Behind the Screen: A Quick Guide to Data Centers, AI, and Our Shared Future

Every time we check a map for driving directions, stream a video, back up our photos, or ask an AI tool a question, we are sending a digital request across the internet. But these data packets don't vanish into thin air. They land in a very physical place: **a data center**.

At their core, data centers are the brick-and-mortar factories of the digital age. Instead of manufacturing physical goods, they process and store information.

What Exactly is a Data Center?

Imagine a warehouse the size of several football fields, packed from floor to ceiling with rows of powerful computer servers, flashing lights, and miles of network cables. These facilities operate 24/7/365, requiring massive electrical systems to keep the computers running and heavy-duty cooling systems to prevent them from overheating.

While there are many smaller data centers scattered across the country used by local hospitals, banks, or universities to manage their internal records, the resolution focuses on **Hyperscale Data Centers**. These are massive, industrial-scale complexes built by tech giants (like Microsoft, Google, Amazon, and Meta) to power global cloud storage and internet traffic.

Why the Sudden Building Boom?

For years, the steady growth of cloud storage (like saving your files online instead of on your hard drive) kept data center construction moving at a predictable pace. However, we are currently experiencing an unprecedented building boom driven by **Artificial Intelligence (AI)**.

Traditional internet tasks—like reading an email or looking up a recipe—only require a server to retrieve a file. AI is fundamentally different. Generative AI tools have to actively *think, simulate, calculate, and learn* in real time. Processing a single AI prompt requires up to **ten times more electrical power** and significantly more cooling than a standard Google search. To meet this massive computational demand, tech developers are

racing to build a new generation of denser, high-powered data centers as fast as possible.

Why Are They Being Built in Idaho?

Idaho, and the Treasure Valley in particular, has become a prime target for data center developers due to a few specific factors:

- Affordable land packages.
- Historically lower electricity rates compared to neighboring coastal states.
- Generative state tax incentives designed to attract tech investment.
- A reliable electrical grid managed by Idaho Power.

How Do They Impact Our Daily Lives and Household Economics?

While these facilities generate construction jobs and local tax revenue, their sheer scale creates significant ripples that hit local residents directly in their daily lives and pocketbooks:

- **Utility Bills and Ratepayer Fairness:** Because data centers operate continuously at maximum capacity, they require an immense amount of power. Meeting this sudden surge forces utilities to build expensive new transmission lines and power plants. Under standard utility rules, those massive infrastructure costs risk being shared among all customers, meaning **local families could see their monthly electricity and water bills rise** to subsidize a multi-billion-dollar corporate footprint.
- **Clean Energy and Climate Goals:** The sudden, massive electrical demand from data centers can outpace the growth of new renewable energy. This strains the local grid and threatens to delay the planned retirement of older, polluting fossil-fuel plants, pushing back critical carbon-reduction timelines.
- **Water Aquifer Pressures:** Keeping millions of servers cool requires millions of gallons of water every single day. In our arid climate, using traditional evaporative cooling means pumping precious groundwater out of our shared aquifers and letting it evaporate away into the atmosphere, rather than returning it to the local watershed.

Why This Matters Today

Technology is a vital part of how we connect, learn, and live. The goal of looking closely at data center management isn't to abandon our phones or reject progress—it is to

ensure that as the digital world expands, it doesn't happen at the expense of our local environment, our democratic transparency, or the financial stability of working households and everyday local ratepayers.

Because the decisions made today will shape Idaho's landscape and our climate timeline for decades to come, the Climate Action Team has drafted the BUUF Data Center Resolution, *Resolution on Just and Sustainable Data Center Management, Industrial Manufacturing, and Clean Energy Accountability in Idaho*, to ensure this growth aligns with our deepest values of ecological stewardship and economic justice. To help you navigate the specific policy goals, we have prepared an annotated version of the resolution that includes detailed explanations and answers to frequently asked questions alongside the formal text.