

THE THREAT TO ROYALTON OF AI/CRYPTO DATA CENTERS

Across the country, a tsunami of construction is underway – very large data centers to provide computing power to build and operate artificial intelligence models and to support the “data mining” operations of cryptocurrency firms. While there are currently no AI or cryptocurrency data centers in Vermont, there are significant risks to towns like Royalton should AI and cryptocurrency industries start looking for sites in our state – there is already preliminary interest (“kicking the tires”) and Vermont legislators and regulatory bodies have been preparing for proposals for more than a year.

THESE RISKS INCLUDE:

Competition for Electric Power. AI/crypto data center growth will drive up energy costs and degrade reliability, while cannibalizing the capacity that is needed to enable increased use of heat pumps and electric vehicles to meet Greenhouse Gas reduction goals. AI/crypto data centers require as much as 100 megawatts of power (equivalent to a town of 20,000 people) to operate thousands of computer servers. Renewable energy is cheaper than fossil fuels; deep-pocketed Big Tech can outbid public utilities, leaving ratepayers with more expensive, dirty energy, with high emissions accelerating climate-caused extreme weather, drought, and wildfire risk. 50% of power demand growth in the U.S. from 2023 to 2024 has been from data centers.¹

Competition for Water. AI/crypto data centers require as much as 5 million gallons of potable water per day to cool the servers, roughly equivalent to the water used by the City of Burlington. This level of water usage would have drained the White River in last summer’s drought, compromising the Town’s water supply.

Competition for Land. These massive facilities frequently require 500 to 800 acres of land. In Royalton, and throughout rural Vermont, this would mean replacing beautiful and essential agricultural working landscapes with swaths of large warehouse structures with asphalt perimeters.

Competition for Construction Workers. Building a modern, large-scale AI data center requires a massive workforce, often employing between 1,500 and 3,000 construction workers at peak construction phases for a single large facility. These projects are highly specialized and typically take 18 to 24 months to complete, often operating as “temporary cities” with round-the-clock labor. In Vermont, an AI data center would compete for very scarce construction workers needed to address the state’s acute housing shortage.

Few Permanent Jobs. AI data centers create relatively few permanent jobs, typically ranging from dozens to around 150 full-time staff (technicians, engineers, security, facilities) for large facilities.

Highly Speculative Businesses. Margins are low throughout the entire stack of AI data center operators — from landlords like Applied Digital to compute providers like CoreWeave — thanks to the billions in debt necessary to fund both facility construction and the IT hardware to make them run, putting both parties in a hole that can only be filled with revenues that come from either mature firms with flat-lining or falling revenue all-in on AI and the AI startups they own struggling with low adoption rates. There is not a single profitable AI start up today, or any with a plausible business model. Most economists believe that AI is a speculative bubble, based on extravagant hype, and that the bubble will ultimately burst, leaving all its massive data centers as stranded assets. Meanwhile, the primary business use case for cryptocurrency is money laundering, sanctions evasion, and fraud. Cryptocurrency has been highly volatile since its inception and – absent powerful lobbies and self-interested insiders – has a high probability of significant collapse, again creating stranded assets of its data mining operations.

WE NEED TO AMEND OUR MASTER PLAN NOW TO PROHIBIT AI/CRYPTO DATA CENTERS.

Towns in Vermont with water and without local zoning regulation, like Royalton, could be particularly attractive to developers of AI/crypto data centers. Because of its scale, a proposed AI/crypto data center would automatically trigger an Act 250 review, but the Town would be hard-pressed to fight an AI/crypto data center through that process unless it amends its Master Plan to explicitly prohibit developments that use excessive amounts of electricity, water, and land, such as AI/crypto data centers.

¹ Ketan Joshi, “Data Centers Are a Climate Enemy,” *Tech Won’t Save Us*. (November 27, 2025). (Online at: https://techwontsave.us/episode/304_data_centers_are_a_climate_enemy_w_ketan_joshi)