

## CLIMATE ASSESSMENT FOR ZTA 25-01, SELF-STORAGE - CIVIC AND INSTITUTIONAL (“STREET ACTIVATION AND VACANCY ELIMINATION (S.A.V.E.)”)

### PURPOSE OF CLIMATE ASSESSMENT

The purpose of this Climate Assessment is to evaluate the anticipated impact of the zoning text amendment (ZTAs) on the county’s contribution to addressing climate change. The assessment will provide the County Council with a better understanding of the potential climate impacts and implications of the proposed ZTAs, at the county level. The scope of the Climate Assessments is limited to addressing climate change, specifically the effect of the land use recommendation of the ZTA on greenhouse gas (GHG) emissions and carbon sequestration, and how actions proposed by the ZTA could improve the county’s adaptive capacity to climate change and increase community resilience.

### SUMMARY

This ZTA will allow Self-Storage above the ground floor in the CR zone with a Charitable, Philanthropic Institution or a Cultural Institution on the ground floor. The proposed Storage Unit ZTA 25-01 will have very slight to no impact on carbon emissions and impacts on the county’s goals of addressing greenhouse gas emissions, carbon sequestration, and ensuring resilience and adaptive capacity of our communities. There may be very slight negative impacts associated with the potential installation of additional impervious cover for unloading and loading of storage material. This could slightly impact greenhouse gas emissions. There will be Positive Adaptive Capacity impacts in the category of Community Social Connections and sense of place as an unoccupied building becomes a usable storage space. This will generate use improving neighborhood safety and activity.

### BACKGROUND AND PURPOSE OF ZTA 25-01

This Zoning Text Amendment was introduced by the District Council on February 4, 2025. The purpose of the ZTA is to provide a feasible use for existing, vacant office buildings that cannot be feasibly torn down, or adaptively reused for other uses such as housing.

### VARIABLES THAT COULD AFFECT THE ASSESSMENT

For many ZTAs its difficult to determine the impacts on climate because of variables such as the scale and location of change which may be difficult to ascertain. With this ZTA, there is a more limited set of locations and situations where this activity could occur, resulting in less uncertainty.

## ANTICIPATED IMPACTS

The Storage Unit ZTA 25-01 does not propose the demolition or construction of new buildings or additions to the existing building within the CR zone. Therefore, it will not have embodied carbon emissions typically associated with demolition or construction of buildings.

The following variables are identified as having a slight impact on carbon emissions as determined in the assessment worksheets: *Climate Assessment Recommendations for Master Plans, and Zoning Text Amendments in Montgomery County*

## GREENHOUSE GAS EMISSIONS, CARBON SEQUESTRATION, AND DRAWDOWN

ZTA 25-01 is anticipated to have slight and insignificant impacts on greenhouse gas emissions. There will be no sequestration or drawdown reductions associated with this proposal. (For the purposes of this assessment, drawdown and sequestration are terms used interchangeably)

### **GHG Emissions and Sequestration Checklist of Variables**

#### **Building Embodied Emissions.**

- Pavement infrastructure: Storage units require parking pads for the vehicle loading and unloading areas which may add impervious cover to the CR zone. Impervious surfaces, like concrete and asphalt, contribute to carbon emissions by preventing rainwater from infiltrating into the soil, which disrupts the natural carbon cycle by reducing the soil's ability to store carbon; this is further compounded by the increased need for energy to produce and maintain these surfaces, contributing to additional carbon emissions.

There is an uncertain potential emissions impact in the variable of Vehicle Miles Traveled by vehicle type (personal vehicles, commercial vehicles, motorcycles, etc.). This ZTA proposes storage units in unoccupied buildings so there will be new emissions associated with the new building use. However, it is unknown if the proposed new use will introduce more or less emissions than the building prior to its abandonment.

## COMMUNITY RESILIENCE AND ADAPTIVE CAPACITY

Montgomery Planning anticipates that ZTA 25-01 will have a positive impact on Community Resiliency and Adaptation as an unoccupied building in a CR zone will become occupied activating the street. Building occupancy enhances community safety, can spur economic development, increase neighborhood desirability, and improve the overall quality of life for its local citizens.

### **Community Resilience and Adaptive Capacity Checklist of Variables**

#### **Adaptive Capacity Factors.**

- Change to community connectivity: It is anticipated that there will be a positive impact associated with this ZTA as it will provide a use to an otherwise unused/unoccupied building.

Building occupancy can help spur and support urban revitalization projects to encourage new businesses and residency.

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

ZTA 25-01 does not involve any greenhouse gas or sequestration reductions or improvements related to the County's Climate Action Plan.

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## RECOMMENDED AMENDMENTS

Planning staff does not have any recommended climate-related amendments to ZTA 25-01 because it will have insignificant impacts on the County's goals regarding greenhouse gas emissions and sequestration rates. The ZTA does not offer obvious additional opportunities for decreasing any potential negative climate change-related impacts nor to significantly enhance positive climate change-related impacts beyond the potential benefits associated with the proposed use as discussed in this assessment.

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## SOURCES OF INFORMATION, ASSUMPTIONS, AND METHODOLOGIES USED

The climate assessment for ZTA 25-01 was prepared using the methodology (tables 1, and 2) for ZTAs contained within the [Climate Assessment Recommendations for Master Plans and Zoning Text Amendments in Montgomery County, December 1, 2022](#).