



CITY OF BALTIMORE
MAYOR BRANDON M. SCOTT

TO	The Honorable President and Members of the Baltimore City Council
FROM	Matthew W. Garbark, Director, Department of Public Works
CC	Mayor's Office of Government Relations
DATE	May 4, 2026
SUBJECT	26-0050R Informational Hearing – Data Centers – Community Impact and Use Standards

Position: Without Recommendation

BILL SYNOPSIS

FOR the purpose of inviting the Office of the People's Council and the Public Service Commission and requiring the Department of Planning, Law Department, Department of Finance, Health Department, and the Department of Public Works to appear before the City Council to discuss: (1) the impact a data center may have on Baltimore City's infrastructure, environment, and its community as a whole; (2) best practices for data center zoning, use standards, and other development standards; and (3) which techniques and technologies are available to limit the public health and environmental impact of these increasingly common facilities.

SUMMARY OF POSITION

Data centers are emerging as high-impact utility users, driven by rapid growth in cloud computing and artificial intelligence. These facilities require large amounts of electricity and significant volumes of water, particularly for cooling. As demand for data centers continue to grow, they are expected to consume substantial resources and, in some cases, place added strain on infrastructure and water supplies. National estimates suggest that direct water consumption for data center cooling could increase from 5.6 billion gallons in 2014 to 73 billion gallons by 2028. Additional impacts for consideration are outlined below.

1) *Data Center Impacts on DPW's Water System:*

- **Increased water demand:** Cooling systems - especially evaporative systems – can require substantial, continuous water use, often peaking during hot weather when systems are already stressed.
- **Cost-shifting risks:** Economic development incentives, such as reduced tap fees and subsidized infrastructure, may inadvertently shift the cost of system expansion onto rate payers.
- **Limits of alternative water supplies:** Even robust reuse systems have constraints. For example, Loudoun Water's reclaimed water system – often cited as best practice – is now experiencing demand that exceeds supply, requiring supplemental potable sources and generating concentrated wastewater streams.

For context on DPW's current system capacity, please find the table outlining available capacity, daily demand, peak demand, and a hypothetical analysis for long-term system resilience.

Water System Demand and Capacity Analysis

<u>Metric</u>	<u>Current Value</u>
<u>Available System Capacity</u>	<u>365 MGD</u>
<u>Average Daily Water Demand</u>	<u>212- 220 MGD</u>
<u>Peak Day Demand</u>	<u>298 MGD</u>
<u>Capacity Buffer (at Peak Day)</u>	<u>18.4% (67 MGD)</u>

Baseline Projection:

- **Growth Rate:** 0.5% annual population growth.
- **Threshold:** System capacity is expected to be exceeded in **41 years** under current demand trends.

Data Center Impact Scenario:

- **Additional Demand:** 10 MGD (estimated from 5-10 new data centers in the City and County).
- **Accelerated Threshold:** With this added industrial load, the system hits peak capacity in **35 years**.

Wastewater Treatment Capacity

- 180 MGD for Back River
- 73 MGD for Patapsco

2) *Best practices for data center zoning, use standards, and other development standards:*

- **DPW defers to the Department of Planning and other relevant agencies to best answer this question.**

3) *Which techniques and technologies are available to limit the public health and environmental impact of these increasingly common facilities:*

- **Encouraging closed-loop construction features** - This reduces water consumption by using a sealed water loop that is filled once during construction and then recirculated rather than evaporated through cooling towers.
- **Establishing water rate structures for large-volume users that better reflect system impact**, including tapping fees scaled to demand and System Development Charges priced based on a facility's projected peak water use.
- **Requiring facility-level disclosures** on water withdrawals, peak and average demand, timing of use, and consumptive use to support infrastructure planning.

As data centers continue to expand, it is important to consider the utility demands that these facilities may generate. Careful review of their water use, operational design, and disclosure requirements may help limit potential public health and environmental impacts.

The Department of Public Works is without recommendation on this bill.