

2

What happens when data centers come to your region: opportunities, challenges, and mitigations

Data centers can provide significant economic benefits and other opportunities. Data center projects also introduce unique planning challenges, however. To be prepared, and to seize opportunities when appropriate, AHJs must understand these challenges and how to mitigate them.

Opportunities

Support essential national infrastructure

Data centers contribute to national infrastructure and economic growth. Also, they enable the digital economy by underpinning businesses of all sizes in virtually every industry.

According to the United States Department of Energy³, “At a national level, data centers are critical to supporting America’s economic growth by powering businesses and enabling continued leadership in innovation, including for AI applications.”

HERE’S HOW DATA CENTERS SUPPORT NATIONAL SECURITY AND ECONOMIC GROWTH:



They protect the privacy of all of the data within U.S. borders against cyber threats by powering security measures such as encryption, firewalls, and access controls.



Data centers also support the development and deployment of emerging tech. Data centers are the backbone of AI infrastructure, which requires rapid data processing, storage, and analysis at scale.



They host critical infrastructure for our emergency services, providing the necessary computing power and data storage to support communication networks, emergency response coordination, and real-time data analysis during crises.



On a macroscale, maintaining advanced data center infrastructure allows the U.S. to compete with such countries as China in the race for AI dominance, thus fostering economic growth and strengthening national security through technological leadership.



Our health care system depends on data centers. They enable a range of services, from telehealth visits to managing digital health records, and they even assist in providing data-analysis-informed diagnoses for patients.



On a microscale, data centers also improve businesses’ operational efficiency by democratizing access to supercomputer processing and secure cloud storage so that small businesses can compete more easily with larger corporations.



Banks and the rest of our financial ecosystem rely on data centers for their daily operations.

3 U.S. Department of Energy, “Clean Energy Resources to Meet Data Center Electricity Demand,” <https://www.energy.gov/policy/articles/clean-energy-resources-meet-data-center-electricity-demand>.