<sup>23</sup>

14) **Engineering, Education, Enforcement:** In considering the popular mantra of the “Three E’s” – Engineering, Education, Enforcement<sup>‡</sup> – the Plan does not give significant consideration of the roles of the latter two. We believe the Plan should include recommendations for expanded educational and outreach programs, including traffic gardens/playgrounds as well as traffic safety / bike maintenance curriculums in schools.<sup>105</sup>

The Plan also presents an opportunity to include narratives on the role of Enforcement, and how the first goal should be to utilize Engineering and Education to reduce the need for Enforcement at all. Where enforcement remains necessary, the Plan might establish a preference toward the use of automated enforcement, which can more equitably apply the law while also reducing the risks and frequency of police interactions. This same statement might also acknowledge that even automated enforcement systems must themselves be applied equitably, and existing regressive penalty systems are themselves not equitable.<sup>103</sup>

15) **Zero Emission / Electric Vehicles:** The Plan establishes a vision for Zero Emission / Electric Vehicles (ZEVs), which is a good effort in the near-term but should not be considered a final stage in achieving environmental goals. ZEVs are still vehicles, which includes infrastructure needs, traffic impacts, Vision Zero risks, and environmental impacts.<sup>96</sup> Thrive’s goals toward increasing the number of ZEVs might instead be better phrased as increasing the *share* of ZEVs among the vehicle fleet.<sup>39</sup>

16) **Actions List:** The Actions List, as written, is poorly organized, contains many overlapping and redundant actions, has actions located in some less-applicable topic areas albeit missing in more-applicable topic areas, and has some actions that are not referenced at all in the main body of the Plan. We suggest that the Actions List be reformatted to improve ease of comprehension, with the goal of ensuring that actions are not overlooked.<sup>53</sup>

17) We understand that the Actions List, as an appendix, is not part of the Plan. It seems to incorporate some of the recommendations that were in the main body of the Public Hearing Draft, but in the Public Hearing Draft, these recommendations were obligatory. The Plan needs more specificity, and the Council should review all of the recommendations in the Public Hearing Draft to see which ones should be restored to the Plan.<sup>52</sup>

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<sup>‡</sup> Recognizing that there has been interest in additional E’s, such as Evaluations, Ethics, and Equity.

Thrive Montgomery – Transportation Comments

July 9, 2021

Page 7 of 7

Should you have any questions regarding our comments on the plan, please feel free to contact me or Mr. Andrew Bossi, Senior Engineer, at [andrew.bossi@montgomerycountymd.gov](mailto:andrew.bossi@montgomerycountymd.gov).

Enclosures: Detailed Technical Comments  
June 10<sup>th</sup> Letter from County Executive to Council

HH:AB

cc: Chris Conklin, MCDOT  
Gary Erenrich, MCDOT  
Andrew Bossi, MCDOT  
Meredith Wellington, CEX  
Glenn Orlin, Council  
Pamela Dunn, Council