




County of Fairfax, Virginia

MEMORANDUM

DATE: November 21, 2023

TO: Fairfax County Board of Supervisors

FROM: Larry Zaragoza, DEnv, Chair 
Environmental Quality Advisory Council (EQAC)

SUBJECT: Follow-up on Data Center Siting

EQAC appreciates the focus that the Board has placed on data centers through the May 9th Board Matter, which directed staff to provide recommendations to the Board by the end of this year. As highlighted in our June 14, 2023 memorandum¹, EQAC recommends that the County carefully plan for the siting of data centers, especially the large hyperscale data centers. This memorandum highlights issues that have been raised during public meetings since our June 14, 2023 memorandum.

1. **Energy Insecurity:** EQAC recommends that the County create policies (when possible) or strongly encourage data centers to provide green energy to serve their electric needs. Given that data centers currently consume over 20 percent of Dominion Energy's state-wide power production, the rapid growth in energy needs of data centers could result in brownouts/blackouts for Northern Virginia and threaten our ability to achieve carbon neutrality goals. Data centers that acquire green energy, either from within or outside of Virginia, should be recognized for their efforts to help reach carbon neutrality goals.
2. **Drinking Water Insecurity:** EQAC strongly recommends future data centers ***not be permitted to consume large quantities of water for evaporative cooling (except for recycled wastewater)***, as water requirements could severely strain available resources. Also, highly saline discharges of evaporative cooling could impact the Occoquan Reservoir water supply. The County should work with Fairfax Water, the Interstate Commission the Potomac River Basin, neighboring counties, and the Virginia delegation to ensure the adequacy of the water supply for Northern Virginia. A forthcoming memorandum on regional water supply issues will be sent to the Board, shortly.

¹ See: https://www.fairfaxcounty.gov/environment-energy-coordination/sites/environment-energy-coordination/files/assets/eqac%202023%20data%20centers%206%2015%2023%20final%20ada_a-1a.pdf
(Reference verified on 11/1/23).

3. **Noise Standards:** EQAC recommends that the County review the Noise Ordinance² to ensure that it protects the communities near data centers from noise that negatively impacts their quality of life. Noise limits also should be considered for nearby natural environmental areas. EQAC is also concerned that the existing noise ordinance may not be adequate to protect communities from data center noise (for example backup generator noise would currently be exempt if their operations were either under a Virginia Department of Environmental Quality order, or to operate during a blackout³).
4. **Avoid Impacts to Sensitive Environments:** As outlined in the Comprehensive Plan⁴, EQAC recommends that the County create policies that minimizes data center development impacts on sensitive environments, especially Resource Protection Areas and Environmental Quality Corridors.
5. **Clustering Data Centers:** EQAC recommends that the County plan for and cluster data centers, especially hyperscale data centers, which should help to reduce infrastructure needs and reduce having multiple large data centers tower over adjacent residential neighborhoods.
6. **Mapping Application:** EQAC recommends that a mapping application with data center information (existing facilities, proposed facilities with applications filed, electric transmission lines, facility energy consumption, water use) be made available to the public. Publicly available information on data transmission lines should also be included in the mapping application. This will help facilitate transparent discussions of siting data centers.

EQAC thanks the Board for your attention to this important issue and welcomes questions.

cc: Rachel Flynn, Deputy County Executive
John Morrill, Acting Director, Office of Environmental and Energy Coordination
Christopher Herrington, Director, Department of Public Works and Environmental Services (DPWES)
Tracy Strunk, Director, Department of Planning and Development (DPD)
Carmen Bishop, Planner, Zoning Administration Division, DPD
Katherine Hermann, Planner, Planning Division, DPD
Bill Hicks, Director, Land Development Services (LDS)
Matthew Hansen, Director, Site Development and Inspections Division, LDS
Fairfax County Planning Commission
Fairfax County Tree Commission
Fairfax County Park Authority
EQAC

² See: <https://www.fairfaxcounty.gov/planning-development/zoning/noise-ordinance> (Reference verified on 11/1/23).

³ See: <https://www.fairfaxcounty.gov/planning-development/sites/planning-development/files/assets/documents/zoning%20ordinance/noise%20amendment/soundsummarychart11-17-15.pdf#page=1>. Verified on 11/14/23.

⁴ Fairfax County Comprehensive Plan. Public Facilities. Objective 41. See: <https://www.fairfaxcounty.gov/planning-development/sites/planning-development/files/assets/compplan/policy/pubfacilities.pdf> (Reference Verified on 11/4/23).