

## CLIMATE ASSESSMENT FOR ZTA 24-04, DORMITORY AND COMMUNITY SERVICE RETAIL OVERLAY ZONE

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### PURPOSE OF CLIMATE ASSESSMENTS

The purpose of the Climate Assessments is to evaluate the anticipated impact of master plans and zoning text amendments (ZTAs) on the county's contribution to addressing climate change. These assessments will provide the County Council with a better understanding of the potential climate impacts and implications of proposed master plans and ZTAs, at the county level. The scope of the Climate Assessments is limited to addressing climate change, specifically the effect of land use recommendations in master plans and ZTAs on greenhouse gas (GHG) emissions and sequestration, and how actions proposed by master plans and ZTAs could improve the county's adaptive capacity to climate change and increase community resilience.

While co-benefits such as health and cost savings may be discussed, the focus is on how proposed master plans and ZTAs may impact GHG emissions and community resilience.

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### BACKGROUND AND PURPOSE OF ZTA 24-04

ZTA 24-04 was introduced at the request of the Planning Board to implement recommendations from the Takoma Park Minor Master Plan. The ZTA adds the use Dormitory to the CR and CRT zones to accommodate existing institutional uses in Takoma Park that may wish to expand. The CSR Overlay Zone is removed because its provisions are considered redundant to the CR family of zones and associated design guidelines and because the CSR Overlay Zone is only within the boundaries of this subject master plan.

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### SUMMARY

The zoning text amendment (ZTA) 24-04, Dormitory and Community Service Retail (CSR) Overlay Zone recommends the implementation of the Takoma Park Minor Master Plan. The master plan contains two recommendations for modifications to the Zoning Code: 1) allow dormitories as a limited use in the CR and CRT Zones, and 2) remove the plan area from the Community Serving Retail (CSR) Overlay Zone. Since the only area in the County with the CSR Overlay Zone is within the boundary of the

Takoma Park Minor Master Plan Amendment, this ZTA would also remove the overlay zone from the Zoning Ordinance.

#### CLIMATE-RELATED VARIABLES

This ZTA (24-04) implements the recommendations within the Takoma Park Minor Master Plan. The carbon outputs and sequestration rates will not be altered or different from the carbon assessment completed with the Takoma Park Minor Master Plan.

GHG Emissions and Sequestration Checklist of Variables.

- None. No new impacts or reductions.

Community Resilience and Adaptive Capacity Impact Variables.

- None. No new resilience or adaptive capacities.

#### FINDINGS FROM THE TAKOMA PARK MINOR MASTER PLAN CLIMATE ASSESSMENT - 2023

The model assesses emissions from four categories: building embodied emissions, building energy emissions, building waste emissions, and transportation emissions. For each category, the assessment uses the number of buildings or units, the types of buildings, and the total commercial square footage. Sequestration is not an emissions category and based on existing and proposed land cover for forests, non-forest tree cover, wetland/meadow, grassland, and green roofs. The model compares base GHG emissions and sequestration levels for the existing master plan at full build-out with the proposed master plan recommendations at full-build out.

At full build-out (every rezoned property is torn down and redeveloped at maximum allowance) the model projects an overall increase in GHG emissions of approximately 78% by the year 2045. However, it is noteworthy that while the model projects an overall increase in GHG emissions at full build-out, per-capita GHG emissions are projected to be reduced in all four emissions categories. Most emissions come from two of the four emissions categories: Lifetime Embodied Building Waste and Lifetime Transportation. Significantly lower emission increases are anticipated for Lifetime Embodied Building and Lifetime Building Energy Emissions.

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#### VARIABLES THAT COULD AFFECT THE ASSESSMENT

There are no new climate related variables introduced within this ZTA. The impacts and results have been accounted for during the planning process for the approval of the Takoma Park Minor Master Plan.

#### CLIMATE-RELATED VARIABLES

No new variables.

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## ANTICIPATED IMPACTS

### GREENHOUSE GAS EMISSIONS, CARBON SEQUESTRATION, AND DRAWDOWN

Montgomery Planning anticipates ZTA 24-04 will result in no unaccounted greenhouse gas increases or decreases. Nor will the ZTA result in new positive or negative carbon sequestration and drawdown rates. The ZTA is the implementation of the existing Takoma Park Minor Master Plan.

### COMMUNITY RESILIENCE AND ADAPTIVE CAPACITY

Montgomery Planning anticipates ZTA 24-04 will have no unaccounted impact and/or changes to community resilience and adaptive capacity.

### GREENHOUSE GAS EMISSIONS, CARBON SEQUESTRATION, AND DRAWDOWN

Montgomery Planning anticipates ZTA 24-04 will result in no greenhouse gas increases or decreases beyond those identified in the carbon assessment completed for the Takoma Park Minor Master Plan. Nor will the ZTA result in new positive or negative carbon sequestration and drawdown rates.

### COMMUNITY RESILIENCE AND ADAPTIVE CAPACITY

Montgomery Planning anticipates ZTA 24-04 will result in no new community resilience or adaptive capacity changes beyond those determined in the carbon assessment completed for the Takoma Park Minor Master Plan.

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## RELATIONSHIP TO GREENHOUSE GAS REDUCTION AND SEQUESTRATION ACTIONS CONTAINED IN THE MONTGOMERY COUNTY CLIMATE ACTION PLAN (CAP)

Montgomery Planning anticipates ZTA 24-04 will result in no unaccounted greenhouse gas reductions or sequestration impacts beyond those determined in the carbon assessment completed for the Takoma Park Minor Master Plan. However, it is not inconceivable that greenhouse gas reductions and sequestration rates could improve if, at the time of construction, new energy efficient technologies were utilized for the new buildings, and additional green infrastructure was utilized.

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## RECOMMENDED AMENDMENTS

Planning staff does not have any recommended climate-related amendments to ZTA 24-04 because it will have no unaccounted or additional impacts on the county's climate and/or sequestration rates.

## SOURCES OF INFORMATION, ASSUMPTIONS, AND METHODOLOGIES USED

The climate assessment for ZTA 24-04 was prepared using the methodology (Tables 1, 2, and 8, in particular) for ZTAs contained within the [\*Climate Assessment Recommendations for Master Plans and Zoning Text Amendments in Montgomery County, December 1, 2022.\*](#)