

The region that includes Fredericksburg, Virginia—an emerging exurban hyperscale campus market located southeast of Loudoun County—is a case study in how AHJs can attract landslide economic and fiscal benefits while mitigating potential concerns well in advance.

In March 2024 Virginia's governor, Glenn Youngkin, alongside other state and local elected officials, announced that AWS was making a \$35 billion dollar investment in data centers in

Spotsylvania, Caroline, Stafford, and Louisa counties, creating approximately 2,000 new jobs. Also announced was AWS' contribution of \$400,000 in community funds to those localities.

We explore how AHJs in the region did the work to prepare for and attract that investment in [the appendix](#), which also covers similar measures in [Elk Grove Village](#), Illinois, a unique suburban community northwest of downtown Chicago that modified its zoning code to attract data center development.

Challenges and mitigations

Sustainability

The sustainability of data centers is a significant concern for both AHJs, as well as for data center operators and developers, who ensure that their centers are designed and engineered to minimize emissions and other community impacts.

Grid impact

Let's address the misconception that data centers draw from the grid power that other customers, such as residential consumers and retail operators, could use. This concern is common among constituents when a data center is proposed in a municipality.

The grid is heavily regulated. Under existing federal regulations (and in Texas, the only state that regulates its own power grid), demand from a new customer cannot affect the reliability or availability of an existing customer.

Rather than taking power from the grid, new large-load customers such as data center operators face the challenge of finding readily available power that the utility can deliver—especially because many seek clean power sources.

According to the U.S. Department of Energy (DOE), as quoted in a recent article,¹⁰ data centers can actually catalyze the grid's clean energy transition: "Near-term data center driven electricity demand growth is an opportunity to accelerate the build-out of clean energy solutions, improve demand flexibility, and modernize the grid while maintaining affordability."

Here's why: in many municipalities, energy providers are obligated to meet the power demands of various users. When a significant portion of demand comes from data center operators, many of which have strong commitments to using renewable energy, that activity accelerates the greening of the grid. These companies, driven by their climate goals, place considerable pressure on utility providers to adopt cleaner energy solutions.

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U.S. Department of Energy

Unlike AHJs, which cannot create the demand to push forward such changes themselves, data center operators wield considerable influence by creating substantial demand for renewable energy.

This dynamic forces utilities to accelerate and help finance their transition to greener energy sources, thereby modernizing the grid to meet contemporary environmental standards. Public officials have a critical role to play in this scenario. By ensuring the existence of clear and easy-to-follow guidelines for data center development within their jurisdictions, AHJs can become integral to the solution, thus fostering a cleaner energy infrastructure.

Conversely, discouraging data center development could inadvertently push these operations into regions with less stringent grid standards and undermine broader sustainability efforts. Thus, the collaboration between data center operators and local governments is pivotal in driving the clean energy transition and ensuring grid modernization.

10 U.S. Department of Energy, "Clean Energy Resources."