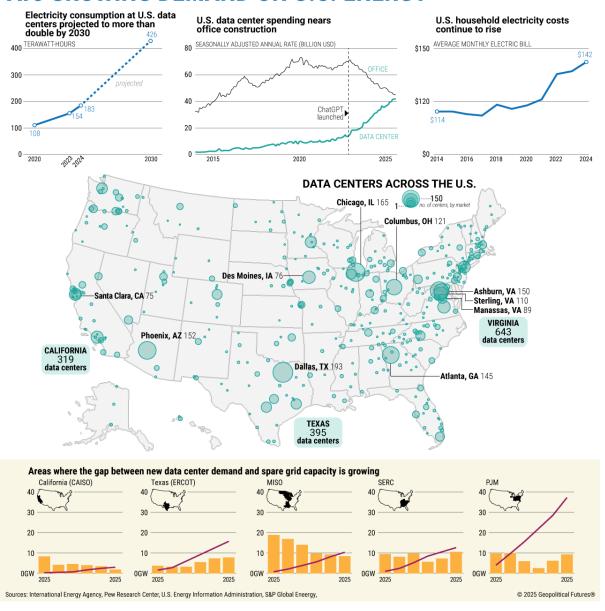


## AI's Built-In Vulnerabilities

by Geopolitical Futures - December 12, 2025

## AI'S GROWING DEMAND ON U.S. ENERGY



(click to enlarge)



The hype surrounding artificial intelligence tends to elide some if its drawbacks – namely, that it consumes vasts amounts of energy, and that it is therefore particularly vulnerable to shocks in energy supply and demand. The United States cannot fully capitalize on Al's benefits if it can't generate enough energy to fuel it. This is no small task considering much of America's infrastructure is old and in need of repair. Even if the U.S. could generate enough energy to power data centers today, it couldn't guarantee secure and reliable transmission as demand on aging systems increases.

Moreover, data centers themselves are concentrated in the hands of the U.S. government and a few select tech firms. Smaller companies developing AI do not have the capital to build their own infrastructure, so they need to rent resources from the bigger players. Until grids can be built to handle projected supply, these companies will compete with consumers for supply, which, in turn, will put upward pressure on prices.

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