

BRIEF IN SUPPORT OF RESOLUTION _____

INTRODUCTION

On November 17, 2020, the Prince William County Board of Supervisors (BOCS) adopted Climate Mitigation and Resiliency goals and authorized the creation of a Sustainability Commission. This public advisory body is charged with advising on the elements of the Community Energy and Sustainability Master Plan (CESMP), which will serve as a roadmap for the county to reach its climate mitigation and resiliency goals.

The Sustainability Commission does not anticipate being able to review a draft CESMP until summer of 2023, but realizes that in the interim the BOCS will be making decisions dealing with land use, housing, and infrastructure issues that could significantly affect greenhouse gas (GHG) emissions, energy use, and climate resilience for the county and may foreclose avenues of mitigation and resilience for the future. Recognizing that many of the policies required to attain the goals of the climate mitigation and resilience resolution are likely to take years to take effect, it is critical that Prince William County start adopting and implementing policies as soon as possible in order to maximize our prospects of meeting the mitigation and resilience goals. The Sustainability Commission is thus offering comments on policies related to sustainability, even though we have not yet completed recommendations on a CESMP.

On November 17, 2020 the BOCS endorsed the Metro Washington Council of Government (MWCOG)'s climate action goals which included the following:

- Reducing greenhouse gas (GHG) emission to 50% below baseline 2005 levels by 2030
- Achieving 100% renewable electricity in Prince William County Government operations by 2030
- Becoming a Climate Ready Region and making significant progress to be a Climate Resilient Region by 2030
- Sourcing 100% of PWC's electricity from renewable sources by 2035
- Achieving 100% carbon neutrality in Prince William County Government operations by 2050

To assist in tracking and reaching these goals, MWCOG has developed a GHG inventory for PWC, covering a base year of 2005, plus 2012, 2015, and 2018 (the most recent year available) to examine the county trajectory. The results indicate that PWC's emissions increased 19% between 2005 to 2018. To achieve PWC's 50% GHG reduction goal by 2030, the County will need to reduce emissions by 58% compared to 2018 levels. It is believed that GHG levels are now higher 2018 levels, requiring even greater proportional cuts in emissions.

The Sustainability Commission anticipates that it will take aggressive actions to attain the renewable energy and resilience goals the BOCS has given us. The pathway to achieving the 2030 climate action goals that MWCOG presents envisions reducing the carbon intensity of the grid. This is to be achieved largely by Dominion Energy switching from coal to natural gas for a portion of the electrical generation and building more clean energy using solar and wind power under the Virginia Clean Economy Act (VCEA), which aims to achieve 30% renewable energy by 2030, and a carbon-free electric grid by 2045. At the federal level, the Inflation Reduction Act (signed into law on August 16, 2022) will support and possibly accelerate the VCEA goals. Commercial buildings and residences can also choose to buy electric power that is cleaner than the grid, through power purchase agreements (PPAs), renewable energy certificates (RECs), and similar measures.

The remainder of the reductions will come from reducing energy use through improved energy efficiency in existing and newly constructed/ planned commercial and residential buildings; cutting emissions from the transportation sector through an increase in electric vehicles and reduction in vehicle miles traveled (VMTs); and using the natural environment for carbon sequestration. The transportation sector at 33% is the biggest source of GHG emissions in Prince William County, so VMTs are a key indicator of emissions from this sector.

In an effort to address potential impacts on GHG emissions, energy use, and climate resilience resulting from amendments to the Comprehensive Plan prior to the adoption of a CESMP, the Sustainability Commission has reviewed the draft Comprehensive Plan and found that the Land Use Chapter and Long Range Land Use Map do not align with the concepts and policies in the Mobility and Housing Plans and do not adopt the strategies used in those areas to reduce GHG emissions. We are concerned that, without better linkage among the chapters to climate mitigation, renewable energy, and climate resilience goals, the Comprehensive Plan will not support the MWCOG and Prince William County climate action goals and address GHG emissions, energy use, and climate resilience.

SUMMARY

The Comprehensive Plan consists of several interrelated chapters, including the Land Use, Mobility, and Housing Chapters, whose goals and strategies are inherently intertwined. The policies and action strategies in the Land Use Chapter should represent the synthesis of concepts and policies from the Mobility and Housing Plans, however, the current draft of the Comprehensive Plan does not adequately recognize that interdependent relationship and falls short of assuring an integrated and cohesive Land Use Plan.

Principally, the Land Use Chapter does not represent the synthesis of concepts and policies from the Mobility and Housing Plans with respect to the reduction of auto-centric development patterns and sustainable development practices.

The proposed development in the Land Use Chapter, particularly Conservation Residential, places housing in areas without mobility or transit options. Similarly, there appears to be little planning for the Equity Emphasis Areas in the Land Use Chapter.

Whereas the Housing Chapter recognizes the significant environmental, economic, and quality of life benefits gained by bringing housing near transit, the draft Mobility and Land Use Chapters do not enable those benefits as they do not focus on placing housing near transit, likely resulting in higher GHG emissions and energy as well as fewer opportunities for affordable housing.

It bears noting that while the Mobility Chapter proposes more than \$5 billion of road improvements required with a projected need of as late as 2030 – with more than \$4 billion having a projected need of 2020 – it contains no similar delineation of proposed/needed transit projects or their cost.

It is clear that most of the proposed road projects will add significant additional lane miles which will result in significant additional Vehicle Miles Traveled (VMT), directly resulting in additional GHG emissions. Thus, the proposed road improvements seem to ignore the protection of environmental resources, GHG reduction goals, and environmental justice impacts.

The expansion of suburban development and proposed road construction projects will do little if anything to increase mobility options or minimize projected trip demand. Rather, the Land Use Chapter amendments will likely increase demand on limited mobility options and dramatically increase the number and length of trips. As a result, the Land Use Chapter does not support compact mixed use, transit, micro transit, or coordination with the County's transit partners, while increasing both the number and length of vehicle trips.

Although Smart Growth Principles are listed as the basis by which the County has prepared the draft Land Use Chapter, it is not clear that those principles and action strategies have been applied. In some cases, open space, farmland, and critical environment areas are planned for intensive industrial uses or higher density residential tracts. Those industrial areas and higher density tracts are largely incompatible with the character of the surrounding uses directed largely to areas unserved by existing transit modes.

Unless these Chapters cooperatively focus regionally on transit-oriented communities, the County will not achieve its multiple, interconnected objectives of expanding housing opportunities, maximizing investment in transit, or supporting greener travel options that contribute to our climate goals. These objectives have been recognized by MWCOCG – through its [Metropolitan Washington 2030 Climate and Energy Action Plan | Metropolitan Washington Council of Governments \(mwcog.org\)](#) and its [TPB Climate Change Mitigation Study of 2021 | Metropolitan Washington Council of Governments \(mwcog.org\)](#) – as critical to attaining the GHG goals, and they will certainly be incorporated in the CESMP. The strategy enabled by the Mobility and Land Use Chapters will make establishing sustainable environmental growth practices – as related to the housing initiative and alignment with the goals of the Adopted Strategic Plan for the County – difficult, if not impossible.

In short, the draft Comprehensive Plan should carefully integrate, across chapters, an emphasis on transit-oriented communities and other measures that will reduce VMTs, in order to help reduce GHG emissions from the county's

highest-emitting sector. This will assure not only better integration across chapters of the Comprehensive Plan, but also will assure better integration with the CESMP when it is finally completed.

Specific suggestions and comments on chapters follow. Passages from the Comprehensive Plan are excerpted or quoted in plain font, and the Sustainability Commission's comments are stated in *italics*.

MOBILITY CHAPTER

MOBILITY-POLICY 2 prioritizes equity and access when planning for mobility projects.

Action Strategy G2.1 is intended to ensure the transportation system contributes to equitable outcomes for all people. This is to be accomplished by increasing mobility options for county residents and access to mobility options especially for Equity Emphasis Areas (EEA) as defined by the MWCOG, increasing accessibility for senior citizens and persons with disabilities, and including equity as a key planning principle in all mobility projects.

Action Strategy G2.2 uses equity as a planning tool to identify social and racial disparities to mitigate adverse impacts consistent with Board adopted Resolution 20-494.

Action Strategy G2.10 seeks to reduce commuting costs for residents in Equity Emphasis Areas ("EEA") by improving access to affordable public transit.

-The emphasis in the Land Use Chapter and the Long-Range Land Use Map appears at odds with the goals of prioritizing equity and access for mobility projects. The greatly expanded suburban residential development, particularly the Conservation Residential, places housing in areas without mobility or transit options. Similarly, there appears to be little planning for the Equity Emphasis Areas in the Land Use Chapter.

MOBILITY-POLICY 3 promotes sustainability and resiliency as critical to the review of new infrastructure or upgrading existing facilities that impact environmental and cultural resources.

Action Strategy G3.2 requires the County to identify and protect the existing environmental resources through approaches that avoid, minimize, and mitigate impacts when planning and implementing transportation infrastructure.

Action Strategy G3.4 requires the evaluation of identified regional strategies for meeting regional greenhouse gas reduction goals for incorporation into local mobility projects.

Action Strategy G3.3 proposes use of the EPA's Environmental Justice Screening and Mapping Tool to identify potential environmental justice impacts of projects.

- Conversely, the Mobility Chapter proposes more than \$5 billion of improvements required with a projected need of as late as 2030, with more than \$4 billion having a projected need of 2020, two years ago. Despite the proposal for this massive spending on road projects, there is no similar delineation of transit projects or their cost. Further, most of the proposed projects add significant additional lane miles which will result in significant VMT, directly resulting in additional GHG emissions. The proposed improvements seem to ignore the protection of environmental resources, GHG reduction goals, and environmental justice impacts.

MOBILITY-POLICY 7 aligns mobility priorities with land use to increase mobility options, minimize projected trip demand, and improve quality of life for residents.

Among the Actions Strategies proposed are Action Strategies G7.1 to improve capacity, options and use of the active mobility and non-motorized network, and supporting facilities, and enhancing intermodal connectivity consistent with land use to minimize trip demand;

Action Strategy G7.2 shifts the focus from planning around vehicle accessibility to supporting more options for public transportation, ride sharing, biking and walkable streets.

Action Strategy G7.4 mandates the development of guidelines for multimodal transportation assessment of projects and provides consistent review of proposed projects.

Action Strategy G7.7 prioritizes transportation infrastructure in areas identified by the Long-Range Land Use Plan Map as Activity Centers or areas identified for targeted industries.

Action Strategy TH7.2 promotes the reduction of expected traffic demand through use of Transportation Demand Management (TDM) strategies and use of Transit-Oriented Development (TOD) to create compact, mixed-use Activity Centers that encourage greater micro transit, transit and active mobility trips and reduce vehicle trips including continued coordination with transit partners.

-As previously noted, the expansion of suburban development and proposed road construction projects will do little to increase mobility options or minimize projected trip demand. Rather, the Land Use Chapter amendments will likely increase demand on limited mobility options and dramatically increase the number and length of trips. For example, the large areas planned for Conservation Residential provide no realistic options for public transportation, ride sharing, biking, and walkable streets, and shift the priority for transportation infrastructure from that proposed in the Action Strategies to the County's rural roads. Thus the Land Use Chapter does not support the Mobility Chapter's action strategies that promote compact mixed use, transit, micro transit, and coordination with the County's transit partners. Instead, measures in the Land Use Chapter would increase both the number and length of vehicle trips.

HOUSING CHAPTER

INTENT

Housing is a key component to achieve the County's vision of being a community of choice for all residents. This chapter addresses affordability concerns and ensures that the implicit connections with mobility, environment, health, and equity are addressed to support the building of healthy equitable communities. This chapter includes consideration of GHG emissions and energy efficiency to a much greater degree than the Land Use or Mobility chapters.

Among the seven guiding policies included in the chapter are:

- Preserve and enhance existing neighborhood communities.
- Enhance mobility strategies that address the intrinsic relationship between housing and mobility in order to reduce transportation costs in terms of both time and money and encourage multi-modal options that enhance the environment resulting in a greater quality of life of the residents.
- Promote sustainable neighborhoods that support county wide environmental goals including reducing energy costs for residents.

- The draft Land Use Chapter proposes changes that will negatively impact some existing neighborhood communities.

- The Mobility Chapter incorporates significant new roads and lane miles that do not reduce transportation costs or encourage multi-modal options.

- The development proposed in the draft Land Use Chapter does not support the County's environmental goals.

Although the chapter text recognizes the significant environmental, economic, and quality of life benefits gained by bringing housing near transit, the draft Mobility and Land Use Chapters do not enable those benefits as they do not focus on placing housing near transit. Those policies will likely also result in fewer opportunities for affordable housing.

Unless those Chapters focus regionally on transit-oriented communities, the County will not achieve its multiple, interconnected goals by expanding housing opportunities, maximizing investment in transit, or supporting greener travel options that contribute to our climate goals. The strategy enabled by the Mobility and Land Use Chapters will make establishing sustainable environmental growth practices – as related to the housing initiative and alignment with the goals of the Adopted Strategic Plan for the County (which identifies quality sustainable developments practices as a Countywide priority) – difficult if not impossible.

Housing Policy 4 emphasizes strategically locating diverse housing types near transportation and employment centers to build equitable comprehensive multimodal communities and reduce associated transportation expenses for cost burdened residents.

-Neither the draft Mobility Chapter nor the draft Land Use Chapter enable that emphasis, and this risks encouraging continued sprawl development and its negative environmental impacts.

Housing Policy 5 emphasizes fostering environmentally sustainable housing communities with a variety of housing types, densities, locations, and affordability to promote a safe and livable environment for all residents. The strategies encourage mixed-use, well connected, and walkable neighborhoods with lower carbon emissions.

-As previously noted, the draft Mobility Chapter and draft Land Use Chapter do not foster that type of development but rather enable continued sprawl development and higher carbon emissions. Rather than reducing auto-centric development patterns the draft chapters encourage auto-centric development, particularly in the rural areas of the County.

LAND USE CHAPTER

ALIGNMENT WITH MOBILITY AND HOUSING CHAPTERS

There is an inherent relationship between the Land Use, Mobility, and Housing Chapters of the Comprehensive Plan. Many of the policies and action strategies in the Land Use Chapter represent the synthesis of concepts and policies from the Mobility and Housing Plans. Recognizing and understanding the interdependent relationship between the Land Use Chapter and these other chapters is necessary to assure an integrated and cohesive Land Use Plan.

The Mobility plan provides the multimodal infrastructure that is essential to support the various land uses in a community. The Mobility plan provides the existing and proposed pedestrian, bicycle, road, transit, and trail networks that connect communities and link the County to the region. The capacity required for the road network is based on the average number of daily vehicle trips that would be generated with build-out of the uses designated by the Long-Range Land Use Map.

The Land Use plan and policies closely consider the design, characteristics, and availability of transportation infrastructure addressed by the Mobility plan to assure their compatibility with the character and needs of the communities.

The Land Use plan is closely related to the Housing plan in that the Land Use Map must provide sufficient capacity to meet existing and long-range housing needs of the community based on population projections and COG's Regional Housing Needs Assessment. The Land Use plan establishes the distribution of residential growth and densities appropriate for a diverse range of housing types and affordability.

-There needs to be a much closer relationship between the Land Use, Mobility, and Housing Chapters of the Comprehensive Plan. In particular, the policies and action strategies in the Land Use Chapter do not represent the synthesis of concepts and policies from the Mobility and Housing Plans, particularly with respect to reducing auto-centric development patterns and sustainable development practices.

LAND USE PRINCIPLES

GUIDING LAND USE PATTERNS

Long-Range planning involves the purposeful arrangement of land use in a balanced, equitable, and orderly manner. Requiring the use of planning tools that facilitate the process. One of the most appropriate tools to optimize land use patterns is the concept of Smart Growth Principles to guide development and land-use decisions. The ten principles of Smart Growth, as adapted specifically to the County, provide a sound basis by which the County can plan for its long-term future and include the following:

- Preserve open space, farmland, cultural resources, natural beauty, and critical environmental areas.
- Strengthen and direct development towards existing communities and infrastructure.
- Provide a variety of transportation choices.

Action Strategy LU2.1 integrates land use intensity with access to transportation and proximity to public facilities.

Action Strategy LU2.2 requires that new development applications have densities that are appropriate to the character areas in the County and are consistent to those reflected on the Long-Range Land Use Plan Map.

Action Strategy LU2.3 directs new development to areas served by transit corridors; particularly designated activity centers, town centers and redevelopment corridors and appropriate areas within Small Area plans.

Action Strategy LU2.4 provides height and density transitions between higher-intensity development areas and surrounding residential and rural areas.

-Although Smart Growth Principles are listed as the basis by which the County has prepared the draft Land Use Chapter, it does not appear that those principles have been carefully applied throughout this chapter. In some cases, open space, farmland, and critical environment areas are planned for intensive industrial uses or higher density residential tracts. Those industrial areas and higher density tracts are largely incompatible with the character of the surrounding uses and new development is directed largely to areas unserved by existing transit modes. Rather, the activity centers appear to serve as islands unconnected by transit and little consideration has been given to height and density transitions between higher-intensity development areas and surrounding residential and rural areas.

COORDINATION OF DEVELOPMENT (TIMING) Mobility

Proposed development can have numerous effects on the County's transportation network, thus transportation impact mitigation measures should be incorporated into the approved Transportation Impact Analysis (TIA) that accompanies appropriate Comprehensive Plan amendment, rezoning, and special use permit requests.

Thus, the Planning Office proposes the following factors be considered.

1. Proximity to Existing/Programmed Transportation Facilities: Is the site in the general and reasonable vicinity of an arterial or collector road that is improved or funded for improvement to the standards identified in the Mobility Plan, as reflected by the Capital Improvements Program (CIP) or the Virginia Six-Year Transportation Plan? Existing or Planned Capacity of the Transportation Facilities. Does the impacted transportation system have the capacity to absorb the trips generated by the development proposal without degrading the adopted level of service? If not, are on-site and off-site measures proposed to offset the impacts?
2. Transportation Systems Management: Does the development proposal address a broad range of programs and techniques to increase the efficiency of the transportation system? (Examples include participation in a transportation funding district, vanpooling, staggered work hours, employer-assisted transit use incentives, shuttle services, pedestrian or bicycle access between the residential and/or non-residential development and public transportation, etc.)
3. Transit: Is the project in the urban portions of the County and within walking distance of transit services or a Transit Corridor? Is effective pedestrian access provided between the project and transit service(s)? Does the project account for an on-site commuter parking area or are other transit facilities being provided? Non-motorized Facilities. Non-motorized facilities include items such as trails, sidewalks, and bikeways. Does the project provide internal non-motorized facilities?
4. Residential Site Location: If the development is a residential project, is the site close to or within walking distance of existing or planned employment areas? Is the site close to or within walking distance to shopping and services? Will the development provide effective pedestrian access between the residential project and nearby employment and/or commercial and service areas and/or public buildings and facilities?

-The proposed transportation impact mitigation measures that are intended to ensure coordination of development with the Mobility Chapter are not effective, as the majority of newly proposed development sites in the Land Use Chapter and the Long Range Land Use Map are not in the vicinity of an arterial or collector road that is improved

or funded for improvement; do not incorporate techniques to increase the efficiency of the transportation system; are not within walking distance of transit services or a Transit Corridor; and are not close to or within walking distance to shopping and services, nearby employment and/or commercial and service areas, and/or public buildings and facilities.

Land Use Policy 8 purposefully integrates a variety of residential uses near transportation hubs, activity, and employment centers to create vibrant multimodal communities.

Action Strategy LU8.1 support higher density residential uses in transit-oriented developments such as Town Centers and Activity Centers located near mass transit stations like the Virginia Rail Express

Action Strategy LU8.2 requires the consideration of travel modes other than the automobile to better connect and integrate residential use with non-residential uses

Action Strategy LU8.3 strategically designates residential land use to encourage development of housing to accommodate the population growth projections with consideration for expanding affordable housing and multigenerational households.

Action Strategy LU8.4 Requires a Complete Streets policy that improves safety and mobility in new development and study of existing neighborhoods that need to improve the local street and pedestrian connections to enhance the community.

Action Strategy LU8.5 requires utilization of the Multimodal System Plan to integrated land use and multimodal transportation planning.

-Although this policy is laudable, it is not well-integrated into the remainder of the Comprehensive Plan. As noted earlier, the draft Land Use Chapter and Long Range Land Use Map envision a variety of higher density residential uses disconnected from transit-oriented developments, far from mass transit modes, incompatible with travel modes other than the automobile, and not utilizing the Multimodal System Plan to integrate land use and multimodal transportation planning.

SUSTAINABILITY

According to the EPA, sustainability is the management of resources that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable development is the process for improving the long term economic, environmental, and social well-being of a community through wise land use. The traditional sprawling growth pattern of low-density development, which disperses residents over a wide area, consumes resources at a rate greater than can be replenished and is not sustainable. To address this concern, the County's Land Use plan will integrate other elements such as energy use, environment, housing, infrastructure and transportation considerations towards a common goal of building and establishing lasting communities and neighborhoods.

Land Use Policy 14: Promotes sustainable land development that provides for a balance of economic opportunity, social equity including environmental justice, and protection of the natural environment.

Action Strategy LU14.1 encourage a mix of complementary land uses and project designs that ensure the long-term sustainability including cultural, environmental and economic health of both the individual development and the broader community.

Action Strategy LU14.2 requires that Residential subdivisions be planned to conserve open space and natural resources, protect agricultural operations, reduce impervious footprints, use sustainable development practices, and, when appropriate, provide public amenities.

Action Strategy LU14.3 encourages land use activities and patterns such as buffers and open space to protect surface and groundwater resources.

Action Strategy LU14.4 Requires that, when feasible, development projects should restore, connect and protect natural habitats and sensitive lands.

Action Strategy LU14.5 Requires, when feasible, the adaptative reuse of significant architectural resources for housing or community facilities.

Action Strategy LU14.6 provides for complete streets in new development that offer multimodal transportation systems designed and operated to accommodate all users and less reliance on the automobile to reduce carbon dioxide emissions.

-Although LU14 is a good policy, the draft Land Use Chapter and Long Range Land Use Map is inconsistent with it, in that it promotes land uses that do not support the previously discussed action strategies of the Mobility and Housing Chapters, with attendant risk to the cultural, environmental, and economic health of the community. In particular, the proposed development appears to increase reliance on the automobile, effectively increasing carbon dioxide emissions.

RURAL COMMUNITIES

This is the area of Prince William County in which are contained agricultural, open space, forestry, and large-lot residential land uses, as well as occasional small-scale convenience retail centers and community facilities. Large-lot residential cluster development contained within or abutted by large tracts of permanent open space is an alternative residential pattern permitted in the Rural Communities. Unlike the 10-acre lots permitted by right, however, these clusters require subdivision approval by the County. The purpose of the Rural Area designation is to help preserve the County's agricultural economy and resources, the County's agricultural landscapes and cultural resources, the quality of the groundwater supply, and the open space and rural character presently found there. The Rural Area also protects Prince William Forest Park and Manassas National Battlefield Park County Registered Historic Sites, which serve as key anchor points within the Rural Area classification. While it is intended that the Rural Area be served by public water facilities, the Rural Area is not intended to be served by public sewer facilities, except under emergency conditions as identified in the Sewer Plan. Protecting the Rural Area from higher density is the key to furthering the intent of this plan and achieving the ten smart growth principles throughout the County including the Development Area. Designation of the Rural Area and application of the development Goals, Policies, and Action Strategies relative to the Rural Area are intended to help avoid the negative economic, social, and environmental characteristics of sprawl development.

-Despite the language contained in the Rural Communities section of the Land Use Chapter, the draft Land Use Chapter and Long Range Land Use Map do not incorporate that language or goals. In some cases, they may encourage continued sprawl development with its inherent negative economic, social, and environmental characteristics, as well as an increased requirement for public sewer facilities.