

## GHG Emissions and Sequestration Checklist

The first step in a 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. For more information regarding this checklist, definitions of terms and factors, and guidance in preparing a narrative assessment, see Table 1 and associated text in the *Final Report: Climate Assessment Recommendations for Master Plans and Zoning Text Amendments in Montgomery County, ICF, December 1, 2022*. This document also provides guidance for quantitative assessments, if applicable.

<i>Does the ZTA/master plan effect any of the following activities</i>			<i>If yes, is the activity likely to have a positive or negative impact on GHG emissions and sequestration?</i>	
<b>Transportation</b>	<b>No Impact</b>	<b>Yes</b>	<b>Positive Impact</b>	<b>Negative Impact</b>
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)				
<b>Building Embodied Emissions</b>	<b>No Impact</b>	<b>Yes</b>	<b>Positive Impact</b>	<b>Negative Impact</b>
Building certifications (e.g., LEED)*				
Building square footage				
Building life span				
Pavement infrastructure*				
Material waste produced				
Use of green building materials				

<b>Energy</b>	<b>No Impact</b>	<b>Yes</b>	<b>Positive Impact</b>	<b>Negative Impact</b>
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)*				
<b>Land Cover Change &amp; Management</b>	<b>No Impact</b>	<b>Yes</b>	<b>Positive Impact</b>	<b>Negative Impact</b>
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 <sup>1*</sup> <i>If available, please list the relevant solutions implemented:</i>				

<sup>1</sup> **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.