

Strong Economy. Strong Communities: A Data Center Primer

Understanding Data Centers

Data centers are the libraries of the internet. They store the data that society depends on, from cutting-edge scientific research to electronic health records. Modern data centers are often designed as hyperscale campuses rather than single facilities. These integrated technology parks comprise multiple specialized structures, including data processing, operations centers, and support facilities.



Data Centers are a Generational Economic Opportunity for Maryland

The digital revolution gives Maryland an historic opportunity to create thousands of jobs and invest in public services like K-12 public education. At the heart of this revolution is the critical infrastructure that enables it: data centers. With the private sector planning \$1 trillion in capital investments in the U.S., communities that proactively plan for data centers will position themselves for decades of economic prosperity and community strength.

The Economic & Fiscal Benefits of a Single Data Center

As integrated technology parks, data centers create immediate construction jobs that often provide five years of work, and permanent career paths in their communities. During construction, a 800,000 sq. ft. data center supports approximately 5,000 construction jobs, generates \$775 million in economic activity, and \$18 million in state tax revenue, plus local tax revenue. Once operational, it supports approximately 500 permanent jobs, \$31 million in annual worker compensation, \$14 million in annual state tax revenue, plus local tax revenue. State tax revenues from a typical data center could pay the equivalent of 165 average teacher salaries annually, based on National Education Association Educator Pay Data.

How Data Centers are Strengthening Frederick County

Frederick County's Eastalco data center campus has generated \$35 million in county tax revenue for K-12 education, and will generate an estimated \$215 million in annual county tax revenue once operational. The campus is creating jobs for Frederick residents, like electrical and construction workers who will be in demand for several years. All told, the campus will create 8,100 construction jobs, and 9,800 permanent jobs, from skilled trades like engineers and electricians to technology professionals.

Data Centers and Water Use

Modern data centers increasingly use sustainable cooling systems that reduce or eliminate the need for groundwater. These practices include air cooling and "closed loop" systems that recycle wastewater on a continuous loop to cool servers inside the facility. Data centers that use water work with local utilities to ensure their water use is sustainable and compatible with community needs. A Virginia legislative committee reports that most data centers use the same amount of water or less as an average large office building, and that data center water use in 2023 was less than 0.5 percent of total statewide withdrawals.

Data Centers Can Help Fix Maryland's Economic and Fiscal Challenges

Maryland faces a structural budget deficit that grows to an estimated \$3 billion by 2030. Further, macroeconomic trends and shifting federal policies have created economic uncertainty for Maryland families and small businesses.

A Safeguard Against Federal Downsizing

Nearly 25,000 federal employees in Maryland lost their jobs in 2025, making it critical that Maryland enable private sector job growth. Data centers offer permanent career paths, with operational roles paying an average of \$100,000, which is 55% above the state average. They also create an employment multiplier effect, meaning every direct data center job creates two additional jobs across the state.

Data Centers and The Electric Grid

Data center operators pay for the electricity they use. Further, Maryland enacted the Next Generation Energy Act of 2025 to require large data centers to pay a special rate for electricity to finance electric grid improvements. As energy prices increase due partly to supply, data centers present an opportunity to spread grid modernization costs to new users, which can drive down rates for all customers. A Lawrence Berkeley National Lab study found that the states with the highest load growth due to data centers saw average power prices decline in inflation-adjusted dollars, while states with load reduction often saw prices increase. In Northern Virginia, home to many data centers, residential customers pay about 10% below the U.S. average for transmission rates because data centers help pay infrastructure costs.

Property Values Can Rise Near Data Centers

Research suggests data centers may actually help property values. A 2025 George Mason University study found that homes in Northern Virginia closer to data centers sold for higher prices on average than those farther away. Additionally, tax revenue from data centers can improve local amenities like schools and parks, which in turn makes an area more desirable to live in.



Learn more about Maryland Tech Council's Data Center Alliance of Maryland (DCA-MD)