SIERRA CLUB Miami Group

Data Center Position Paper
June 17, 2026

Introduction - Anything can be done well or can be done poorly. The construction and operation of data centers is no exception. If done well, data centers can be assets to the community, improving the quality of life of residents. If done poorly, data centers are a liability, worsening the quality of life of people in the host communities. This position paper identifies characteristics necessary for data centers to be assets, not liabilities, and to help, not harm, Ohio residents. Sierra Club Miami Group calls upon local governments to adopt appropriate regulations to ensure that data centers are done in a way that makes them assets, not liabilities.

Energy Use – Data Centers use a lot of electricity. When demand for electricity exceeds supply, prices go up, creating financial hardships for ratepayers. When energy comes from dirty fuels like coal and natural gas, air quality suffers, climate change accelerates, and the land is devastated by extraction activities. Data centers should be coupled with new sources of clean renewable energy, such as solar and wind, so we can avoid energy shortages and the damage caused by fossil fuels.

Back-up Power – Data Centers need to function 24/7/365. They are more impacted than most utility customers by the occasional grid failure. As a result, data centers typically have an on-site source of emergency power. Sometimes this takes the form of diesel generators. Diesel generators are noisy and dirty. They produce the same types of air pollution as diesel trucks, only far more of it. For example, to power a data center that uses 100 megawatts of electricity using diesel generators would use 8,000 gallons of diesel fuel per hour. This consumption rate is equal to about 400 tractor trailer trucks running at highway speed. Some people think that emergency generators don't matter much because they hardly ever operate. The truth is that, to make sure the diesel generator is always ready to go, they must be tested and "exercised" on a regular schedule, meaning at least several hours of operation every month.

An alternative to diesel generators would be an on-site battery backup system. Battery back-up systems are clean and quiet. They also perform "grid services" when they are not needed for emergency power. Batteries are used by the grid operator to level the real-time

fluctuations in energy demand, switching from charging to discharging and back again nearly instantaneously, so that power plants don't have to cover demand spikes, and surplus energy in the grid between momentary spikes is not wasted. Diesel generators should be prohibited. Battery back-up should be required.

Water Use – Data Centers use a lot of water, mostly for cooling systems. Ohio is fortunate to have abundant water resources, especially in the Ohio River and the Great Lakes, but those water resources are not evenly distributed. Many parts of Ohio experience water shortages due to periodic droughts. In those locations, the water demand of a Data Center can turn a routine drought into a crisis. Data Centers should be located where abundant water is always available. They should be required to draw their water from sources that do not create competition with other users.

Wastewater – Data centers that take in a lot of water also discharge a lot of water. These wastewater discharges can cause thermal pollution and sewer system overflows. Water used in cooling systems is often discharged at elevated temperatures. Many aquatic organisms are very sensitive to temperature changes. Wastewaters that are warmer than the receiving stream can be very harmful, and are referred to as thermal pollution.

In parts of Cincinnati and many other Ohio communities, combined sewers receive both sewage and stormwater. During storms, raw sewage overflows into rivers and streams. If wastewater from data centers flows into sewers that are already oversubscribed, more raw sewage will overflow into the streams. Raw sewage contains pathogens that impair the health of humans and wildlife, as well as nutrients that cause algae blooms and deplete oxygen in streams. Data centers must be located in places that can accommodate their wastewater flows without overheating surface waters or worsening sewer overflows.

Economics – Data centers create very few permanent jobs. Their primary benefit to a host community is tax revenue. Too often, decisionmakers fixated on economic development cut deals that eliminate large portions of the taxes that data centers would otherwise pay, leaving the host community with no benefits to counterbalance the burdens imposed by data centers. To give host communities a net benefit from data centers, tax breaks must be limited.

Closure Costs – As technology advances, today's data centers can be expected to have a relatively short useful life. Estimates vary, but the IT Equipment is likely to last only 3-6 years, while the facility as a whole may operate for 10-15 years. At end-of-life, the process of preparing the site for its next productive use will be expensive. Historically, when facilities become obsolete, many owners just walk away, leaving the clean up costs or abandoned shell as a burden on the host community. The way to prevent new brownfields

and assure that closure expenses are covered at the end of the facility's useful life is to require "financial assurance for closure" on the front end.

Secrecy – Data Center proponents often ask public officials to sign non-disclosure agreements (NDAs) before providing information about proposed projects. These NDAs keep residents from knowing what is being proposed for their neighborhoods. There may be situations where an NDA is appropriate, but City Council as a body, not individual employees or officials, should make that determination. All elected officials and city employees should be prohibited from signing NDAs unless authorized by City Council on a case by case basis. Those authorizations should be public, and should include, at the least, the entities that will be party to the agreement and the parcels of land that may be affected.

Conclusion – Data Centers can be assets to their host communities, but they can also be liabilities. Appropriate regulations can eliminate or minimize the harms associated with data centers, while preserving or enhancing the benefits. Sierra Club Miami Group encourages municipalities to adopt regulations that ensure that future data centers will be good ones.