Climate Assessment

Office of Legislative Oversight

BILL 4-26: BUILDINGS – TASK FORCE ON DATA CENTERS - ESTABLISHED

SUMMARY

The Office of Legislative Oversight (OLO) cannot anticipate the impact of Bill 4-26 as it is proposing the creation of a task force to study the potential risks and benefits of data centers in the County which would inform future planning and policy recommendations. OLO cannot anticipate what findings and recommendations would come from the task force's study. However, there are environmental and climate impacts associated with development and operations of data centers.

BACKGROUND AND PURPOSE OF BILL 4-26

Data centers house networks of servers that store, manage, and process digital information. Data centers are essential for internet sites, streaming services, global communications, and more.[1] Recently, demand for data centers has grown by 20 percent each year. This is due to increased internet traffic, widespread cloud storage use, and the rapid adoption of artificial intelligence (AI) models that require significant computing power.[2] Regionally, Loudoun County, Virginia is nicknamed the "data center capital of the world" with approximately 200 data centers and another 117 planned for development.[3]

In Maryland, Prince George's County and Frederick County have both created task forces to study the impact of data center development and provide recommendations on building location and design standards. According to its lead sponsor, the purpose of Bill 4-26 is to begin a Countywide conversation to determine an approach to data center development, learning from neighboring jurisdictions.[4] The Bill aims to do this by:

1. Exploring the benefits and potential economic and environmental impacts of data center development;
2. Better understanding community concerns around data center development; and
3. Gathering community and stakeholder opinions to inform future planning and policy recommendations[5]

If enacted, Bill 4-26 would establish a temporary 15-member task force on data centers. This task force would be responsible for studying the impact of data centers on the environment, energy demand, and racial equity and social justice in the County. It would also be required to publish a final report with policy and zoning recommendations related to data centers within 12 months of its first meeting.[6]

Figure 1 in the Appendix lists the full requirements of the final report and Table 1 describes the proposed composition of the task force. Figure 2 describes the spectrum of community engagement.

The Council introduced Bill 4-26 on January 20, 2026.[7]

ANTICIPATED IMPACTS

Data centers require significant power and water for their daily operations, which has an impact on both the environment and future climate conditions. Environmental and climate impacts include:

- **Significant amounts of water used in operations of data centers** – A mid-sized data center consumes an estimated 300,000 gallons of water a day, about as much water as 1,000 U.S. households consume on average.[8] Large data centers can consume up to 500,000 gallons a day.[9]
- **Significant greenhouse gas emissions from consumption of electricity** – In 2023, data centers were responsible for about 4.4% of all electricity consumption in the United States.[10] Consumption of electricity by data centers is expected to increase in the future and is projected energy associated with AI will increase by 21% by 2030.[11] Currently, 50% of the County's emissions are associated with energy use in the residential and commercial sector.[12]
- **Climate change is increasing the duration and frequency of droughts -** With a decreasing supply of water, the amount of water needed to operate data centers can further exacerbate diminishing water supplies.[13]

Data centers can also have an impact on community climate resilience. The risk of drought is anticipated to increase in the future due to increasing temperatures caused by climate change, both in Montgomery County and surrounding regions.[14] Assuring that residents will continue to have access to clean drinking water is an essential component of a community's climate resilience.[15] Further, noise pollution is another concern with data centers. Exposure to noise pollution can negatively impact an individual's health and health outcomes of a community are tied to a community's resilience – improving health outcomes can increase community resilience and vice versa.[16]

OLO cannot anticipate the impact Bill 4-26 may have on the County's contribution to addressing climate change, including the reduction and/or sequestration of greenhouse gas emissions, community resilience, and adaptative capacity. The Bill is proposing the creation of a task force to study the potential risks and benefits of data centers in the County which would inform future planning and policy recommendations. OLO cannot anticipate what findings and recommendations would come from this study. However, there are significant environmental and climate impacts associated with development and operations of data centers.

RECOMMENDED AMENDMENTS

The Climate Assessment Act requires OLO to offer recommendations, such as amendments or other measures to mitigate any anticipated negative climate impacts.[17] OLO does not offer recommendations or amendments as the impact of Bill 4-26 on the County's contribution to addressing climate change cannot be anticipated.

CAVEATS

OLO notes two caveats to this climate assessment. First, predicting the impacts of legislation upon climate change is a challenging analytical endeavor due to data limitations, uncertainty, and the broad, global nature of climate change. Second, the analysis performed here is intended to inform the legislative process, not determine whether the Council should enact legislation. Thus, any conclusion made in this statement does not represent OLO's endorsement of, or objection to, the bill under consideration.

PURPOSE OF CLIMATE ASSESSMENTS

The purpose of the Climate Assessments is to evaluate the anticipated impact of legislation on the County's contribution to addressing climate change. These climate assessments will provide the Council with a more thorough understanding of the potential climate impacts and implications of proposed legislation, at the County level. The scope of the Climate Assessments is limited to the County's contribution to addressing climate change, specifically upon the County's contribution to greenhouse gas emissions and how actions suggested by legislation could help improve the County's adaptative capacity to climate change, and therefore, increase community resilience.

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

CONTRIBUTIONS

OLO staffer Kaitlyn Simmons drafted this assessment.

APPENDIX

Figure 1: Composition of the 15-Member Task Force by Category[18]

Montgomery County Government

- 1 representative from the Montgomery County Planning Department
- 1 representative from the Department of Permitting Services
- 1 representative from the Department of Environmental Protection
- 1 representative from the Montgomery County Fire & Rescue Service

Environmental

- 2 representatives from an environmental group

Utilities

- 1 representative from an electric and gas utility
- 1 representative from a water utility company

Economic Development and Labor

- 1 representative from the Montgomery County Economic Development Corporation
- 2 representatives from the labor and trade industry

Industry Expert

- 2 representatives with professional experience in the data center industry

Civic and Community

- 2 representatives from a registered civic association

Table 1: Data Center Task Force Final Report Elements

#	Report Elements
1.	A definition of "data center" specific to the County
2.	The potential impact of data centers on existing and future local energy demands and the County taxpayers' ability to meet future energy demands
3.	The potential environmental impact of data centers on air, water, and woodland quality and supply in the County, including recommended measures to mitigate negative impacts
4.	Recommendations related to potential locations and policies for the siting of data center uses
5.	Infrastructure capacity (power and site size)
6.	Impact on quality of life aspects of areas surrounding data centers, such as viewscapes, open and green spaces, accessibility, urban mobility, and social or recreational facilities
7.	Emergency-response considerations
8.	Potential racial equity and social justice impacts
9.	Any other community benefits or incentives

Source: Introduction Staff Report for Bill 4-26, Montgomery County Council, Introduced January 20, 2026.

Figure 2. Spectrum of Community Engagement with Examples[19]

No Community Engagement

- **Stage 0, Ignore**: Deny community access to decision-making processes.

One-Way Community Engagement

Examples: websites, press releases, e-newsletters, social media, presentations, print materials, MC311, public hearings, public meetings, and forums

- **Stage 1, Inform:** Provide the community with relevant information.
- **Stage 2, Consult:** Gather input from the community.

Two-Way Community Engagement

Examples: Boards, committees, commissions, and task forces

- **Stage 3, Involve:** Ensure community needs and assets are integrated into process and inform planning.
- **Stage 4, Collaborate:** Ensure community capacity to play a leadership role in the implementation of decisions.
- **Stage 5, Defer To:** Foster democratic participation and equity through community driven decision-making; bridge divide between community and governance

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[1] Fortinet, "Data Center: Key Components and Their Role in Cybersecurity", Accessed 2/2/2025.
[2] BOMA International, "What's Fueling the Data Center Boom? 5 Key Industry Insights", May 21, 2025.
[3] Loudoun County, VA Board of Supervisors, "Loudoun County, Virginia: Data Center Capital of the World "A Strategy for a Changing Paradigm", October 20, 2025.
[4] Councilmember Evan Glass, Introductory Remarks to Bill 4-26, Introduced January 20, 2026.
[5] Introduction Staff Report for Bill 4-26, Montgomery County Council, Introduced January 20, 2026.
[6] Ibid.
[7] Ibid.
[8] NPR, "Data centers, backbone of the digital economy, face water scarcity and climate risk", August 30, 2022.
[9] New York Times, "Their Water Taps Ran Dr y When Meta Built Next Door", July, 14, 2025.
[10] Brookings Institute, "The future of data centers", November 5, 2025.
[11] MIT Management Sloan School, "AI has high data center energy costs - but there are solutions", January 7, 2025.
[12] Montgomery County Government "Montgomery County Climate Action Plan", June 2021.
[13] Bloomberg, "AI is Draining Water from Areas That Need It Most", May 8, 2025.; Brookings Institute, "The future of data centers", November 5, 2025.
[14] Interstate Commission on the Potomac River Basin, "News Release: New report exposes the vulnerabilities of the Washington metropolitan area's water supply", December 5, 2025.
[15] National League of Cities, "Invest in Water and Climate Resilience", May 11, 2021.
[16] Hammer, M. S., Swinburn, T. K., and Neitzel, R. L., "Environmental Noise Pollution in the United States: Developing an Effective Public Health Response", Environmental Health Perspectives, December 5, 2013.; NOAA, "Perceptions of Community Resilience: A Maryland Community Pilot Study", 2016.
[17] Bill 3-22, Legislative Branch – Climate Assessments – Required, Montgomery County Council, Effective date October 24, 2022
[18] Introduction Staff Report for Bill 4-26, Montgomery County Council, Introduced January 20, 2026.
[19] Peña & Kalyandurg, OLO Report 2024-8, page ii. Table adapted from The Spectrum of Community Engagement to Ownership, Facilitating Power, August, 2021.