

Industry Update

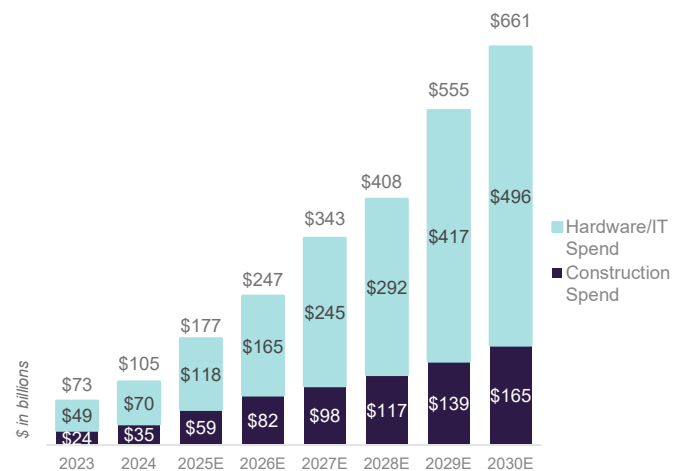
Data Centers Drive U.S. Construction Growth

Artificial Intelligence ("AI") is accelerating, creating increased demand for data center infrastructure. Data centers, once niche facilities, are now multi-billion-dollar projects requiring enormous investments in land, power, steel, concrete, and cooling systems. As AI workloads scale, data centers are evolving into critical national infrastructure, propelling long-term growth in construction spend:

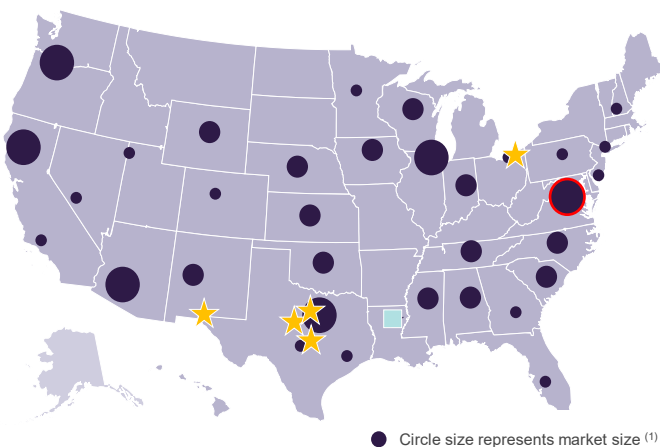
- AI models improve geometrically when trained on more data, fine tuned against specific work domains, and provided more compute time for reasoning. These "scaling laws" drive an exponential need for more computing power delivered through data centers that cannot only train AI models, but distribute them on multiple platforms, real-time, across a global consumer and enterprise user base
- As AI models improve, demand has rapidly increased as the cost per unit of AI intelligence (tokens) falls and the performance per unit of energy increases. The economics of AI user demand increasing as a function of model performance provides hyperscalers (i.e., Amazon, Meta, Google, and Microsoft, etc.) the confidence to continue an unprecedented spending wave on AI infrastructure
- Key challenges looking forward include access to available land/permitting, water for cooling, labor and equipment, and most importantly, energy. Less visible risks include: 1) any degradation in model performance or demand that slows data center capital expenditures 2) state / local regulatory constraints that limit construction, and 3) any emergent AI model risks that lead to government intervention and stricter controls

AI Accelerates Data Center Spend

- Total data center spend includes construction spend plus hardware/IT spend with the majority of hardware/IT allocated to advanced graphics processing units (GPUs) that power AI and often cost ~2-3x total construction spend
- U.S. data center construction spend is expected to more than double by 2030



Pursuit for Power Drives Expansion of Data Center Projects



The U.S. holds a dominant share of global data center capacity at an estimated 53.7 gigawatts ("GW") in 2024, accounting for over 44% of the world's total installed capacity of 122.2 GW. For reference, a GW is ~ equal to the power generated by a single nuclear reactor for one day, or enough to power ~750K single family homes

- Virginia is the world's largest market at ~6 GW of capacity, with another 1.8 GW underway

- "Stargate Project": OpenAI JV initially committing \$500B to develop up to 10 GW of capacity across multiple data centers. Central Texas is the epicenter of the project given the regions ability to deliver the required power, land, and skilled labor

- Meta's \$10B Monroe, LA, 4MM SF data center broke ground in December 2024, with over 2 GW of potential computing power. The project is set to deliver in 2030

(1) Largest circles equate to capacity > 800 megawatts

Sources: Congress.gov, McKinsey & Company, Bloomberg, Dodge Construction Network, Grandview Research, OpenAI.com, Datacenters.com, Datacentermap.com, S&P Global 451 Research



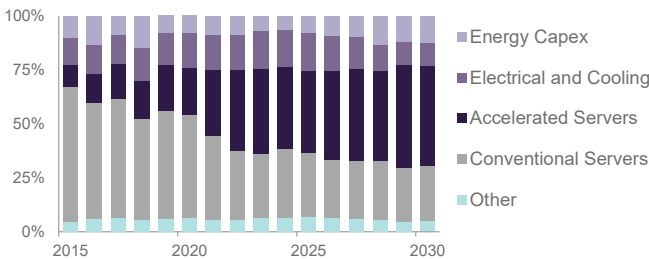
Building Products
Industry Specialty Team

Taylor Howerton | Industry Manager | Taylor.Howerton@Truist.com
Matt Klucznik | Senior Vice President | Matthew.Klucznik@Truist.com
Lindsay Earley | Associate | Lindsay.Earley@Truist.com

Data Center Growth

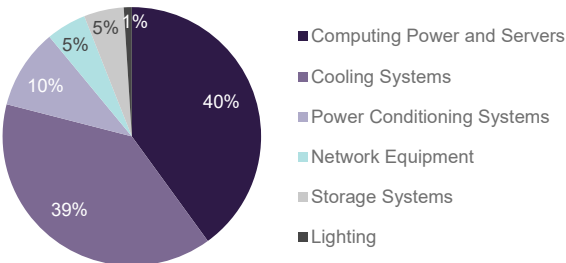
Servers Shift with Next-Gen AI

Investment is rapidly migrating from traditional CPU-based infrastructure to GPU accelerated data centers to meet the compute demands of AI. These next-gen facilities consume ~6-8x more power, as GPUs deliver far higher energy density and thermal output, necessitating sophisticated cooling and power management systems



Breakdown of Energy Usage

~40% of energy usage in a single data center is devoted to computing power with another ~40% of energy usage being devoted to cooling systems

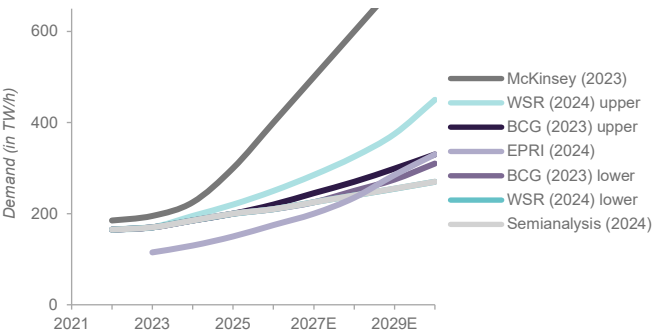


Surge in Demand for Power

- U.S. data center annual energy use in 2023 was ~4.4% of U.S. electricity consumption. Data center energy consumption is projected to double or even triple by 2030. This will overburden the existing power grid and necessitate enhancements to infrastructure
- Primary drivers of the acceleration in electric power demand for data centers stems from higher density IT equipment (servers, storage, and communication equipment) with the other half coming from building and infrastructure (cooling systems and electrical systems)
- Solutions to enhance the power grid include:
 - Grid modernization & flexibility:** Upgrade transmission capacity and deploy smart-grid technologies to shift or curtail AI workloads during peak demand
 - On-site & hybrid power solutions:** Integrate behind-the-meter generation, battery storage, and micro grids
 - Efficiency & innovation:** Adopt liquid cooling, high-voltage direct current power, energy reuse systems to lower total consumption and stabilize grid impact

Forecasted U.S. Data Center Energy Demand

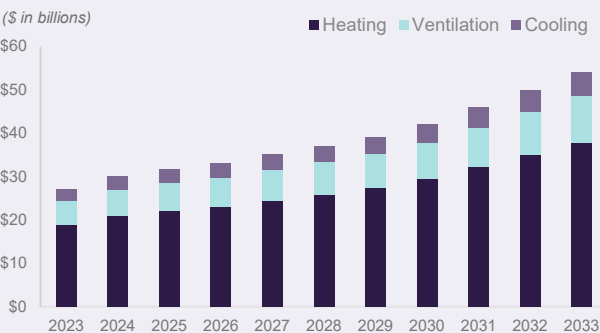
Multiple forecasts predict that data center energy demand is expected to double from ~200 terawatts in 2021 to ~400 terawatts by 2030



Non Residential Cooling Expected to Heat Up

- The HVAC industry stands to benefit from advanced data center projects given the mission-critical nature of these systems that: 1) manage the intense heat generated by GPUs, 2) control humidity to prevent electrostatic discharge and corrosion, and 3) filter air to remove dust that can cause server/chip malfunction
- The industry is deploying advanced cooling systems (i.e., liquid cooling and AI-driven climate control) to meet data center needs while also driving overall energy efficiency
- An opportunity exists for commercial HVAC contractors to expand direct-to-owner and GC relationships with more customized solutions, while establishing long-term service contracts. Unlike traditional non-residential structures, these systems are continuously retrofitted and upgraded to keep up with the thermal load increases with chip advancements

HVAC Systems Market



Sources: IEA, Cushman & Wakefield, Congress.gov, Deloitte, Oxford Energy Forum, Truist Research, Allegis Corp