Greenhouse Gas (GHG) Emissions and Sequestration Checklist
(Revised, June 2025)

The first step in a greenhouse gas (GHG) emissions and sequestration assessment for a ZTA or master plan involves an initial applicability review and directional impact assessment. This includes considering whether the ZTA or master plan will influence activities that may result in changes in GHG emissions or sequestration. It also includes an evaluation to qualify whether these activities that may be influenced may have a positive or negative impact on GHG emissions or sequestration. While the checklist provides a starting point, it is not a comprehensive list of all potential GHG and sequestration related activities for a specific ZTA or master plan. Planning staff should supplement climate assessments with additional data and information as appropriate. The checklist also does not cover how much of an impact may be involved and how it might relate to other impacts, which should be part of the qualitative narrative of the climate assessment, or quantitative analysis if applicable. As noted in this checklist, some of the factors overlap with factors in the Community Resilience and Adaptive Capacity checklist.

Please Note: The checklist below revises Table 1 in the *Final Report: Climate Assessment Recommendations for Master Plans and Zoning Text Amendments in Montgomery County, ICF, December 1, 2022.* For more information regarding definitions of terms and factors, and additional guidance in preparing a narrative assessment, see pages 8 – 17 in the *Final Report.* The *Final Report* also provides guidance for quantitative assessments, if applicable.

Does the ZTA/master plan effect any of the following activities? *(Indicate if there is no anticipated impact, or if an impact is indeterminate because you cannot say whether there will be an impact or not.)*			*If there is an anticipated impact, is the activity likely to have a positive, negative, both, or either positive or negative impact on GHG emissions and sequestration?* *(The assessment narrative should indicate minor, moderate, major, a combination, or a range of possible impacts based on the location and extent of potential changes that could occur under the ZTA or Master Plan.)*		
Transportation Emissions	**No Impact**	**Indeter-minate**	**Positive Impact**	**Negative Impact**	**Comments**
Vehicle miles traveled by type (personal vehicles, commercial trucks or vehicles, rideshare, school buses, motorcycles)	☐	☐	☐	☐	
Number of trips (including considering single occupancy or carpool trips)	☐	☐	☐	☐	
Non-vehicle modes of transportation (scooter, bikes, walking)	☐	☐	☐	☐	
Public transportation use (public bus and Metrorail)*	☐	☐	☐	☐	
Electric vehicle infrastructure access (i.e., charging stations)	☐	☐	☐	☐	
Building Embodied Emissions	**No Impact**	**Indeter-minate**	**Positive Impact**	**Negative Impact**	**Comments**
Building certifications (e.g., LEED)*	☐	☐	☐	☐	
Building square footage	☐	☐	☐	☐	
Building life span	☐	☐	☐	☐	
Pavement infrastructure*	☐	☐	☐	☐	
Building Embodied Emissions (continued)	**No Impact**	**Indeter-minate**	**Positive Impact**	**Negative Impact**	**Comments**

Material waste produced	☐	☐	☐	☐	
Use of green building materials	☐	☐	☐	☐	
Energy Emissions	**No Impact**	**Indeter-minate**	**Positive Impact**	**Negative Impact**	**Comments**
Electricity usage (including distributed and renewable energy)	☐	☐	☐	☐	
Stationary fuel usage (natural gas, fuel oil, or LPG)	☐	☐	☐	☐	
Electricity efficiency (kilowatt-hour per square foot)*	☐	☐	☐	☐	
Stationary fuel efficiency (BTU per square foot)*	☐	☐	☐	☐	
Land Cover Change & Management Sequestration	**No Impact**	**Indeter-minate**	**Positive Impact**	**Negative Impact**	**Comments**
Area of forest*	☐	☐	☐	☐	
Area of non-forest tree canopy (i.e., number of trees on the ground, or percent of tree canopy cover per acre)*	☐	☐	☐	☐	
Area of green cover (i.e., meadow, grassland, turf, wetland, etc.)*	☐	☐	☐	☐	
Implementation of nature-based solutions[1]* *If available, please list the relevant solutions implemented:*	☐	☐	☐	☐	

[1] **Nature-Based Solutions** – sustainable planning, design, environmental management, and engineering practices that weave natural features or processes into the built environment to promote adaptation and resilience. Examples include green roofs and bioretention.

* Overlaps with a Community Resilience factor.